# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 3 to FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

## **BULLFROG AI HOLDINGS, INC.**

(Exact Name of Registrant as specified in its charter)

Nevada	7374	84-4786155
(State or other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)
(Address, including zip code, and	323 Ellington Blvd, Unit 317 Gaithersburg, MD 20878 Tel. (240) 658-6710 I telephone number, including area code, of registrant's p	rincipal executive offices)
(Name, address, including	Vininder Singh Chief Executive Officer Bullfrog AI Holdings, Inc. 325 Ellington Blvd., Unit 317 Gaithersburg, MD 20878 Tel: (240) 658-6710 g zip code, and telephone number, including area code, of	agent for service)
	With copies to:	
Arthur S. Marcus, Esq. Matthew Siracusa, Esq. Sichenzia Ross Ference LLP 1185 Avenue of the Americas, 31 Fl. New York, NY 10036 Telephone: (212) 930-9700 Facsimile: (212) 930-9725	Са	Ross David Carmel, Esq. Jeffrey P. Wolford, Esq. armel, Milazzo & Feil LLP 55 West 39 <sup>th</sup> Street New York, NY 10018 Felephone: (212) 658-0458 Facsimile: (646) 838-1314
* *	nate date of commencement of proposed sale to the public acticable after the effective date of this registration star	
If any of the securities being registered on this Form are to b following box. $\boxtimes$	be offered on a delayed or continuous basis pursuant to	Rule 415 under the Securities Act of 1933, check the
If this Form is filed to register additional securities for an offer registration statement number of the earlier effective registration		ase check the following box and list the Securities Act
If this Form is a post-effective amendment filed pursuant to R number of the earlier effective registration statement for the san	` '	g box and list the Securities Act registration statement
If this Form is a post-effective amendment filed pursuant to R number of the earlier effective registration statement for the san	` '	g box and list the Securities Act registration statement
Indicate by a check mark whether the registrant is a large accompany. See the definitions of "large accelerated filer," "accelerated."		
Large Accelerated Filer □ Non-Accelerated Filer ⊠	Smal	elerated Filer □ ller Reporting Company ⊠ rging Growth Company ⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

accounting standards provided to Section 7(a)(2)(B) □

#### EXPLANATORY NOTE

This Registration Statement contains two forms of prospectuses: one to be used in connection with the initial public offering of up to 1,317,647 Units through the underwriters named on the cover page of this prospectus (the "IPO Prospectus") and one to be used in connection with the potential resale by a selling stockholders of up to 1,985,313 shares of common stock (the "Resale Prospectus"). The IPO Prospectus and the Resale Prospectus will be identical in all respects except for the alternate pages for the Resale included herein which are labeled "Alternate Pages for Resale Prospectus."

The Resale Prospectus is substantively identical to the IPO Prospectus, except for the following principal points:

- they contain different outside and inside front covers;
- they contain different Offering sections in the Prospectus Summary section;
- they contain different Use of Proceeds sections;
- the Capitalization section is deleted from the Resale Prospectus;
- the Dilution section is deleted from the Resale Prospectus;
- A Selling Stockholder section is included in the Resale Prospectus;
- the Underwriting section from the IPO Prospectus is deleted from the Resale a Plan of Distribution is inserted in its place; and
- the Legal Matters section in the Resale Prospectus deletes the reference to counsel for the underwriters.

We have included in this Registration Statement, after the financial statements, a set of alternate pages to reflect the foregoing differences of the Resale Prospectus as compared to the IPO Prospectus.

While the selling stockholders have expressed an intent not to sell the common stock registered pursuant to the Resale Prospectus prior to the closing of or concurrently with the public offering, the sales of our common stock registered in the IPO Prospectus and the Resale Prospectus may result in two offerings taking place sequentially or concurrently, which could affect the price and liquidity of, and demand for, our common stock. This risk and other risks are included in "Risk Factors" beginning on page 8 of the IPO Prospectus.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

## SUBJECT TO COMPLETION

**DATED DECEMBER 8, 2022** 

1,317,647 Units

Each Unit Consisting of
One Share of Common Stock and
One Warrant to Purchase One share of Common Stock

BULLFROG AI HOLDINGS, INC.

This is a firm commitment initial public offering of 1,317,647 units (each, a "Unit," collectively, the "Units") of Bullfrog AI Holdings, Inc. (the "Company", "we", "us", "our"). We anticipate that the initial public offering price of our Units will be \$6.375 per Unit. Each Unit consists of one share of our common stock and one tradeable warrant to purchase one share of common stock at an anticipated exercise price of \$6.75 per share (each, a "Warrant," collectively, the "Warrants"). The Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock and the Warrants underlying the Units are immediately separable and will be issued separately in this offering. Each Warrant offered as part of this offering is immediately exercisable on the date of issuance and will expire five years from the date of issuance.

No public market currently exists for our common stock or Warrants. We intend to apply to list our shares of common stock and Warrants for trading on the Nasdaq Capital Market, subject to official notice of issuance, under the symbol "BFRG" and "BFRGW," respectively. No assurance can be given that our applications will be approved. The consummation of this offering is conditioned on obtaining Nasdaq approval.

We are an emerging growth company under the Jumpstart our Business Startups Act of 2012, or JOBS Act, and, as such, may elect to comply with certain reduced public company reporting requirements for future filings. Investing in our common stock involves a high degree of risk.

In connection with this offering, we will complete a 1-for-7 reverse split of our common stock immediately prior to the closing of this offering. Unless otherwise noted, the share and per share information in this prospectus reflects, other than in our historical financial statements and the notes thereto, a proposed reverse stock split of the outstanding common stock of the Company as of the date of this prospectus at an assumed 1-for-7 ratio to occur immediately following the time when the registration statement of which this prospectus forms a part is declared effective by the Securities and Exchange Commission but prior to the listing of our common stock on Nasdaq and the closing of the offering. The reverse split will not occur prior to the effectiveness of this registration statement.

The registration statement of which this prospectus forms a part also relates to the registration for resale of an aggregate of 1,985,313 shares of common stock and shares of common stock issuable upon the conversion of certain promissory notes and the exercise of certain warrants.

Investing in our common stock is highly speculative and involves a high degree of risk. See "Risk Factors" beginning on page 8 of this prospectus for a discussion of information that should be considered in connection with an investment in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Per Unit Total

Public offering price

\$

Underwriting discounts and commissions (1)	\$ \$
Proceeds to Bullfrog AI Holdings, Inc. (before expenses)	\$ \$

(1) See "Underwriting" for a description of compensation payable to the underwriters.

We have granted the underwriters an option, exercisable within 45-days after the closing of this offering to purchase 197,647 shares of our common stock at a price of \$6.365 per share and/or Warrants to purchase up to an additional 197,647 shares of common stock at a price of \$0.01 per Warrant to purchase one share of common stock

The underwriters expect to deliver our shares to purchasers in the offering on or about , 2022.

## WALLACHBETH CAPITAL LLC

## VIEWTRADE SECURITIES, INC.

The date of this prospectus is , 2022

## TABLE OF CONTENTS

PROSPECTUS SUMMARY	1
THE OFFERING	6
SUMMARY SELECTED FINANCIAL AND OTHER DATA	7
<u>RISK FACTORS</u>	8
CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS	22
USE OF PROCEEDS	23
DIVIDEND POLICY	23
<u>CAPITALIZATION</u>	23
<u>DILUTION</u>	24
DESCRIPTION OF CAPITAL STOCK	26
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	28
DESCRIPTION OF BUSINESS	31
MANAGEMENT CONTROL OF THE PROPERTY OF THE PROP	46
EXECUTIVE COMPENSATION	48
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS	49
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	51
SHARES ELIGIBLE FOR FUTURE SALE	52
UNDERWRITING	53
DETERMINATION OF OFFERING PRICE	57
EXPERTS	57
LEGAL MATTERS	57
WHERE YOU CAN FIND ADDITIONAL INFORMATION	58
INDEX TO FINANCIAL STATEMENTS	F-1

You should rely only on information contained in this prospectus. We have not, and the underwriters have not, authorized anyone to provide you with additional information or information different from that contained in this prospectus. Neither the delivery of this prospectus nor the sale of our securities means that the information contained in this prospectus is correct after the date of this prospectus. This prospectus is not an offer to sell or the solicitation of an offer to buy our securities in any circumstances under which the offer or solicitation is unlawful or in any state or other jurisdiction where the offer is not permitted.

For investors outside the United States: Neither we nor the underwriters have taken any action that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities covered hereby and the distribution of this prospectus outside of the United States.

The information in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since those dates.

No person is authorized in connection with this prospectus to give any information or to make any representations about us, the securities offered hereby or any matter discussed in this prospectus, other than the information and representations contained in this prospectus. If any other information or representation is given or made, such information or representation may not be relied upon as having been authorized by us.

Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. You are required to inform yourself about, and to observe any restrictions relating to, this offering and the distribution of this prospectus.

## PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. Before investing in our securities, you should carefully read this entire prospectus, including our consolidated financial statements and the related notes thereto and the information set forth under the sections "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes thereto, in each case included in this prospectus. Some of the statements in this prospectus constitute forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements." Except as otherwise indicated, references to "we", "us", "our", and the "Company" refer to Bullfrog AI Holdings, Inc. and its wholly-owned subsidiaries.

## **Business Overview**

Most new therapeutics will fail at some point in preclinical or clinical development. This is the primary driver of the high cost of developing new therapeutics. A major part of the difficulty in developing new therapeutics is efficient integration of complex and highly dimensional data generated at each stage of development to de-risk subsequent

stages of the development process. Artificial Intelligence and Machine Learning (AI/ML) has emerged as a digital solution to help address this problem.

We use artificial intelligence and machine learning to advance medicines for both internal and external projects. We are committed to increasing the probability of success and decreasing the time and cost involved in developing therapeutics. Most current AI/ML platforms still fall short in their ability to synthesize disparate, high-dimensional data for actionable insight. Our platform technology, named, bfLEAP<sup>TM</sup>, is an analytical AI/ML platform derived from technology developed at The Johns Hopkins University Applied Physics Laboratory (JHU-APL), which is able to surmount the challenges of scalability and flexibility currently hindering researchers and clinicians by providing a more precise<sup>1</sup>, multi-dimensional understanding of their data. We are deploying bfLEAP<sup>TM</sup> for use at several critical stages of development for internal programs and through strategic partnerships and collaborations with the intention of streamlining data analytics in therapeutics development, decreasing the overall development costs by decreasing failure rates for new therapeutics, and impacting the lives of countless patients that may otherwise not receive the therapies they need.

The bfLEAP<sup>TM</sup> platform utilizes both supervised and unsupervised machine learning – as such, it is able to reveal real/meaningful connections in the data without the need for a prior hypothesis. Supervised machine learning uses labeled input and output data, while an unsupervised learning algorithm does not. In supervised learning, the algorithm "learns" from the training dataset by iteratively making predictions on the data and adjusting for the correct answer. Unsupervised learning, also known as unsupervised machine learning, uses machine learning algorithms to analyze and cluster unlabeled datasets. These algorithms discover hidden patterns or data groupings without the need for human intervention. Algorithms used in the bfLEAP<sup>TM</sup> platform are designed to handle highly imbalanced data sets to successfully identify combinations of factors that are associated with outcomes of interest.

Together with our strategic partners and collaborators, our primary goal is to improve the odds of success at any stage of pre-clinical and clinical therapeutics development. Our primary business model is improving the success and efficiency of drug development which is accomplished either through acquisition of drugs or partnerships and collaborations with companies that are developing drugs. We hope to accomplish this through strategic acquisitions of current clinical stage and failed drugs for in-house development, or through strategic partnerships with biopharmaceutical industry companies. We are able to pursue our drug asset enhancement business by leveraging a powerful and proven AI/ML platform (trade name: bfLEAP<sup>TM</sup>) initially derived from technology developed at JHU-APL. We believe the bfLEAP<sup>TM</sup> analytics platform is a potentially disruptive tool for analysis of pre-clinical and/or clinical data sets, such as the robust pre-clinical and clinical trial data sets being generated in translational R&D and clinical trial settings. In November 2021, we amended the agreement with JHU-APL to include additional advanced AI technology. On July 8, 2022, the company entered into an exclusive, world-wide, royalty-bearing license from JHU-APL for the additional technology developed to enhance the bfLEAP<sup>TM</sup> platform. The July 8, 2022 JHU-APL license provides the Company with new intellectual property and also encompasses most of the intellectual property from the February 2018 license

We believe bfLEAPTM will inform/enable decision making throughout the development cycle:

- 1. Discovery Phase Analyze and categorize discovery phase data to better define highest-value leads from groups of candidates, for advancement to preclinical phase of development. Integrate data from high-throughput screening, pharmacodynamics assays, pharmacokinetics assays, and other key data sets to create the most accurate profile of a pool of therapeutic candidates. There is often a high degree of similarity among closely related therapeutics in a candidate pool bfLEAP<sup>TM</sup> is able to harmonize disparate data streams for a more nuanced understanding of each candidate's characteristics/potency.
- 2. Pre-Clinical Data Large-scale/multivariate analysis of pre-clinical and/or early-stage clinical data sets. In these settings, bfLEAP could be used to find novel drug targets, elucidate mechanism of action (MOA), predict potential off-target effects/side effects, uncover specific genetic/phenotypic background(s) with highest correlation to therapeutic response, etc. These insights from bfLEAP<sup>TM</sup> analysis can be used to inform decision making/study design at the subsequent step(s) of therapeutic/diagnostic development, including first-inhuman/Phase I RCTs.

<sup>1</sup>In an August 2021 publication in DeepAI.org (https://deepai.org/publication/random-subspace-mixture-models-for-interpretable-anomaly-detection), the algorithms used in bfLEAP were compared to 10 of the most popular clustering algorithms in the world using 12 data sets. The end result showed that the algorithms used in bfLEAP had the highest average score when measuring speed and accuracy of prediction. The bfLEAP platform currently has more advanced versions of these algorithms and is applying them in multiple data analytics projects.

]

• 3. Clinical Development - Advanced/multivariate analysis of PhII and/or PhII clinical trials data, to find niche populations of highly responsive patients and/or inform patient selection for later-stage CT(s). This can be used to decrease overall study risk for larger clinical trials - including Phase II trials, and any Phase III Registration Clinical Trials. The bfLEAP<sup>TM</sup> platform analysis can also be used to more precisely understand complex correlations between therapeutic treatment and adverse events, side effects, and other undesirable responses which could jeopardize clinical trial success.

Our platform is agnostic to the disease indication or treatment modality and therefore we believe that it is of value in the development of biologics or small molecules.

The process for our drug asset enhancement program is to:

- acquire the rights to a drug from a biopharmaceutical industry company or academia;
- use the proprietary bfLEAPTM AI/ML platform to determine a multi-factorial profile for a patient that would best respond to the drug;
- rapidly conduct a clinical trial to validate the drug's use for the defined "high-responder" population; and
- divest/sell the rescued drug asset with the new information back to a large player in the pharma industry, following positive results of the clinical trial.

As part of our strategy, we will continue evolving our intellectual property, analytical platform and technologies, build a large portfolio of drug candidates, and implement a model that reduces risk and increases the frequency of cash flow from rescued drugs. This strategy will include strategic partnerships, collaborations, and relationships along the entire drug development value chain, as well as acquisitions of the rights to developing failed drugs and possibly the underlying companies.

To date, we have not conducted clinical trials on any pharmaceutical drugs and our platform has not been used to identify a drug candidate that has received regulatory approval for commercialization. However, we currently have a strategic relationship with a leading rare disease non-profit organization for AI/ML analysis of late stage clinical data. We have also positioned the Company to acquire the rights to a series of preclinical and early clinical drug assets from universities, as well as a strategic collaboration with a world renowned research institution to create a HSV1 viral therapeutic platform to engineer immunotherapies for a variety of diseases. In addition, we have signed exclusive worldwide license agreements with Johns Hopkins University for a cancer drug that targets glioblastoma (brain cancer), pancreatic cancer, and other cancers. We have also signed an exclusive worldwide license with George Washington University for another cancer drug that targets hepatoceullar carcinoma (liver cancer), and other liver diseases.

Our platform was originally developed by the JHU-APL uses the same technology for applications related to national defense. Over several years, the software and algorithms have been used to identify relationship, patterns, and anomalies, and make predictions that otherwise may not be found. These discoveries and insights provide an advantage when predicting a target of interest, regardless of industry or sector. We have applied the technology to various clinical data sets and have identified novel relationships that may provide new intellectual property, new drug targets, and other valuable information that may help with patient stratification for a clinical trial thereby improving the odds for success. The platform has not yet aided in the development of a drug that has reached commercialization. However, we own one drug candidate that has completed a phase 1 trial and a second candidate that is in the preclinical stages. Our aim is to use our technology on current and future available data to help us better determine the optimal path for development

While we have not generated significant revenues from our AI/ML operations, we anticipate generating revenue in the future from the following three sources:

Our fee for service partnership offering model is designed for biopharmaceutical companies, as well as other organizations, of all sizes that have challenges analyzing data throughout the drug development process. We provide the customer with an analysis of large complex data sets using our proprietary Artificial Intelligence / Machine Learning platform called bfLEAP<sup>TM</sup>. This platform is designed to predict targets of interest, patterns, relationships, and anomalies. Our service model involves a cash fee plus the potential for rights to new intellectual property generated from the analysis, which can be performed at the discovery, preclinical, or clinical stages of drug development.

#### Collaborative Arrangements

We plan to enter into collaborative arrangements with biotechnology and pharmaceutical companies who have drugs that are in development or have failed late Phase 2 or Phase 3 trials. The collaborations may also be at the discovery or preclinical stages of drug development. Our revenue will be a combination of fee for service cash payments and success fees based on achieving certain milestones as determined by each specific arrangement. There may also be fees or legal rights associated with the development of new intellectual property.

2

#### Acquisition of Rights to Certain Drugs

We may acquire the rights to drugs that have failed late Phase 2 or Phase 3 trials and generate revenues by using our platform to accurately determine the profile of patients that would respond to the drugs, conduct a clinical trial to test our findings either independently or with a clinical partner, and finally sell the drug back to pharmaceutical companies. We have and may continue acquiring the rights to drugs that have not yet failed any trials. We will use our technology to improve the chances for success, conduct a trial, and divest the asset. When divesting assets, the transaction may involve a combination of upfront payments, milestone payments based on clinical success, and royalties on sales of the product.

## Our bfLEAPTM Analytics Platform

We are able to pursue our drug rescue business by leveraging a powerful and proven AI/ML platform (trade name: bfLEAP<sup>TM</sup>) derived from technology developed at The Johns Hopkins University Applied Physics Laboratory (JHU-APL). The bfLEAP<sup>TM</sup> platform is based on an exclusive, world-wide license granted by Johns Hopkins University Applied Physics Laboratory. The license covers three (3) issued patents, as well as a new provisional patent application, non-patent rights to proprietary libraries of algorithms and other trade secrets, which also includes modifications and improvements. On July 8, 2022, the company entered into an exclusive, world-wide, royalty-bearing license from JHU-APL for the additional technology developed to enhance the bfLEAP<sup>TM</sup> platform. The new license provides additional intellectual property rights including patents, copyrights and knowhow to be utilized under the Company's bfLEAP<sup>TM</sup> analytical AI/ML platform. Under the terms of the new License Agreement, JHU will be entitled to eight (8%) percent of net sales for the services provided by the Company to other parties and 3% for internally development drug projects in which the JHU license was utilized. The new license also contains tiered sub licensing fees that start at 50% and reduce to 25% based on revenues.

We believe the bfLEAP<sup>TM</sup> analytics platform is a potentially disruptive tool for analysis of pre-clinical and/or clinical data sets, such as the robust pre-clinical and clinical trial data sets being generated in translational R&D and clinical trial settings. The input data for bfLEAP<sup>TM</sup> can include raw data (preclinical and/or clinical readouts), categorical data, sociodemographic data of patients, and various other inputs. Thus, the bfLEAP<sup>TM</sup> platform is capable of capturing the particular genetic and physical characteristics of patients in an unbiased manner, and contextualizing it against other disparate data sources from patients (e.g. molecular data, physiological data, etc.) for less biased and more meaningful conclusions. It is also uniquely scalable – the bfLEAP<sup>TM</sup> platform is able to perform analysis on large, high-volume data sets (i.e. 'big data') and also able to analyze highly disparate "short and wide" data as well. In terms of visualization, bfLEAP<sup>TM</sup> is able to integrate with most commonly used visualization tools for graph analytics.

We believe that the combination of a) scalable analytics (i.e., large data or short/wide data), b) state-of-the-art proprietary algorithms, c) unsupervised machine learning, and d) streamlined data ingestion/visualization makes bfLEAP<sup>TM</sup> one of the most flexible and powerful new platforms available on the market.

The Company will continue to evolve and improve bfLEAP<sup>TM</sup>, and some of the proceeds from this offering may be used toward that effort either in-house or with development partners like The Johns Hopkins University Applied Physics Lab.

## **Summary Risk Factors**

Our business is subject to numerous risks as described in the section entitled "Risk Factors" and elsewhere in this prospectus. You should carefully consider these risks before making an investment. Some of these risks include:

- We have a limited operating history upon which you can evaluate our performance, and accordingly, our prospects must be considered in light of the risks that any new company encounters.
- In order for the Company to compete and grow, it must attract, recruit, retain and develop the necessary personnel who have the needed experience.
- The development and commercialization of our technology, products, and services is highly competitive.
- The Company's success depends on the experience and skill of the board of directors, its executive officers and key employees.
- We rely on various intellectual property rights, including patents and licenses in order to operate our business.
- From time to time, third parties may claim that one or more of our products or services infringe their intellectual property rights.
- New product development involves a lengthy, expensive and complex process.
- We may not be able to conduct clinical trials necessary to commercialize and sell our proposed products and formulations.
- Our long-term viability and growth will depend upon successful clinical trials.
- We face significant competition from other biotechnology and pharmaceutical companies.
- Our research and development efforts may not succeed in developing commercially successful products and technologies, which may limit our ability to achieve profitability.
- Even if we are able to obtain regulatory approvals for new pharmaceutical products, generic or branded, the success of those products is dependent upon acceptance of such products, particularly by the pharmaceutical industry.

3

- We extensively outsource our clinical trial activities and usually perform only a small portion of the start-up activities in-house.
- We may not be able to acquire the rights to any failed drugs or we may not be able to rescue failed drugs through analysis due to our technology or the lack of clinical data
- We have no current specific plan for a significant portion of the offering proceeds and it is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return for you.

## Implications of Being an Emerging Growth Company

As a company with less than \$1.07 billion in revenue during our last completed fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting requirements that are otherwise applicable generally to public companies. These reduced reporting requirements include:

- an exemption from compliance with the auditor attestation requirement on the effectiveness of our internal control over financial reporting;
- an exemption from compliance with any requirement that the Public Company Accounting Oversight Board may adopt regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- an exemption from the requirements to obtain a non-binding advisory vote on executive compensation or a stockholder approval of any golden parachute arrangements;
- extended transition periods for complying with new or revised accounting standards;
- being permitted to present only two years of audited financial statements and only two years of related "Management's Discussion and Analysis of Financial Condition and Results of Operations", in addition to any required unaudited interim financial statements in this prospectus; and
- reduced disclosures regarding executive compensation in our periodic reports, proxy statements and registration statements, including in this prospectus.

We will remain an emerging growth company until the earliest to occur of: (i) the end of the first fiscal year in which our annual gross revenue is \$1.07 billion or more; (ii) the end of the first fiscal year in which we are deemed to be a "large accelerated filer," as defined in the Securities Exchange Act of 1934, as amended, (the "Exchange Act"); (iii) the date on which we have, during the previous three-year period, issued more than \$1.00 billion in non-convertible debt securities; and (iv) the end of the fiscal year during which the fifth anniversary of this offering occurs. We may choose to take advantage of some, but not all, of the available benefits under the JOBS Act. We currently intend to take advantage of the exemptions discussed above. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

We are also a "smaller reporting company," as defined under SEC Regulation S-K. As such, we also are exempt from the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and also are subject to less extensive disclosure requirements regarding executive compensation in our periodic reports and proxy statements. We will continue to be deemed a smaller reporting company until our public float exceeds \$75 million on the last day of our second fiscal quarter in the preceding fiscal year.

4

## **Recent Developments**

The Company recently entered into the following licensing agreements:

## George Washington University - Beta2-spectrin siRNA License

On January 14, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from George Washington University (GWU) for rights to use siRNA targeting Beta2-spectrin in the treatment of human diseases, including hepatocellular carcinoma (HCC). The license covers methods claimed in three US and worldwide patent applications, and also includes use of this approach for treatment of obesity, non-alcoholic fatty liver disease, and non-alcoholic steatohepatitis. This program is currently in the preclinical stage of development. 'The Company has not yet initiated development activities or IND-enabling studies on this asset; however, the plan is to conduct this work over the next 24 months. All R&D to date on this candidate has been conducted by the licensor of the technology, George Washington University.

In consideration of the rights granted to the Company under the License Agreement GWU received a \$20,000 License Initiation Fee. Under the terms of the License Agreement, GWU will be entitled to a three percent (3%) royalty on net sales subject to quarterly minimums once the first sale has occurred subsequent to regulatory approval, as well sublicense or assignment fees in the event the Company sublicenses or assigns their rights to use the technology. The Company will also reimburse GWU for previously incurred and ongoing patent costs. The Sublicense and Assignment fee amounts decline as the Company advances the clinical development of the licensed technology. The license agreement also contains milestone payments for clinical development through the approval of an NDA and commercialization.

## Johns Hopkins University - Mebendazole License

On February 22, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from Johns Hopkins University (JHU) for the use of an improved formulation of Mebendazole for the treatment of any human cancer or neoplastic disease. This formulation shows potent activity in animal models of different types of cancer, and has been evaluated in a Phase I clinical trial in patients with high-grade glioma (NCT01729260). The trial, an open-label dose-escalation study, assessed the safety of the improved formulation with adjuvant temozolomide in 24 patients with newly diagnosed gliomas. Investigators observed no dose-limiting toxicity in patients receiving all but the highest tested dose (200mg/kg/day). Four of the 15 patients receiving the maximum tested dose of 200mg/kg/day experienced dose-limiting toxicity, all of which were reversed by decreasing or eliminating the dose given. There were no serious adverse events attributed to mebendazole at any dose during the trial. The Company is currently formulating a strategy to conduct additional clinical trials with this asset to enable evaluation of safety in humans.

The license covers six (6) issued patents and one (1) pending application. In consideration of the rights granted to the Company under the License Agreement JHU will receive a staggered Upfront License Fee of \$250,000. The Company will also reimburse JHU for previously incurred and ongoing patent costs. Under the terms of the License Agreement, JHU will be entitled to three- and one-half percent (3.5%) royalty on net sales by the Company. In addition, the Company is required to pay JHU minimum annual royalty payments of \$5,000 for 2023, \$10,000 for 2024, \$20,000 for 2025, \$30,000 for 2026 and \$50,000 for 2027 and each year after until the first commercial sale after which the annual minimum royalty shall be \$250,000. The license agreement also contains milestone payments for clinical development steps through the approval of an NDA and commercialization

5

## **Corporate Information**

Bullfrog AI Holdings, Inc. was incorporated in the State of Nevada on February 6, 2020. Bullfrog AI Holdings, Inc. is the parent company of Bullfrog AI, Inc. and Bullfrog AI Management, LLC. which were incorporated in Delaware and Maryland, in 2017 and 2021, respectively. All of our operations are currently conducted through BullFrog AI Holdings, Inc. The Company's principal business address is 325 Ellington Blvd, Unit 317, Gaithersburg, MD 20878. Our website address is www.bullfrogai.com. The references to our website in this prospectus are inactive textual references only. The information on our website is neither incorporated by reference into this prospectus nor intended to be used in connection with this offering. All of our operations are currently conducted through BullFrog AI, Inc.

## Planned Reverse Stock Split

Our Board of Directors and stockholders have approved an amendment to our Certificate of Incorporation to effect a 1-for-7 reverse stock split of our common stock in connection with the offering. As a result of the reverse stock split, every 7 shares of our outstanding common stock will be combined and reclassified into one share of our common stock. No fractional shares will be issued in connection with the reverse stock split, and any of our stockholders that will be entitled to receive a fractional share as a result of the reverse stock split will instead receive cash in lieu of the fractional share valued at the per share price of this offering. Unless otherwise noted, the share and per share information in this prospectus reflects, other than in our historical financial statements and the notes thereto, a proposed reverse stock split of the outstanding common

stock of the Company as of the date of this prospectus at an assumed 1-for-7 ratio to occur immediately following the time when the registration statement of which this prospectus forms a part is declared effective by the Securities and Exchange Commission but prior to the listing of our common stock on Nasdaq and the closing of the offering. The reverse stock split will not occur prior to the effectiveness of this registration statement.

### Going Concern

The Company intends to overcome the circumstances that impact its ability to remain a going concern through a combination of expanding its revenues and additional equity and debt financing. The Company anticipates raising additional funds through public or private financing, strategic relationships or other arrangements in the near future to support its business operations; however, the Company may not have commitments from third parties for a sufficient amount of additional capital. The Company cannot be certain that any such financing will be available on acceptable terms, or at all, and its failure to raise capital when needed could limit its ability to continue its operations. The Company's ability to obtain additional funding will determine its ability to continue as a going concern. Failure to secure additional financing in a timely manner and on favorable terms would have a material adverse effect on the Company's financial performance, results of operations and stock price and may require it to curtail or cease operations, sell off its assets, seek protection from its creditors through bankruptcy proceedings, or otherwise. Furthermore, additional equity financing may be dilutive to the holders of the Company's common stock, and debt financing, if available, may involve restrictive covenants, and strategic relationships, if necessary, to raise additional funds, and may require that the Company relinquish valuable rights. Please see note 1, in our financial statements, for further information. The Company believes that, following this offering, it will have sufficient capital to sustain its operations for at least the next 15 months, however, there can be no assurance that sufficient funds required during the subsequent year or thereafter will be generated from operations or that funds will be available from external sources such as debt or equity financings or other potential sources.

## THE OFFERING

The following summary of the offering contains basic information about the offering and the common stock and is not intended to be complete. It does not contain all the information that is important to you. For a more complete understanding of the common stock, please refer to the section of this prospectus entitled "Description of Capital Stock."

Securities offered by us

1,317,647 Units, each Unit consisting of one share of our common stock and one Warrant to purchase one share of our common stock from the date of issuance until the fifth anniversary of such date for an assumed exercise price of \$6.375 per share (100% of the assumed \$6.375 public offering price of one Unit), as adjusted to reflect a 1-for-7 reverse stock split of our common stock that we anticipate will be effected immediately prior to the completion this offering. The actual number of Units we will offer will be determined based on the actual public offering price. The Units will not be certificated or issued in stand-alone form. The shares of our common stock and the Warrants underlying the Units are immediately separable upon issuance and will be issued separately in this offering. Unless otherwise noted, the share and per share information in this prospectus reflects, other than in our historical financial statements and the notes thereto, a proposed reverse stock split of the outstanding common stock of the Company as of the date of this prospectus at an assumed 1-for-7 ratio to occur immediately following the time when the registration statement of which this prospectus forms a part is declared effective by the Securities and Exchange Commission but prior to the listing of our common stock on Nasdaq and the closing of the offering.

Description of the Warrants.

Each Warrant is exercisable for one share of common stock for an assumed \$6.375 per share (100% of the assumed \$6.375 public offering price of one Unit) subject to adjustment in the event of stock dividends, stock splits, stock combinations, reclassifications, reorganizations, or similar events affecting our common stock as described herein. A holder may not exercise any portion of a Warrant to the extent that the holder, together with its affiliates and any other person or entity acting as a group, would beneficially own more than 4.99% of our outstanding common stock after exercise, as such percentage ownership is determined in accordance with the terms of the Warrants, except that upon notice from the holder to us, the holder may waive such limitation up to a percentage, not in excess of 9.99%. Each Warrant will be exercisable immediately upon issuance and will expire five (5) years after the initial issuance date. The terms of the Warrants will be governed by a Warrant Agent Agreement, dated as of the effective date of this offering, between us and Vstock Transfer, LLC as the warrant agent (the "Warrant Agent"). This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the Warrants. For more information regarding the Warrants, you should carefully read the section titled "Description of Capital Stock-Warrants" on page 27 of this prospectus.

Common Stock outstanding before this offering:

4,021,935 shares

Common Stock to be outstanding immediately after this offering:

5,671,881 shares(1)

Option to purchase additional shares:

We have granted the underwriters an option, exercisable within 45-days after the closing of this offering to purchase up to an additional 197,647 shares of our common stock at a price of \$6.365 per share and/or Warrants to purchase up to an additional 197,647 shares of common stock at a price of \$0.01 per Warrant to purchase one share of common stock, solely for the purpose of cover over-allotments

6

Use of proceeds:

We expect to receive approximately \$7,384,000 in net proceeds from the sale of our Units offered by us in this offering (approximately \$8,530,600 if the underwriters exercise their over-allotment option in full), after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds received from this offering for general and working capital purposes, including but not limited to investing in research and development, including in our technology, the repayment of debt and for working capital and general corporate purposes

See "Use of Proceeds" on page 23 for a more complete description of the intended use of proceeds from this offering.

Dividend Policy

Holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available. We have not paid any dividends since our inception, and we presently anticipate that all earnings, if any, will be retained for development of our business. Any future disposition of dividends will be at the discretion of our Board of Directors and will depend upon, among other things, our future earnings, operating and financial condition, capital requirements, and other factors.

Risk Factors:

Investing in our securities is highly speculative and involves a high degree of risk. You should carefully consider the information set forth in this prospectus and, in particular, the specific factors set forth in the "Risk Factors" section beginning on page 8 of this prospectus before deciding whether or not to invest in our securities.

Reverse Stock Split

We will complete a 1-for-7 reverse split of our common stock immediately prior to the completion of this offering. The purpose of the reverse stock split is to meet minimum stock price requirement of the Nasdaq Capital Market. Unless otherwise noted, the share and per share information in this prospectus reflects, other than in our historical financial statements and the notes thereto, a proposed reverse stock split of the outstanding common stock of the Company as of the date of this prospectus, but not prior to the effectiveness of this registration statement, at an assumed 1-for-7 ratio to occur immediately following the time when the registration statement of which this prospectus forms a part is declared effective by the Securities and Exchange Commission but prior to the listing of our common stock on Nasdaq and the closing of the offering.

Proposed Nasdaq Ticker Symbol

We intend to apply to list our common stock on the Nasdaq Capital Market, subject to official notice of issuance, under the symbol "BFRG". We also intend to apply to have our Warrants listed on the Nasdaq Capital Market under the symbol "BFRGW." No assurance can be given that our applications will be approved, or that a trading market will develop for our common stock or Warrants. The consummation of this offering is conditioned on obtaining Nasdaq approval.

Lock-ups

We and our directors, officers and holders of five percent (5%) or more of our outstanding securities have agreed with the underwriters, subject to certain exceptions, not to offer for sale, issue, sell, contract to sell, pledge or otherwise dispose of any of our common stock for a period of 12 months after the completion of this offering. See "Underwriting" on page 53.

(1)	Based on 4,021,935 shares of common stock issued and outstanding as of November 28, 2022.
1	Unless otherwise indicated, the information in this prospectus assumes:

☐ A public offering price of \$6.375 per Units;

□ No exercise by the underwriter of its option to purchase 197,647 additional shares of common stock to cover over-allotments, if any;

☐ No exercise of the underwriter's warrants;

☐ 1,317,647 shares of common stock sold in this offering; and

☐ The conversion of 332,299 shares upon automatic conversion of Convertible Bridge and SAFE Notes and the voluntary conversion of other convertible notes outstanding upon the completion of the IPO.

#### SUMMARY SELECTED FINANCIAL DATA

The summary selected financial data set forth below should be read together with our financial statements and the related notes to those statements, as well as the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus. The statements of operations data for the period ended September 30, 2022 has been derived from our reviewed financial statements included elsewhere in this prospectus. The statements of operations data for the period ended December 31, 2021 has been derived from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future, and the results for the year ended December 31, 2021 are not necessarily indicative of results to be expected for the full year ending December 31, 2022.

### **Statements of Operations Data**

	Sept	period ended ember 30, 2022 naudited	For the year ended December 31, 2021 Audited	
Revenues	\$	-	\$	-
Net income (loss)	\$	(2,106,969)	\$	(585,840)
Net income (loss) per share	\$	(0.08)	\$	(0.02)
Weighted average number of shares		27,586.200		26,145,503

## **Balance Sheet Data**

	Ac	Actual as of		Pro Forma <sup>(1)</sup> for		orma as adjusted <sup>(2)</sup>
	Septen	nber 30, 2022	September 30, 2022		September 30, 2022	
Cash	\$	42,216	\$	42,216	\$	7,426,216
Total assets	\$	65,356	\$	65,356	\$	7,449,356
Total liabilities	\$	2,478,716	\$	1,067,640	\$	1,067,640
Total stockholder's equity (deficit)	\$	(2,413,360)	\$	(1,002,284)	\$	6,381,716

- (1) The proforma balance sheet data gives effect to the issuance of 332,229 shares of common stock that are issuable upon automatic conversion of Convertible Bridge Notes and SAFE Notes, as described elsewhere in this prospectus, and the voluntary conversion of other convertible notes outstanding upon the completion of the IPO.
- (2) The as adjusted balance sheet data gives effect to the issuance and sale of Units in this offering at an assumed offering price of \$6.375 per Unit, as set forth on the cover of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted balance sheet data also gives effect to the conversion of our preferred stock, and convertible notes and related accrued interest.

7

## RISK FACTORS

An investment in our securities is highly speculative and involves a high degree of risk. In determining whether to purchase the Company's securities, an investor should carefully consider all of the material risks described below, together with the other information contained in this Prospectus. We cannot assure you that any of the events discussed below will not occur. These events could have a material and adverse impact on our business, financial condition, results of operations and prospects. If that were to happen, the trading price of our common stock could decline, and you could lose all or part of your investment.

## Risks Related to Liquidity, the Company's Business and Industry

We have a limited operating history upon which you can evaluate our performance, and accordingly, our prospects must be considered in light of the risks that any new company encounters.

We were incorporated under the laws of Nevada on February 26, 2020. Accordingly, we have no significant history upon which an evaluation of our prospects and future performance can be made. Our proposed operations are subject to all of the business risks associated with a new enterprise. The likelihood of our creation of a viable business must be considered in light of the problems, expenses, difficulties, complications, and delays frequently encountered in connection with the inception of a business, operation in a competitive industry, and the continued development of our technology and the results of our clinical data. We anticipate that our operating expenses will increase for the near future. There can be no assurances that we will ever operate profitably. You should consider the Company's business, operations and prospects in light of the risks, expenses and challenges faced as an early-stage company.

## If we are unable to attract and retain key management, scientific personnel and advisors, we may not achieve our business objectives.

Our success depends on the availability and contributions of members of our senior management team. The loss of services of any of these individuals could delay, reduce or prevent our drug development and other business objectives. Furthermore, recruiting and retaining qualified scientific personnel to perform drug development work will be critical to our success. We face intense competition for qualified individuals from numerous pharmaceutical and biotechnology companies, universities, governmental entities and other public and private research institutions. We may be unable to attract and retain these individuals, and our failure to do so could materially adversely affect our business and financial condition.

8

## The development of our technology, products, and services is highly competitive.

We face competition with respect to any products that we may seek to develop or commercialize in the future. Our competitors include major companies worldwide. Many of our competitors have significantly greater financial, technical and human resources than we have and superior expertise in research and development and marketing approved products/services and thus may be better equipped than us to develop and commercialize products/services. These competitors also compete with us in recruiting and retaining qualified personnel and acquiring technologies. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Accordingly, our competitors may commercialize products more rapidly or effectively than we are able to, which would adversely affect our competitive position, the likelihood that our products/services will achieve initial market acceptance and our ability to generate meaningful additional revenues from our products.

#### From time to time, third parties may claim that one or more of our products or services infringe their intellectual property rights.

Any dispute or litigation regarding patents or other intellectual property could be costly and time consuming due to the uncertainty of intellectual property litigation and could divert our management and key personnel from our business operations. A claim of intellectual property infringement could force us to enter into a costly or restrictive license agreement, which might not be available under acceptable terms or at all, could require us to redesign our products, which would be costly and time-consuming, and/or could subject us to an injunction against development and sale of certain of our products or services. We may have to pay substantial damages, including damages for past infringement if it is ultimately determined that our products infringe on a third party's proprietary rights. Even if these claims are without merit, defending a lawsuit takes significant time, may be expensive and may divert management's attention from other business concerns. Any public announcements related to litigation or interference proceedings initiated or threatened against us could cause our business to be harmed. Our intellectual property portfolio may not be useful in asserting a counterclaim, or negotiating a license, in response to a claim of intellectual property infringement. In certain of our businesses we rely on third party intellectual property licenses and we cannot ensure that these licenses will be available to us in the future on favorable terms or at all.

## Although dependent on certain key personnel, the Company does not have any key man life insurance policies on any such people.

The Company is dependent on Vininder Singh in order to conduct its operations and execute its business plan and the loss of Vininder Singh or any member of the board of directors or executive officer could harm the Company's business, financial condition, cash flow and results of operations.; however, the Company has not purchased any insurance policies with respect to those individuals in the event of their death or disability. Therefore, if Vininder Singh or any member of the board of directors or an executive officer dies or become disabled, the Company will not receive any compensation to assist with such person's absence. The loss of such person could negatively affect the Company and its operations.

## The Company's business operations may be materially adversely affected by a pandemic such as the Coronavirus COVID-19) outbreak.

In December 2019, a novel strain of coronavirus was reported to have surfaced in Wuhan, China, which spread throughout other parts of the world, including the United States. On January 30, 2020, the World Health Organization declared the outbreak of the coronavirus disease (COVID-19) a "Public Health Emergency of International Concern." On January 31, 2020, U.S. Health and Human Services Secretary Alex M. Azar II declared a public health emergency for the United States to aid the U.S. healthcare community in responding to COVID-19, and on March 11, 2020 the World Health Organization characterized the outbreak as a "pandemic." COVID-19 resulted in a widespread health crisis that adversely affected the economies and financial markets worldwide. The Company's business could be materially and adversely affected. The extent to which COVID-19 impacts the Company's business will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others. If the disruptions posed by COVID-19 or other matters of global concern continue for an extended period of time, the Company's operations may be materially adversely affected. A chief concern related to such events is that they could cause a disruption to our clinical trials.

9

## New product development involves a lengthy, expensive and complex process.

We may be unable to develop or commercialize any product candidates. Moreover, even if we develop such candidates, they may be subject to significant regulatory review, approval and other government regulations. There can be no assurance that our technologies will be capable of developing and commercializing products at all. New product development involves a lengthy, expensive and complex process and we currently have no fully validated diagnostic candidates. In addition, before we can commercialize any new product candidates, we will need to:

- conduct substantial research and development;
- conduct validation studies;
- expend significant funds;
- develop and scale-up our laboratory processes; and
- obtain regulatory approval and acceptance of our product candidates.

This process involves a high degree of risk and takes several years. Our product development efforts may fail for many reasons, including:

- failure of the product at the research or development stage; and
- lack of clinical validation data to support the effectiveness of the product.

Few research and development projects result in commercial products, and perceived viability in early clinical trials often is not replicated in later studies. At any point, we may abandon development of a product candidate or we may be required to expend considerable resources repeating clinical trials, which would adversely impact the timing for generating potential revenues from those product candidates. In addition, as we develop product candidates, we will have to make significant investments in product development, marketing and sales resources.

## We may not be able to conduct clinical trials necessary to increase the value of our proposed products and formulations.

In order to conduct clinical trials that are necessary to obtain approval of a product by the FDA, it is necessary to receive clearance from the FDA to conduct such clinical trials.

The FDA can halt clinical trials at any time for safety reasons or because we or our clinical investigators do not follow the FDA's requirements for conducting clinical trials. If we are unable to receive clearance to conduct clinical trials or the trials are halted by the FDA, the likelihood of our ability to sell or license our products would be greatly reduced as it is the FDA approval which will enhance the value of our products.

## Our ability to resell and/or license our products will depend upon successful clinical trials.

Only a small number of research and development programs result in the development of a product that obtains FDA approval. Success in preclinical work or early stage clinical trials does not ensure that later stage or larger scale clinical trials will be successful. Conducting clinical trials is a complex, time-consuming and expensive process. Our ability to complete our clinical trials in a timely fashion depends in large part on a number of key factors including protocol design, regulatory and institutional review board approval, the rate of patient enrollment in clinical trials, and compliance with extensive current Good Clinical Practices. If we fail to adequately manage the design, execution and regulatory aspects of our clinical trials, our studies and ultimately our regulatory approvals may be delayed, or we may fail to gain approval for our product candidates. Clinical trials may indicate that our product candidates have harmful side effects or raise other safety concerns that may significantly reduce the likelihood of regulatory approval, result in significant restrictions on use and safety warnings in any approved label, adversely affect placement within the treatment paradigm, or otherwise significantly diminish the commercial potential of the product candidate. Also, positive results in a registrational trial may not be replicated in any subsequent confirmatory trials. Even if later stage clinical trials are successful, regulatory authorities may disagree with our view of the data or require additional studies, and may fail to approve or delay approval of our product candidates or may grant marketing approval that is more restricted than anticipated, including indications for a narrower patient population than expected and the imposition of safety monitoring or educational requirements or risk evaluation and mitigation strategies. In addition, if another Company is the first to file for marketing approval of a competing drug candidate, that Company may ultimately receive marketing exclusivity for it

10

#### We face significant competition from other biotechnology and pharmaceutical companies.

While we believe that our technology, development experience and scientific knowledge provide competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical, and biotechnology companies, academic institutions and governmental agencies, and public and private research institutions. Many of our existing or potential competitors have substantially greater financial, technical and human resources than we do and significantly greater experience in the development of drug candidates as well as in obtaining regulatory approvals of those drug candidates in the United States and in foreign countries.

Mergers and acquisitions in the pharmaceutical and biotechnology industries could result in even more resources being concentrated among a small number of our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing, on an exclusive basis, drug candidates that are more effective or less costly than any drug candidate that we may develop.

Our ability to compete successfully will depend largely on our ability to:

- \* identify drugs that have suffered set backs in the clinical development and regulatory process which we believe can be assisted by our platform's ability to design a better study group;
- \* attract qualified scientific, product development and commercial personnel;
- \* obtain patent or other proprietary protection for our drugs and technologies;
- \* obtain required regulatory approvals; successfully collaborate with pharmaceutical companies in the discovery, development and commercialization of new drugs; and
- \* negotiate competitive pricing and reimbursement with third party payors

The availability of our competitors' technologies could limit the demand, and the price we are able to charge for our services and for any drug candidate we develop. The inability to compete with existing or subsequently introduced drug development technologies would have a material adverse impact on our business, financial condition and prospects.

Established pharmaceutical companies and research institutions may invest heavily to accelerate discovery and development of novel compounds or to in license novel compounds that could make bfLEAP<sup>TM</sup> less competitive, which would have a material adverse impact on our business.

## We may not be able to acquire the rights to any failed drugs or we may not be able to rescue failed drugs through analysis due to our technology or the lack of clinical data

Our business model is based on the use of AI/ML technology, which technology may not uncover actionable insights or we may not be able to access sufficient clinical data to uncover such insights that lead to a successful project, clinical trial, or product. The failure of such projects, clinical trials or products would result in a loss of revenue from one of our three sources, which could have a material adverse impact on our business as a whole.

## We may not succeed in acquiring the rights to failed drugs, which could limit one of our main sources of revenue.

Our business model is partly based on our ability to acquire drugs that have failed to pass Phase 2 or Phase 3 of the FDA approval process; however, there is no guarantee that we will be able to acquire the rights to such drugs, which would significantly impact our ability to generate revenue and as a result would have a material adverse impact on our business.

## We intend to invest in early stage experimental technologies which have a high risk of failure.

To continue supporting our business model, we intend to invest in early stage and experimental technologies, some or all of which may not be useful to us. There is a risk that we will invest in technology that will not ultimately contribute to the success of our projects, which could have a material adverse impact on our business.

## We are dependent on our collaborative agreements for the development of products and business development, which exposes us to the risk of reliance on the viability of third parties.

In conducting our research and development activities, we currently rely, and will in the future rely, on collaborative agreements with third parties such as manufacturers, contract research organizations, commercial partners, universities, governmental agencies and not-for-profit organizations for both strategic and financial resources. The loss of, or failure to perform by us or our partners under, any applicable agreements or arrangements, or our failure to secure additional agreements for other products in development, would substantially disrupt or delay our research and development and commercialization activities. Any such loss would likely increase our expenses and materially harm our business, financial condition and results of operation.

We rely on independent third-party contract research organizations (CROs) to perform most of our clinical studies, including document preparation, site identification, screening and preparation, pre-study visits, training, program management and bioanalytical analysis. Many important aspects of the services performed for us by the CROs are out of our direct control. If there is any dispute or disruption in our relationship with our CROs, our clinical trials may be delayed. Moreover, in our regulatory submissions, we rely on the quality and validity of the clinical work performed by third-party CROs. If any of our CROs' processes, methodologies or results were determined to be invalid or inadequate, our own clinical data and results and related regulatory approvals could be adversely impacted.

We are a biotechnology company with no significant revenue. We have incurred operating losses since our inception, and we expect to incur losses for the foreseeable future and may never achieve profitability.

We have incurred significant operating losses since our inception. To date, we have not generated any revenue and we may not generate any revenue from sales of our clinical analytics services or drug candidates for the foreseeable future. We expect to continue to incur significant operating losses and we anticipate that our losses may increase substantially as we expand our drug development programs.

To achieve profitability, we must successfully develop and obtain regulatory approval for one or more of drugs and effectively commercialize any drugs we develop. Even if we succeed in developing and commercializing one or more drug candidates, we may not be able to generate sufficient revenue and we may never be able to achieve or sustain profitability.

We will continue to require additional capital for the foreseeable future. If we are unable to raise additional capital when needed, we may be forced to delay, reduce or eliminate our drug acquisition efforts.

We expect to continue to incur significant operating expenses in connection with our ongoing activities, including conducting clinical trials and seeking regulatory approval of drug candidates. Our ongoing future capital requirements will depend on numerous factors, including:

- the rate of progress, results and costs of completion of clinical trials of drug candidates;
- the size, scope, rate of progress, results and costs of completion of any potential future clinical
- trials and preclinical tests of our drug candidates that we may initiate;
- the costs of obtaining regulatory approval of drug candidates;
- the scope, prioritization and number of drug development programs we pursue;
- · the costs for preparing, filing, prosecuting, maintaining and enforcing our intellectual property
- rights and defending intellectual property-related claims;
- the extent to which we acquire or in-license other products and technologies and the costs to be able to obtain regulatory approval of such products;
- our ability to establish strategic collaborations and licensing or other arrangements on terms
- favorable to us; and
- · competing technological and market developments.

Any additional fundraising efforts may divert our management from their day to day activities, which may adversely affect our ability to identify and acquire new drug candidates and to further the regulatory process of such products. Our ability to raise additional funds will depend, in part, on the success of our product development activities and other factors related to financial, economic and market conditions, many of which are beyond our control. There can be no assurance that we will be able to raise additional capital when needed or on terms that are favorable to us, if at all. If adequate funds are not available on a timely basis, we may be forced to:

• delay, reduce the scope of or eliminate one or more of our drug development programs;

12

- limit the amount of new products that we acquire or relinquish, license or otherwise dispose of rights on terms that are less favorable than if we were able to further the regulatory approval process; or
- liquidate and dissolve the Company.

If our operating plans change, we may require additional capital sooner than planned. Such additional financing may not be available when needed or on terms favorable to us. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current and future operating plan.

We are increasingly dependent on information technology systems to operate our business and a cyber-attack or other breach of our systems, or those of third parties on whom we may rely, could subject us to liability or interrupt the operation of our business.

We are increasingly dependent on information technology systems to operate our business. A breakdown, invasion, corruption, destruction or interruption of critical information technology systems by employees, others with authorized access to our systems or unauthorized persons could negatively impact operations. In the ordinary course of business, we collect, store and transmit confidential information and it is critical that we do so in a secure manner to maintain the confidentiality and integrity of such information. Additionally, we outsource certain elements of our information technology systems to third parties. As a result of this outsourcing, our third party vendors may or could have access to our confidential information making such systems vulnerable. Data breaches of our information technology systems, or those of our third party vendors, may pose a risk that sensitive data may be exposed to unauthorized persons or to the public. For example, the loss of clinical trial data from completed or ongoing clinical trials or preclinical studies could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. While we believe that we have taken appropriate security measures to protect our data and information technology systems, and have been informed by our third party vendors that they have as well, there can be no assurance that our efforts will prevent breakdowns or breaches in our systems, or those of our third party vendors, that could materially adversely affect our business and financial condition.

We must complete extensive clinical trials to demonstrate the safety and efficacy of our drug candidates. If we are unable to demonstrate the safety and efficacy of our drug candidates, we will not be successful.

The success of our business depends primarily on our ability to further the regulatory approval process to increase the value of our drug candidates. Drug candidates must satisfy rigorous standards of safety and efficacy before they can be approved for sale which greatly enhances their value. To satisfy these standards, we must engage in expensive and lengthy testing of drug candidates.

We may not be able to obtain authority from the FDA or other equivalent foreign regulatory agencies to move on to further efficacy segments of the Phase 2 or Phase 3 clinical trials or commence and complete any clinical trials for any of our drug candidates. Positive results in preclinical studies of a drug candidate may not be predictive of similar results in human clinical trials, and promising results from early clinical trials of a drug candidate may not be replicated in later clinical trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in early-stage development. Accordingly, the results from the preclinical tests or clinical trials for our drug candidates may not be predictive of the results we may obtain in later stage trials. The failure of clinical trials to demonstrate safety and efficacy of one or more of our drug candidates will have a material adverse effect on our business and financial condition.

Delays in the commencement of clinical trials of our drug candidates could result in increased costs to us and delay our ability to successfully license or sell such products.

Our drug candidates will require continued extensive clinical trials to increase the value and desirability of the products. Because of the nature of clinical trials, we do not know

whether future planned clinical trials will begin on time, if at all. Delays in the commencement of clinical trials could significantly increase our drug development costs and delay our ability to successfully sell or license our drug candidates. In addition, many of the factors that may cause, or lead to, a delay in the commencement of clinical trials may also ultimately lead to denial of regulatory approval of a drug candidate. The commencement of clinical trials can be delayed for a variety of reasons, including delays in:

- demonstrating sufficient safety and efficacy in past clinical trials to obtain regulatory approval
- to commence a further clinical trial;

13

- convincing the FDA that we have selected valid endpoints for use in proposed clinical trials; and
- obtaining institutional review board approval to conduct a clinical trial at a prospective site.

In addition, the commencement of clinical trials may be delayed due to insufficient patient enrollment, which is a function of many factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease and the eligibility criteria for the clinical trial.

## If we are unable to obtain U.S. and/or foreign regulatory approval, we will be unable to resell or license our drug candidates.

Our drug candidates will be subject to extensive governmental regulations relating to, among other things, research, testing, development, manufacturing, safety, efficacy, record keeping, labeling, marketing and distribution of drugs. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process are required in the U.S. and in many foreign jurisdictions prior to the commercial sale of drug candidates. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. It is possible that no drug candidate that we present to the FDA will obtain marketing approval which will significantly diminish the value and desirability of our product candidates. In connection with the clinical trials for our drug candidates, we face risks that:

- the drug candidate may not prove to be efficacious;
- the drug candidate may not prove to be safe;
- the drug candidate may not be readily co-administered or combined with other drugs or drug
- candidates:
- the results may not confirm the positive results from earlier preclinical studies or clinical trials;
- the results may not meet the level of statistical significance required by the FDA or other
- · regulatory agencies; and
- the FDA or other regulatory agencies may require us to carry out additional studies.

We have limited experience in conducting and managing later stage clinical trials necessary to obtain regulatory approvals, including approval by the FDA. However, this risk would be mitigated in the event the Company is successful entering into a co-development agreement with a pharma partner for late stage clinical development. The time required to complete clinical trials and for the FDA and other countries' regulatory review processes is uncertain and typically takes many years. Our analysis of data obtained from preclinical and clinical trials is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We may also encounter unanticipated delays or increased costs due to government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials, and FDA regulatory review.

## We will rely on third parties for manufacturing of our clinical drug supplies; our dependence on these manufacturers may impair the development of our drug candidates.

We have no ability to internally manufacture the drug candidates that we need to conduct our clinical trials for the products that we acquire. For the foreseeable future, we expect to continue to rely on third-party manufacturers and other third parties to produce, package and store sufficient quantities of our drug candidates and any future drug candidates for use in our clinical trials. We may face various risks and uncertainties in connection with our reliance on third-party manufacturers, including:

- reliance on third-party manufactures for regulatory compliance and quality assurance;
- the possibility of breach of the manufacturing agreement by the third-party manufacturer because
- of factors beyond our control;
- the possibility of termination or nonrenewal of our manufacturing agreement by the third-party
- manufacturer at a time that is costly or inconvenient for us;
- the potential that third-party manufacturers will develop know-how owned by such third-party
- manufacturer in connection with the production of our drug candidates that is necessary for the
- manufacture of our drug candidates; and
- · reliance on third-party manufacturers to assist us in preventing inadvertent disclosure or theft of
- our proprietary knowledge.

14

Our drug candidates may be complicated and expensive to manufacture. If our third-party manufacturers fail to deliver our drug candidates for clinical use on a timely basis, with sufficient quality, and at commercially reasonable prices, we may be required to delay or suspend clinical trials or otherwise discontinue development of our drug candidates. While we may be able to identify replacement third-party manufacturers or develop our own manufacturing capabilities for these drug candidates, this process would likely cause a delay in the availability of our drug candidates and an increase in costs. In addition, third-party manufacturers may have a limited number of facilities in which our drug candidates can be manufactured, and any interruption of the operation of those facilities due to events such as equipment malfunction or failure or damage to the facility by natural disasters could result in the cancellation of shipments, loss of product in the manufacturing process or a shortfall in available drug candidates.

## $We \ may \ rely \ on \ technology \ solution \ partners \ for \ the \ development \ and \ deployment \ of \ our \ AI \ technology$

Our partners may experience technical, financial, operational, or security issues that reduce or eliminate their ability to support the Company. This could prevent the Company from generating revenue and eliminate our ability to operate.

In addition to the risks listed above, businesses are often subject to risks not foreseen or fully appreciated by the management. It is not possible to foresee all risks that may affect us. Moreover, the Company cannot predict whether the Company will successfully effectuate the Company's current business plan. Each prospective Purchaser is encouraged to carefully analyze the risks and merits of an investment in the Securities and should take into consideration when making such analysis, among other, the Risk Factors discussed above.

## Risks Related to Intellectual Property Rights

## We rely on various intellectual property rights, including patents and licenses in order to operate our business.

Our intellectual property rights, may not be sufficiently broad or otherwise may not provide us a significant competitive advantage. In addition, the steps that we have taken to

maintain and protect our intellectual property may not prevent it from being challenged, invalidated, circumvented or designed-around, particularly in countries where intellectual property rights are not highly developed or protected. In some circumstances, enforcement may not be available to us because an infringer has a dominant intellectual property position or for other business reasons, or countries may require compulsory licensing of our intellectual property. Our failure to obtain or maintain intellectual property rights that convey competitive advantage, adequately protect our intellectual property or detect or prevent circumvention or unauthorized use of such property, could adversely impact our competitive position and results of operations. We also rely on nondisclosure and noncompetition agreements with employees, consultants and other parties to protect, in part, trade secrets and other proprietary rights and will not be breached, that we will have adequate remedies for any breach, that others will not independently develop substantially equivalent proprietary information or that third parties will not otherwise gain access to our trade secrets or other proprietary rights.

As we expand our business, protecting our intellectual property will become increasingly important. The protective steps we have taken may be inadequate to deter our competitors from using our proprietary information. In order to protect or enforce our patent rights, we may be required to initiate litigation against third parties, such as infringement lawsuits. Also, these third parties may assert claims against us with or without provocation. These lawsuits could be expensive, take significant time and could divert management's attention from other business concerns. The law relating to the scope and validity of claims in the technology field in which we operate is still evolving and, consequently, intellectual property positions in our industry are generally uncertain. We cannot assure you that we will prevail in any of these potential suits or that the damages or other remedies awarded, if any, would be commercially valuable.

15

#### The Company could be negatively impacted if found to have infringed on intellectual property rights.

Technology companies, including many of the Company's competitors, frequently enter into litigation based on allegations of patent infringement or other violations of intellectual property rights. In addition, patent holding companies seek to monetize patents they have purchased or otherwise obtained. As the Company grows, the intellectual property rights claims against it will likely increase. The Company intends to vigorously defend infringement actions in court and before the U.S. International Trade Commission. The plaintiffs in these actions frequently seek injunctions and substantial damages. Regardless of the scope or validity of such patents or other intellectual property rights, or the merits of any claims by potential or actual litigants, the Company may have to engage in protracted litigation. If the Company is found to infringe one or more patents or other intellectual property rights, regardless of whether it can develop non-infringing technology, it may be required to pay substantial damages or royalties to a third-party, or it may be subject to a temporary or permanent injunction prohibiting the Company from marketing or selling certain products. In certain cases, the Company may consider the desirability of entering into licensing agreements, although no assurance can be given that such licenses can be obtained on acceptable terms or that litigation will not occur. These licenses may also significantly increase the Company's operating expenses. Regardless of the merit of particular claims, litigation may be expensive, time-consuming, disruptive to the Company's operations and distracting to management. In recognition of these considerations, the Company may enter into arrangements to settle litigation. If one or more legal matters were resolved against the Company's consolidated financial statements for that reporting period could be materially adversely affected. Further, such an outcome could result in significant compensatory, punitive or trebled monetary damages, disgorgement of revenue or p

We rely heavily on our technology and intellectual property, but we may be unable to adequately or cost-effectively protect or enforce our intellectual property rights, thereby weakening our competitive position and increasing operating costs.

To protect our rights in our services and technology, we rely on a combination of copyright and trademark laws, patents, trade secrets, confidentiality agreements and protective contractual provisions. We also rely on laws pertaining to trademarks and domain names to protect the value of our corporate brands and reputation. Despite our efforts to protect our proprietary rights, unauthorized parties may copy aspects of our services or technology, obtain and use information, marks, or technology that we regard as proprietary, or otherwise violate or infringe our intellectual property rights. In addition, it is possible that others could independently develop substantially equivalent intellectual property. If we do not effectively protect our intellectual property, or if others independently develop substantially equivalent intellectual property, our competitive position could be weakened.

Effectively policing the unauthorized use of our services and technology is time-consuming and costly, and the steps taken by us may not prevent misappropriation of our technology or other proprietary assets. The efforts we have taken to protect our proprietary rights may not be sufficient or effective, and unauthorized parties may copy aspects of our services, use similar marks or domain names, or obtain and use information, marks, or technology that we regard as proprietary. We may have to litigate to enforce our intellectual property rights, to protect our trade secrets, or to determine the validity and scope of others' proprietary rights, which are sometimes not clear or may change. Litigation can be time consuming and expensive, and the outcome can be difficult to predict.

We rely on agreements with third parties to provide certain services, goods, technology, and intellectual property rights necessary to enable us to implement some of our applications.

Our ability to implement and provide our applications and services to our clients depends, in part, on services, goods, technology, and intellectual property rights owned or controlled by third parties. These third parties may become unable to or refuse to continue to provide these services, goods, technology, or intellectual property rights on commercially reasonable terms consistent with our business practices, or otherwise discontinue a service important for us to continue to operate our applications. If we fail to replace these services, goods, technologies, or intellectual property rights in a timely manner or on commercially reasonable terms, our operating results and financial condition could be harmed. In addition, we exercise limited control over our third-party vendors, which increases our vulnerability to problems with technology and services those vendors provide. If the services, technology, or intellectual property of third parties were to fail to perform as expected, it could subject us to potential liability, adversely affect our renewal rates, and have an adverse effect on our financial condition and results of operations.

If any third-party owners of intellectual property we may license in the future do not properly maintain or enforce the patents underlying such licenses, our competitive position and business prospects will be harmed.

We may enter into licenses for third-party intellectual property in the future. Our success will depend in part on the ability of our licensors to obtain, maintain and enforce patent protection for their intellectual property, in particular, those patents to which we have secured exclusive rights.

16

If applicable, our licensors may not successfully prosecute the patent applications to which we are licensed. Even if patents issue in respect of any such patent applications, our licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents, or may pursue such litigation less aggressively than we would. In addition, our licensors may terminate their agreements with us in the event we breach the applicable license agreement and fail to cure the breach within a specified period of time. Without protection for the intellectual property we license, other companies might be able to offer substantially identical products for sale, which could materially adversely affect our competitive business position, business prospects and financial condition.

Because our research and development of drug candidates often incorporates compounds and other information that is the intellectual property of third parties, we depend on continued access to such intellectual property to conduct and complete our preclinical and clinical research and commercialize the drug candidates that result from this research. We expect that future licenses would impose, numerous obligations on us. For example, under our existing and future license agreements, we may be required to pay (i) annual maintenance fees until a drug candidate is sold for the first time, (ii) running royalties on net sales of drug candidates, (iii) minimum annual royalties after a drug candidate is sold for the first time, and (iv) one-time payments upon the achievement of specified milestones. We may also be required to reimburse patent costs incurred by the licensor, or we may be obligated to pay additional royalties, at specified rates, based on net sales of our drug candidates that incorporate the licensed intellectual property rights. We may

also be obligated under some of these agreements to pay a percentage of any future sublicensing revenues that we may receive. Future license agreements may also include payment obligations such as milestone payments or minimum expenditures for research and development. We expect that any future licenses would contain reporting, insurance and indemnification requirements. We are actively reviewing and preparing additional patent applications to expand our patent portfolio, but there can be no assurances that patents related to our existing patent applications or any applications we may file in the future will be issued or that any issued patents will provide meaningful protection for our drug candidates, which could materially adversely affect our competitive business position, business prospects and financial condition.

## Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information and may not adequately protect our intellectual property.

We rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. In order to protect our proprietary technology and processes, we also rely in part on confidentiality and intellectual property assignment agreements with our corporate partners, employees, consultants, outside scientific collaborators and sponsored researchers and other advisors. These agreements may not effectively prevent disclosure of confidential information nor result in the effective assignment to us of intellectual property, and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information or other breaches of the agreements. In addition, others may independently discover our trade secrets and proprietary information, and in such case we could not assert any trade secret rights against such party. Enforcing a claim that a party illegally obtained and is using our trade secrets is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, courts outside the U.S. may be less willing to protect trade secrets. Costly and time-consuming litigation could be necessary to seek to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret

## Risks Related to Ownership of Our Securities and this Offering

#### The market price of our common stock may be highly volatile, and you could lose all or part of your investment.

The trading price of our common stock is likely to be volatile. Upon the consummation of this offering, we will have a relatively small public float due to the relatively small size of this offering, and the concentrated ownership of our common stock among our executive officers and directors, and greater than 5% stockholders. As a result of our small public float, our common stock may be less liquid and have greater stock price volatility than the common stock of companies with broader public ownership.

Our stock price could be subject to wide fluctuations in response to a variety of other factors, which include:

- whether we achieve our anticipated corporate objectives;
- changes in financial or operational estimates or projections;
- termination of the lock-up agreement or other restrictions on the ability of our stockholders and other security holders to sell shares after this offering; and
- general economic or political conditions in the United States or elsewhere.

In addition, the stock market in general has recently experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Such rapid and substantial price volatility, including any stock run-up, may be unrelated to our actual or expected operating performance and financial condition or prospects, making it difficult for prospective investors to assess the rapidly changing value of our stock. This volatility may prevent you from being able to sell your securities at or above the price you paid for your securities. If the market price of our common stock after this offering does not exceed the initial public offering price, you may not realize any return on your investment in us and may lose some or all of your investment.

## Our management will have broad discretion over the use of any net proceeds from this offering and you may not agree with how we use the proceeds, and the proceeds may not be invested successfully.

Our management will have broad discretion as to the use of any net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Accordingly, you will be relying on the judgment of our management with regard to the use of any proceeds from this offering and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. We have no current specific plan for a significant portion of the offering proceeds and it is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return for you.

## Investors in this offering may experience future dilution as a result of this and future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock. Investors purchasing our shares or other securities in the future could have rights superior to existing common stockholders, and the price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

17

## An active trading market for our common stock or Warrants may not develop, and you may not be able to sell your common stock at or above the initial public offering price.

Prior to the consummation of this offering, there has been no public market for our common stock or Warrants. An active trading market for shares of our common stock or Warrants may never develop or be sustained following this offering. If an active trading market does not develop, you may have difficulty selling your shares of common stock or Warrants at an attractive price, or at all. The price for our Units in this offering will be determined by negotiations between us and the underwriters, and it may not be indicative of prices that will prevail in the open market following this offering. Consequently, you may not be able to sell your common stock or Warrants at or above the initial public offering price or at any other price or at the time that you would like to sell. An inactive market may also impair our ability to raise capital by selling our common stock, and it may impair our ability to attract and motivate our employees through equity incentive awards and our ability to acquire other companies, products or technologies by using our common stock as consideration.

## The price of our common stock may fluctuate substantially.

You should consider an investment in our common stock to be risky, and you should invest in our common stock only if you can withstand a significant loss and wide fluctuations in the market value of your investment. Some factors that may cause the market price of our common stock to fluctuate, in addition to the other risks mentioned in this "Risk Factors" section and elsewhere in this prospectus, are:

- sales of our common stock by our stockholders, executives, and directors;
- volatility and limitations in trading volumes of our shares of common stock;
- our ability to obtain financing to conduct and complete research and development activities;
- our ability to attract new customers;
- changes in the development status of the drugs we acquire;

- failures to meet external expectations or management guidance;
- changes in our capital structure or dividend policy or future issuances of securities;
- our cash position;
- announcements and events surrounding financing efforts, including debt and equity securities;
- reputational issues;
- announcements of acquisitions, partnerships, collaborations, joint ventures, new products, capital commitments, or other events by us or our competitors;
- changes in general economic, political and market conditions in or any of the regions in which we conduct our business;
- changes in industry conditions or perceptions;
- changes in valuations of similar companies or groups of companies;
- analyst research reports, recommendation and changes in recommendations, price targets, and withdrawals of coverage;
- departures and additions of key personnel;
- disputes and litigations related to intellectual property rights, proprietary rights, and contractual obligations;
- changes in applicable laws, rules, regulations, or accounting practices and other dynamics; and
- other events or factors, many of which may be out of our control.

18

In addition, if the market for stocks in our industry or industries related to our industry, or the stock market in general, experiences a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, financial condition and results of operations. If any of the foregoing occurs, it could cause our stock price to fall and may expose us to lawsuits that, even if unsuccessful, could be costly to defend and a distraction to management.

#### The Warrants may not have any value.

Each Warrant will have an assumed exercise price equal to \$6.375 (100% of the assumed \$6.375 offering price per Unit). The Warrants will be exercisable from the date of issuance until the fifth anniversary of the issue date. In the event our common stock price does not exceed the exercise price of the Warrants during the period when the Warrants are exercisable, the Warrants may not have any value.

## Holders of Warrants have no rights as stockholders until such holders exercise their Warrants and acquire our shares of Common Stock.

Until holders of our Warrants acquire shares of common stock upon exercise thereof, such holders will have no rights with respect to the shares of common stock underlying the Warrants. Upon exercise of the Warrants, the holders will be entitled to exercise the rights of a stockholder only as to matters for which the record date occurs after the date they were entered in the register of members of the Company as a stockholder.

## Future sales of shares by existing stockholders could cause our stock price to decline.

If our existing stockholders sell, or indicate an intent to sell, substantial amounts of our common stock in the public market after the twelve-month contractual lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock and Warrants could decline significantly and could decline below the initial public offering price. Based on shares outstanding as of the date of this prospectus, upon the completion of this offering, we will have 5,339,582 outstanding shares of common stock. Of these shares, assuming no shares are purchased in this offering by our existing stockholders, 2,539,994 shares of common stock, plus any shares sold pursuant to the underwriters' option to purchase additional shares, will be immediately freely tradable, without restriction, in the public market.

After the six-month lock-up agreements pertaining to this offering expire, as the case may be, and based on shares outstanding as of the date of the prospectus, an additional 2,799,588 shares will be eligible for sale in the public market. In addition, upon issuance, the 900,000 shares reserved for future issuance under our 2022 Equity Incentive Plan may become eligible for sale in the public market in the future, subject to certain legal and contractual limitations. If our existing stockholders sell substantial amounts of our common stock in the public market, or if the public perceives that such sales could occur, this could have an adverse impact on the market price of our common stock, even if there is no relationship between such sales and the performance of our business.

## After the completion of this offering, we may be at an increased risk of securities class action litigation.

Historically, securities class action litigation has often been brought against a company following a decline in the market price of its securities. If we were to be sued, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

We have never paid dividends on our capital stock and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our common stock will likely depend on whether the price of our common stock increases.

We have not paid dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the terms of any future indebtedness we may incur could preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain from an investment in our common stock for the foreseeable future. Consequently, in the foreseeable future, you will likely only experience a gain from your investment in our common stock if the price of our common stock increases.

## We are not subject to all Sarbanes-Oxley regulations and lack of financial controls and safeguards required of public companies.

We do not have the internal infrastructure necessary, and are not required, to complete an attestation about our financial controls that would be required under Section 404 of the Sarbanes-Oxley Act of 2002. There can be no assurance that there are no significant deficiencies or material weaknesses in the quality of our financial controls. We expect to incur additional expenses and diversion of management's time if and when it becomes necessary to perform the system and process evaluation, testing and remediation required in order to comply with the management certification and auditor attestation requirements.

## If you invest in securities in this offering, you will incur immediate and substantial dilution in the book value of your common stock.

The offering price per share of our common stock that is part of a Unit will be substantially higher than the net tangible book value per share of our common stock immediately after this offering. Investors purchasing Units in this offering will pay a price per Unit that substantially exceeds the book value of our tangible assets after subtracting our liabilities. As a result, investors purchasing Units in this offering will incur immediate dilution of \$5.18 per share of our common stock, based on the assumed offering price of \$6.375 per Unit.

19

If equity research analysts do not publish research or reports about our business or if they issue unfavorable commentary or downgrade our common stock, the price of our common stock could decline.

The trading market for our common stock may be affected by the research and reports that equity research analysts publish about us and our business. We do not control these

analysts. The price of our common stock could decline if one or more equity analysts downgrade our common stock or if analysts issue other unfavorable commentary or cease publishing reports about us or our business.

#### We may not be able to satisfy listing requirements of Nasdaq to maintain a listing of our common stock or Warrants.

When our common stock and Warrants are listed on Nasdaq, we must meet certain financial and liquidity criteria to maintain such listing. If we violate the maintenance requirements for continued listing of our common stock and Warrants, our common stock or Warrants may be delisted. In addition, our board of directors may determine that the cost of maintaining our listing on a national securities exchange outweighs the benefits of such listing. A delisting of our common stock or Warrants from Nasdaq may materially impair our stockholders' ability to buy and sell our common stock or Warrants and could have an adverse effect on the market price of, and the efficiency of the trading market for, our common stock or Warrants. In addition, the delisting of our common stock or Warrants could significantly impair our ability to raise capital.

## Provisions of our charter documents or Nevada law could delay or prevent an acquisition of our company, even if the acquisition would be beneficial to our stockholders, and could make it more difficult to change management.

Provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a merger, acquisition or other change in control that stockholders might otherwise consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. In addition, these provisions may frustrate or prevent any attempt by our stockholders to replace or remove our current management by making it more difficult to replace or remove our board of directors. These provisions include:

- limitations on our stockholders' ability to call special meetings of stockholders;
- an advance notice requirement for stockholder proposals and nominations for members of our
- Board
- the authority of our Board to determine the number of director seats on our Board;
- the authority of our Board to fill vacancies occurring on the Board;
- the authority of our Board to issue preferred stock with such terms as our Board may determine.

## Our certificate of incorporation grants our Board of Directors the power to designate and issue additional shares of common and/or preferred stock.

Our authorized capital consists of 100,000,000 shares of common stock and 10,000,000 shares of preferred stock. Our preferred stock may be designated into series pursuant to authority granted by our certificate of incorporation, and on approval from our Board of Directors. The Board of Directors, without any action by our stockholders, may designate and issue shares in such classes or series as the Board of Directors deems appropriate and establish the rights, preferences and privileges of such shares, including dividends, liquidation and voting rights. The rights of holders of other classes or series of stock that may be issued could be superior to the rights of holders of our common stock. The designation and issuance of shares of capital stock having preferential rights could adversely affect other rights appurtenant to shares of our common stock.

#### We will indemnify and hold harmless our officers and directors to the maximum extent permitted by Nevada law.

Our bylaws provide that we will indemnify and hold harmless our officers and directors against claims arising from our activities, to the fullest extent not prohibited by Nevada law. If we were called upon to perform under our indemnification agreement, then the portion of our assets expended for such purpose would reduce the amount otherwise available for our business.

20

## We must implement additional and expensive procedures and controls in order to grow our business and organization and to satisfy new reporting requirements, which will increase our costs and require additional management resources.

Upon becoming a fully public reporting company, we will be required to comply with the Sarbanes-Oxley Act of 2002 (the 'Sarbanes-Oxley Act") and the related rules and regulations of the SEC, including the requirements that we maintain disclosure controls and procedures and adequate internal control over financial reporting. In the future, if our securities are listed on a national exchange, we may also be required to comply with marketplace rules and heightened corporate governance standards. Compliance with the Sarbanes-Oxley Act and other SEC and national exchange requirements will increase our costs and require additional management resources. We recently have begun upgrading our procedures and controls and will need to continue to implement additional procedures and controls as we grow our business and organization and to satisfy new reporting requirements. If we are unable to complete the required assessment as to the adequacy of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act or if we fail to maintain internal control over financial reporting, our ability to produce timely, accurate and reliable periodic financial statements could be impaired.

If we do not maintain adequate internal control over financial reporting, investors could lose confidence in the accuracy of our periodic reports filed under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Additionally, our ability to obtain additional financing could be impaired or a lack of investor confidence in the reliability and accuracy of our public reporting could cause our stock price to decline.

## We are an "emerging growth company" under the JOBS Act of 2012 and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and we may take advantage of certain exemptions from various reporting requirements that are not applicable to other public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, Section 107 of the JOBS Act also provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933 (the "Securities Act") for complying with new or revised accounting standards. In other words, an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We are choosing to take advantage of the extended transition period for complying with new or revised accounting standards.

We will remain an "emerging growth company" until the last day of the fiscal year following the fifth anniversary of the date of the first sale of our common stock pursuant to an effective registration statement under the Securities Act, although we will lose that status sooner if our revenues exceed \$1.07 billion, if we issue more than \$1 billion in non-convertible debt in a three year period, or if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last day of our most recently completed second fiscal quarter.

Investors may be unable to compare our business with other companies in our industry if they believe that our financial accounting is not as transparent as other companies in our industry. If we are unable to raise additional capital as and when we need it, our financial condition and results of operations may be materially and adversely affected.

Because Vininder Singh, our Chief Executive Officer and director, controls a significant number of shares of our voting capital stock, he has effective control over actions requiring stockholder approval.

Upon the completion of this offering, Mr. Vininder Singh, our Chief Executive Officer and a director will beneficially own approximately 48.35% of the Company's common stock (approximately 46.72% if the over-allotment option is exercised). As a result, Mr. Singh may have the ability to control the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation or sale of all or substantially all of our assets. Accordingly, any investors who purchase shares will be minority shareholders and as such will have little to no say in the direction of us and the election of directors. Additionally, this concentration of ownership might harm the market price of our common stock by:

- delaying, deferring or preventing a change in corporate control;
- impeding a merger, consolidation, takeover or other business combination involving us; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

21

#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," but are also contained in this prospectus. In some cases, you can identify forward-looking statements by the words "may," "might," "will," "could," "would," "should," "expect," "intend," "plan," "aim," "objective," "anticipate," "believe," "estimate," "project," "potential," "continue," "ongoing," "target," "seek" or the negative of these terms, or other comparable terminology intended to identify statements about the future. Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

- our future financial performance, including our revenue, costs of revenue, operating expenses and profitability;
- the sufficiency of our cash and cash equivalents to meet our liquidity needs;
- our predictions about the property development, digital transformation technology and biohealth businesses and their respective market trends;
- our ability to attract and retain customers in all our business segments to purchase our products and services;
- the availability of financing for smaller publicly traded companies like us;
- our ability to successfully expand in our three principal business markets and into new markets and industry verticals; and
- our ability to effectively manage our growth and future expenses.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this prospectus.

These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain.

You should refer to the "Risk Factors" section of this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result, of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by federal securities law.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

22

## USE OF PROCEEDS

We expect the net proceeds from this offering to be approximately \$7,384,000, or approximately \$8,529,340 if the underwriters exercise their option to purchase additional shares in full, assuming an initial public offering price of \$6.375 per Unit and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$6.375 per Unit of common stock would increase (decrease) the net proceeds to us by approximately \$1,150,000, assuming that the number of Units offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions. We may also increase or decrease the number of Units we are offering. Each increase (decrease) of 1,000,000 shares in the number of shares of common stock offered by us would increase (decrease) the net proceeds to us by approximately \$5,801,250, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions.

We intend to use the net proceeds received from this offering for general and working capital purposes, including but not limited to investing in research and development, including in our technology, the repayment of debt and for working capital and general corporate purposes

RESEARCH AND DEVELOPMENT. We anticipate using approximately \$2.0 million of the net proceeds on expenditures related to our licensed programs and collaborations. Of such amount, we anticipate spending \$1.5 million on our Mebendazole program on license and patent obligations, as well as initiating development activities including regulatory efforts towards an IND filing and drug product manufacturing to support preclinical studies. We will also increase our efforts for securing partners to advance the program through clinical development. Our siRNA program is an earlier stage program, and we anticipate expending approximately \$500,000 on discovery collaborations seeking indications, primarily for siRNA before initiating drug product manufacturing initiatives for IND enabling studies.

DEBT REDUCTION. Approximately 10% for repayment of debt incurred related to the engagement of consultants and employees directed at developing the operations and supporting our public listing as well as other trade liabilities. Further, the Company has borrowed working capital to support the public listing initiative under a convertible bridge note agreement. The note, with a \$195,000 face value with a 9% interest rate and maturity on February 9, 2023 has a current balance with accrued interest of

approximately \$206,000. The holder has the right to convert the note into equity but has not confirmed their intent to convert therefore we anticipate repaying the debt from proceeds.

WORKING CAPITAL. The remainder for working capital and other general corporate purposes.

The actual allocation of proceeds realized from this offering will depend upon our operating revenues and cash position and our working capital requirements and may change. The estimated use of proceeds is preliminary and subject to change. We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering.

We will pay all of our own expenses and certain expenses of the underwriters related to this offering. See "Underwriting" on page 53.

#### DIVIDEND POLICY

Holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available. We have not paid any dividends since our inception, and we presently anticipate that all earnings, if any, will be retained for development of our business. Any future disposition of dividends will be at the discretion of our Board of Directors and will depend upon, among other things, our future earnings, operating and financial condition, capital requirements, and other factors.

#### CAPITALIZATION

The following table sets forth our cash, cash equivalents, capitalization and indebtedness as of September 30, 2022:

- on an actual basis, reflecting the 1-7 reverse share split;
- on a pro forma basis to give effect to (i) the automatic conversion of the outstanding Convertible Bridge Notes and SAFE Notes and (ii) the conversion of other convertibles notes outstanding, pursuant to an optional conversion, effective immediately prior to the effectiveness of the registration statement of which this prospectus forms a part;
- on a pro forma as adjusted basis to give further effect to the sale of 1,317,647 Units in this offering at an assumed initial offering price of \$6.375 per Unit, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

23

The pro forma and pro forma as adjusted information below is illustrative only and our capitalization following the completion of this offering is subject to adjustment based on the initial public offering price of the Units and other terms of this offering determined at pricing. You should read the following table in conjunction with the "Use of Proceeds" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus and our consolidated financial statements and related notes appearing elsewhere in this prospectus.

	As of September 30, 2022 (Unaudited)					
	Actual		Pro forma <sup>(1)</sup>		Pro fo	rma as adjusted <sup>(2)</sup>
Cash	\$	42,216	\$	42,216	\$	7,426,216
Debt	\$	2,478,716	\$	1,067,640	\$	1,067,640
Stockholders' equity:						_
Preferred stock, par value \$0.00001 per share, 10,000,000 shares authorized, 0						
outstanding	\$	-	\$	-	\$	-
Common stock, par value \$0.00001 per share, 100,000,000 shares authorized,						
4,021,935 shares outstanding		40		43		56
Additional paid-in capital	\$	1,290,137	\$	2,701,210		10,085,197
Accumulated deficits	\$	(3,703,537)	\$	(3,703,537)	\$	(3,703,537)
Total stockholder's equity (deficit)	\$	(2,413,360)	\$	(1,002,284)	\$	6,381,716
Total capitalization	\$	(2,413,360)	\$	(1,002,284)	\$	6,381,716

- (1) The number of shares of common stock shown above to be outstanding before and after this offering gives effect to our planned reverse stock split at a ratio of 1-for-7. Includes 332,299 shares of common stock that are issuable upon automatic conversion of Convertible Bridge and SAFE Notes and the voluntary conversion of other convertible notes outstanding upon the completion of the IPO.
- (2) Reflects the sale of units in this offering at an assumed initial public offering price of \$6.375 per Unit, and after deducting the estimated underwriting discounts, and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$6.375 per share of common stock would increase (decrease) the net proceeds to us by approximately \$1,150,000, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares in the number of shares of common stock offered by us would increase (decrease) the net proceeds to us by approximately \$5,801,250, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions.

If the underwriters exercise their option to purchase additional shares in full, pro forma cash, additional paid-in capital, total stockholders' (deficit) equity and total capitalization and shares of common stock outstanding as of September 30, 2022 would be \$8,571,556, \$11,230,535, \$7,527,056 and 5,869,528 shares, respectively.

The total number of shares of our common stock reflected in our actual and pro forma information set forth in the table above excludes:

- Warrants to purchase 425,761 shares of common stock at an exercise price of \$2.76 per share, with terms expiring April 1, 2026 through May 3, 2032
- Options to purchase 69,217 shares of common stock at a weighted average exercise price of \$3.06 per share; and
- Warrants to purchase 274,284 shares of common stock at an exercise price of \$0.0007 per share, with terms expiring February 7, 2030; and
- Warrants to purchase 340,185 shares of common stock at an e exercise price of \$2.50 per share, with terms expiring August 9, 2031 through August 19, 2031

## DILUTION

If you invest in our securities in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share of our

Our pro forma net tangible book value (deficit) as of September 30, 2022 was \$(1,002,284), or (\$0.23) per share. Pro forma net tangible book value (deficit) represents the amount of our total assets less our total liabilities, after giving effect to the automatic conversion of Convertible Bridge and SAFE Notes and the voluntary conversion of other convertible notes outstanding upon the completion of the IPO.

After giving further effect to the receipt of the net proceeds from our sale of 1,317,647 shares of common stock in this offering, at an assumed initial public offering price of \$6.375 per Unit after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2022 would have been approximately \$6,381,716 or \$1.13 per share. This amount represents an immediate increase in pro forma as adjusted net tangible book value of \$1.36 per share to our existing stockholders and an immediate dilution of \$5.25 per share to new investors purchasing Units in this offering.

We determine dilution per share to investors participating in this offering by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by investors participating in this offering. The following table illustrates this dilution on a per share basis to new investors:

\$ 6.375
\$ (0.60)
\$ 0.37
\$ (0.23)
\$ 1.36
\$ 1.13
\$ 5.25
\$ \$ \$ \$ \$

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$6.375 per Unit would increase (decrease) the pro forma net tangible book value by \$0.21 per share and increase (decrease) the dilution per share to new investors by (\$0.21) per share, assuming the number of Units offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions.

Similarly, each increase (decrease) of 1,000,000 shares in the number of common stock we are offering would increase (decrease) our pro forma net tangible book value by approximately \$5,800,000, or \$0.70 per share and decrease (increase) the dilution per share to new investors participating in this offering by \$0.70 per share, assuming that the assumed initial public offering price of \$6.375 remains the same, and after deducting the estimated underwriting discounts and commissions.

The pro forma information discussed above is illustrative only and will change based on the actual initial public offering price, number of shares and other terms of this offering determined at pricing.

If the underwriters exercise their option to purchase additional shares in this offering in full at the assumed initial public offering price of \$6.375 Unit and assuming the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses, the pro forma net tangible book value would be approximately \$1.33 per share, and the dilution in pro forma net tangible book value per share to investors in this offering would be approximately \$5.05 per share.

The table below summarizes as of September 30, 2022, adjusted pro forma basis described above, the number of shares of our common stock, the total consideration and the average price per share (i) paid to us by existing stockholders and (ii) to be paid by new investors purchasing our common stock in this offering at an assumed initial public offering price of \$6.375 per share, before deducting underwriting discounts and commissions and estimated offering expenses.

	Shares Purc	hased	Total Cons	Average Price Per		
	Number	Percent	Amount	Percent	Share	
Existing stockholders	4,354,234	76.8%	\$ 2,701,253	26.8%	\$ 0.62	
New investors	1,317,647	23.2%	\$ 7,384,000	73.2%	\$ 5.60	
Total	5,671,881	100.0%	\$ 10,085,253	100.0%	\$ 1.78	

In addition, if the underwriters exercise their option to purchase additional shares in full, the number of shares held by existing stockholders will be reduced to 74% of the total number of shares of common stock to be outstanding upon the closing of this offering, and the number of shares of common stock held by new investors participating in this offering will be further increased by 197,647, or 2.6% of the total number of shares of common stock to be outstanding upon the closing of this offering.

25

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$6.375 per share of common stock would increase (decrease) total consideration paid by new investors by approximately \$1,150,00, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares in the number of shares of common stock offered by us would increase (decrease) total consideration paid by new investors by approximately \$5,800,000, assuming that the assumed initial price to the public remains the same, and after deducting the estimated underwriting discounts and commissions.

The total number of shares of our common stock reflected in our actual and pro forma information set forth in the table above excludes:

- Warrants to purchase 425,761 shares of common stock at an exercise price of \$2.76 per share, with terms expiring April 1, 2026 through May 2, 2032
- Options to purchase 69,217 shares of common stock at a weighted average exercise price of \$3.06 per share; and
- Warrants to purchase 274,284 shares of common stock at an exercise price of \$0.0007 per share, with terms expiring February 7, 2030; and
- Warrants to purchase 340,185 shares of common stock at an exercise price of \$2.50 per share, with terms expiring August 9, 2031 through August 19, 2031

## DESCRIPTION OF CAPITAL STOCK

## General

share, including 5,500,000 shares of Series A Preferred Stock.

#### Common Stock

Common stock outstanding

As of November 28, 2022, there were 4,021,935 shares of our common stock outstanding.

Voting rights

Each share of common stock entitles the holder to one vote, either in person or by proxy, at meetings of stockholders. The holders are not permitted to vote their shares cumulatively.

Dividend rights

Holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available.

Rights upon liquidation

Upon our liquidation, dissolution or winding up, the holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities

Other rights

Holders of our common stock do not have any pre-emptive rights or other subscription rights, conversion rights, redemption or sinking fund provisions.

26

## **Preferred Stock**

Preferred stock outstanding

As of November 28, 2022, there are 73,449 shares of Series A Preferred Stock issued and outstanding.

Conversion rights

Each holder of Series A Preferred Stock may, from time to time, convert any or all of such holder's shares of Series A Preferred Stock into fully paid and nonassessable shares of Common Stock in an amount equal to ten shares of common stock for each one share of Series A Preferred Stock surrendered.

A holder of shares of Series A Preferred Stock is not entitled to convert shares of Series A Preferred Stock if upon such conversion the number of shares of common stock to be received, together with the number of shares of common stock beneficially owned by the holder and its affiliates on the conversion date, would result in beneficial ownership by the bolder and its affiliates of more than 4.99% of the outstanding shares of common stock of the Company on such conversion date

Voting rights

Each holder of Series A Preferred Stock has no voting rights.

Rights upon liquidation

Upon our liquidation, dissolution or winding up, the holders of our Series A Preferred Stock shall not be entitled to any liquidation preference and are to receive any liquidation as if they were converted to common stock.

## Warrants

Warrants to Be Issued in the Offering

Overview. The following summary of certain terms and provisions of the Warrants included in the Units offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Warrant Agent Agreement between us and VStock Transfer, LLC, as Warrant Agent, and the form of Warrant, all of which are filed as exhibits to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions set forth in the Warrant Agent Agreement, including the annexes thereto, and forms of Warrant.

Exercisability. The Warrants are exercisable at any time after their original issuance and at any time up to the date that is five years after their original issuance. The Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the shares of common stock underlying the Warrants under the Securities Act is effective and available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of such shares, by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. If a registration statement registering the issuance of the shares of common stock underlying the Warrants under the Securities Act is not effective or available and an exemption from registration under the Securities Act is not available for the issuance of such shares, the holder of a Warrant may, in its sole discretion, elect to exercise the Warrant through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the Warrant.

Exercise Limitation. A holder of a Warrant will not have the right to exercise any portion of the Warrant if the holder (together with its affiliates and any other person or entity acting as a group) would beneficially own more than 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants. However, upon notice from the holder to us, the holder may waive such limitation up to a percentage, not in excess of 9.99%, provided that any increase in such percentage shall not be effective until 61 days following delivery of such notice from the holder to us.

Exercise Price. The exercise price per whole share of common stock purchasable upon exercise of the Warrants is \$6.375 per share, which is 100% of the assumed offering price of the Units. The exercise price of the Warrants and the is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

Fractional Shares. No fractional shares of common stock will be issued upon exercise of the Warrants. If, upon exercise of a Warrant, a holder would be entitled to receive a fractional interest in a share, we will, upon exercise, round up to the next whole share.

Transferability. Subject to applicable laws, the Warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing. We have applied for listing of our common stock and the Warrants on The Nasdaq Capital Market under the symbols "BFRG" and "BFRGW," respectively. No assurance can be given that our listing application will be approved.

Warrant Agent; Global Certificates. The Warrants will be issued in registered form under a Warrant Agent Agreement between the Warrant Agent and us. The Warrants shall initially be represented only by one or more global warrants deposited with the Warrant Agent, as custodian on behalf of The Depository Trust Company ("DTC") and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

Fundamental Transactions. In the event of a fundamental transaction, as described in the Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, or the acquisition of more than 50% of our outstanding common stock, the holders of the Warrants will be entitled to receive upon exercise of the Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Warrants immediately prior to such fundamental transaction.

Rights as a Stockholder. Except as otherwise provided in the Warrants or by virtue of such holder's ownership of shares of our common stock, the holder of a Warrant does not have the rights or privileges of a holder of our Common Stock, including any voting rights, until the holder exercises the Warrant.

Cashless Exercise. If at the time of exercise there is no effective registration statement registering the issuance of the shares of common stock underlying the Warrants (the "Warrant Shares"), then the holder of a Warrant may, in its sole discretion, exercise in whole or in part, and in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the aggregate exercise price, elect instead to exercise the Warrant on a cashless basis. Notwithstanding anything herein to the contrary, the Company shall not be required to make any cash payments or net cash settlement to the Warrant holder in lieu of delivery of the Warrant Shares. Upon a "cashless exercise," the Warrant holder shall be entitled to receive the number of Warrant Shares equal to the quotient obtained by dividing (A-B) (X) by (A), where:

- (A) = the last VWAP immediately preceding the date of exercise giving rise to the applicable "cashless exercise," as set forth in the applicable Election to Purchase (as defined in the Warrant Agent Agreement) (to clarify, the "last VWAP" will be the last VWAP as calculated over an entire trading day such that, in the event that the Warrant is exercised at a time that the trading market is open, the prior trading day's VWAP shall be used in this calculation);
- (B) = the Exercise Price then in effect for the applicable Warrant Shares at the time of the exercise of the Warrant, as adjusted as set forth herein; and
- (X) = the number of Warrant Shares that would be issuable upon exercise of the Warrant in accordance with the terms of the Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

Governing Law; and Exclusive Forum. The Warrants and the Warrant Agent Agreement are governed by New York law. The warrant certificates governing the Warrants provide that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by the warrant certificate (whether brought against a party to the warrant certificate or their respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York, Borough of Manhattan. The warrant certificates further provide that we and the Warrant holders irrevocably submit to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan, for the adjudication of any dispute under the warrant certificate or in connection with it or with any transaction contemplated by it or discussed in it. Furthermore, we and the Warrant holders irrevocably waive, and agree not to assert in any suit, action or proceeding, any claim that we or they are not personally subject to the jurisdiction of any such court, that such suit, action or proceeding. With respect to any complaint asserting a cause of action arising under the Securities Act or the rules and regulations promulgated thereunder, we note, however, that there is uncertainty as to whether a court would enforce this provision and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 22 of the Securities Act creates concurrent jurisdiction for state and federal courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Section 27 of the Exchange Act creates exclusive forum provision in the Warrant certificates expressly does not apply to suits brought to enforce any duty or liability created by the Exchange Act. We irrevocably waive any right we may have to, and agree not to r

## Representative's Warrants

We have agreed to issue to the Representative (or its designed affiliates) share purchase warrants (the "Representative's Warrants") to purchase up to a total of 6% of the shares of common stock sold in this offering at an exercise price that is equal to 110% of the public offering price of the shares. The Representative's Warrants will be non-exercisable for six (6) months after the effective date of the registration statement of which this prospectus forms a part and will expire five (5) years from the closing of this offering. The Representative's Warrants shall not be redeemable. The Company will register the shares of common stock underlying the Representative's Warrants under the Securities Act and will file all necessary undertakings in connection therewith. The Representative's Warrants also provide for customary antidilution protect of the number and price of such warrants and shares of common stock underlying such warrants.

As of November 23, 2022, the Company had 1,044,515 warrants issued and outstanding, each exercisable for one share of common stock at an average exercise price of \$1.93 per share.

## 27

## Convertible Bridge Notes and Warrants

In December 2021, the Company initiated a placement of Convertible Bridge Notes seeking \$1.5M in operating capital to ensure the Company had operating capital while it finished the audit of its financial statements and prepared the S-1 registration statement related to the IPO. In December, the Company sold a convertible promissory note to an unrelated party for \$25,000. On April 11, 2022, the Company entered into an exclusive engagement agreement with WallachBeth Capital LLC in connection with a proposed private and/or public offering by the Company. As discussed in the notes to our consolidated financial statements, a significant component of the Company's plan to secure capital is the intention of the Company to seek to be listed on a national exchange through an initial public offering ("IPO") of its common stock. WallachBeth was engaged in this regard and on April 28, 2022, the Company received net proceeds or approximately \$775,000 from the sale of Convertible Bridge Notes and warrants to several institutional investors, as well as certain individual accredited investors. In addition to the money received on April 28th, the Company also received \$100,000 from the sale of a Convertible Bridge Note and warrants to a related party in early April on the same terms. The Company received additional proceeds of \$25,000 from the sale of a Convertible Bridge Note and warrants to an unrelated party in early September on the same terms.

As of November 28, 2022, the Company had approximately \$1.13M in face value of Convertible Bridge Notes outstanding. The notes were sold with a 10% original Issue discount and convert at the IPO at the lesser of a 20% discount to the IPO price or a \$27 million pre-money valuation. The purchasers also received a warrant for each share of common stock to be issued upon conversion. The warrant exercise price will be 90% of the per share IPO price.

## Anti-Takeover Provisions of Nevada Law, or Certificate of Incorporation and our Bylaws

Our certificate of incorporation and bylaws contain certain provisions that may have the effect of delaying, deferring or preventing a party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our Board of Directors rather than pursue non-negotiated takeover attempts. According to our bylaws and certificate of incorporation, neither the holders of our common stock nor the holders of our preferred stock have cumulative voting rights in the election of our directors. The combination of the present ownership by a few stockholders of a significant portion of our issued and outstanding common stock and lack of cumulative voting makes it more difficult for other stockholders to replace our Board of Directors or for a third party to obtain control of our Company by

replacing our Board of Directors.

The following provisions of the Nevada Revised Statutes ("NRS") could, if applicable, have the effect of discouraging takeovers of our company.

Transactions with Interested Stockholders. The NRS prohibits a publicly-traded Nevada company from engaging in any business combination with an interested stockholder for a period of three years following the date that the stockholder became an interested stockholder unless, prior to that date, the Board of Directors of the corporation approved either the business combination itself or the transaction that resulted in the stockholder becoming an interested stockholder.

An "interested stockholder" is defined as any entity or person beneficially owning, directly or indirectly, 10% or more of the outstanding voting stock of the corporation and any entity or person affiliated with, controlling, or controlled by any of these entities or persons. The definition of "business combination" is sufficiently broad to cover virtually any type of transaction that would allow a potential acquirer to use the corporation's assets to finance the acquisition or otherwise benefit its own interests rather than the interests of the corporation and its stockholders.

In addition, business combinations that are not approved and therefore take place after the three year waiting period may also be prohibited unless approved by the board of directors and stockholders or the price to be paid by the interested stockholder is equal to the highest of (i) the highest price per share paid by the interested stockholder within the 3 years immediately preceding the date of the announcement of the business combination or in the transaction in which he or she became an interested stockholder, whichever is higher; (ii) the market value per common share on the date of announcement of the business combination or the date the interested stockholder acquired the shares, whichever is higher; or (iii) if higher for the holders of preferred stock, the highest liquidation value of the preferred stock.

Acquisition of a Controlling Interest. The NRS contains provisions governing the acquisition of a "controlling interest" and provides generally that any person that acquires 20% or more of the outstanding voting shares of an "issuing corporation," defined as Nevada corporation that has 200 or more stockholders at least 100 of whom are Nevada residents (as set forth in the corporation's stock ledger); and does business in Nevada directly or through an affiliated corporation, may be denied voting rights with respect to the acquired shares, unless a majority of the disinterested stockholder of the corporation elects to restore such voting rights in whole or in part.

The statute focuses on the acquisition of a "controlling interest" defined as the ownership of outstanding shares sufficient, but for the control share law, to enable the acquiring person, directly or indirectly and individually or in association with others, to exercise (i) one-fifth or more, but less than one-third; (ii) one-third or more, but less than a majority; or (iii) a majority or more of the voting power of the corporation in the election of directors.

The question of whether or not to confer voting rights may only be considered once by the stockholders and once a decision is made, it cannot be revisited. In addition, unless a corporation's articles of incorporation or bylaws provide otherwise (i) acquired voting securities are redeemable in whole or in part by the issuing corporation at the average price paid for the securities within 30 days if the acquiring person has not given a timely information statement to the issuing corporation or if the stockholders vote not to grant voting rights to the acquiring person's securities; and (ii) if voting rights are granted to the acquiring person, then any stockholder who voted against the grant of voting rights may demand purchase from the issuing corporation, at fair value, of all or any portion of their securities.

The provisions of this section do not apply to acquisitions made pursuant to the laws of descent and distribution, the enforcement of a judgment, or the satisfaction of a security interest, or acquisitions made in connection with certain mergers or reorganizations.

### Listing

We intend to apply to list our common stock and Warrants on the Nasdaq Capital Market under the symbol "BFRG" and "BFRGW," respectively. No assurance can be given that our application will be approved. The consummation of this offering is conditioned on obtaining Nasdaq approval.

## Transfer Agent and Registrar

The transfer agent and registrar for our common stock is VStock Transfer, LLC.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the section titled "Selected Consolidated Financial and Other Data" and the consolidated financial statements and related notes thereto included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section titled "Risk Factors" included elsewhere in this prospectus.

## OVERVIEW

Bullfrog AI Holdings, Inc. was incorporated in the State of Nevada on February 6, 2020. Bullfrog AI Holdings, Inc. is the parent company of Bullfrog AI, Inc. and Bullfrog AI Management, LLC. which were incorporated in Delaware and Maryland, in 2017 and 2021, respectively. Operations are currently conducted through BullFrog AI Holdings, Inc., which began operations on February 6, 2020. We are a company focused specifically on advanced Artificial Intelligence / Machine Learning (AI/ML) analysis of complex data in the advancement of medicine. Our AI/ML platform (trade name: bfLEAP<sup>TM</sup>) was created from technology originally developed at The Johns Hopkins University Applied Physics Laboratory (JHU-APL).

28

In February of 2018, BullFrog AI Holdings secured the original exclusive, world-wide, royalty-bearing license from JHU-APL for the technology. The license covers three (3) issued patents, one (1) new provisional patent application, non-patent rights to proprietary libraries of algorithms and other trade secrets including modifications and improvements. On July 8, 2022, a new license was secured that provides the Company with new intellectual property and also encompasses most of the intellectual property from the February 2018 license. Our objective is to utilize our for a precision medicine approach toward drug development with biopharmaceutical collaborators, as well as our own internal clinical development programs. We believe the bfLEAP<sup>TM</sup> platform is ideally suited for evaluating pre-clinical and clinical trial data generated in translational research and clinical trial settings that lead to faster, less expensive drug approvals.

Our aim is to improve the odds of success in each stage of developing medicine, ranging from early pre-clinical through late-stage clinical development. Our ultimate objective is to utilize bfLEAP<sup>TM</sup> to enable the success of ongoing clinical trials or rescue late-stage failed drugs (i.e., Phase 2 or Phase 3 clinical trial failures) for development and divestiture; although, we will also consider collaborations for earlier stage drugs. We hope to accomplish this through strategic acquisitions of current clinical stage and failed drugs for in-house development, or through strategic partnerships with biopharmaceutical industry companies.

On July 8, 2022, the company entered into an exclusive, world-wide, royalty-bearing license from JHU-APL for the additional technology. The new license provides additional intellectual property rights including patents, copyrights and knowhow to be utilized under the Company's bfLEAP<sup>TM</sup> analytical AI/ML platform. In consideration of the new license, the Company issued to JHU-APL 39,879 shares of common stock. In September 2020 and October of 2021, the Company executed Amendments to the original license which represents improvements and new advanced analytics capabilities. In consideration of the rights granted to the Company under the original License Agreement, the Company granted JHU 178,571 warrants exercisable to purchase shares of common stock at \$2.10 per share. Under the terms of the new License Agreement, JHU will be entitled to eight (8%) percent of net sales for the services provided by the Company to other parties and 3% for internally development drug projects in which the JHU license was utilized. The new license also contains tiered sub licensing fees that start at 50% and reduce to 25% based on revenues. In addition, the Company is required to pay JHU an annual maintenance fee of \$1,500. Minimum annual payments are set to be \$30,000 for 2022, \$80,000 for 2023, and \$300,000 for 2024 and beyond, all of which are creditable by royalties.

We will continue to evolve and improve bfLEAP<sup>TM</sup>, and some of the proceeds from this offering may be used toward that effort either in-house or with development partners like The Johns Hopkins University Applied Physics Lab. We plan to leverage our proprietary AI/ML platform developed over several years at one of the top innovation institutions in the world which has already been successfully applied in multiple sectors.

We are preparing to ramp our business using funds from this offering and through our partnerships and relationships. We currently have a strategic relationship with a leading rare disease non-profit organization for AI/ML analysis of late-stage clinical data. We have also acquired the rights to a series of preclinical and early clinical drug assets from universities, as well as a strategic collaboration with a world-renowned research institution to create a HSV1 viral therapeutic platform to engineer immunotherapies for a variety of diseases. We have signed exclusive worldwide License Agreements with Johns Hopkins University for a cancer drug that targets glioblastoma (brain cancer), pancreatic cancer, and others. We have also signed an exclusive worldwide license from George Washington University for another cancer drug that targets hepatoceullar carcinoma (liver cancer), and other liver diseases. Additionally, we intend to gain access to later-stage clinical assets through partnerships or the acquisition of rights to failed therapeutic candidates for drug rescue. In certain circumstances, we intend to conduct late-stage clinical trials in an effort to rescue therapeutic assets that previously failed. In these cases there will be a requirement for a drug supply and regulatory services to conduct clinical trials in an effort to rescue therapeutic assets that previously failed. In partners to support the clinical development, adequate availability of raw materials and/or drug product for our R&D and clinical trials, and, in some cases, may also require establishment of third-party arrangements to obtain finished drug product that is manufactured appropriately under (GMP) industry-standard guidelines, and packaged for clinical use or sale. Since we are a company focused on using our AI technology to advance medicines, any clinical development programs will also require, in all cases, partners and the establishment of third-party relationships for execution and completion of clinical trials. Over the next 15-18 mo

29

#### Our Strategy

The Company has a unique strategy designed to reduce risk and increase the frequency of cash flow. The first part of the strategy is to generate revenues through strategic relationships with biopharma companies. These relationships will be structured as a combination of fees and intellectual property based on the specific scope of the engagement. The objective of these engagements will be to uncover valuable insights to reduce the risk and/or increase the speed of the drug development process which can be achieved through manual or automated integration into the client's work flow or analysis of discrete data sets.

In the future, the second part of our strategy involves acquiring the rights to clinical stage drugs, using our bfLEAP technology to design a precision medicine trial, conduct the trial with a partner, and sell the asset. This approach may also apply to earlier phases in the drug development process such as discovery and preclinical. In any case, the objective is to create near term value and exit and monetize as quickly as possible, preferably within approximately 30 months

## **Results of Operations**

## For the years ended December 31, 2021 and 2020

Through the end of 2021, the Company has not recorded any revenues and has an accumulated deficit of approximately \$1,600,000. Net loss from operations in 2021 was approximately \$600,000 versus \$340,000 in 2020. The 2021 increase reflects the costs of engaging advisors and consultants and other costs associated with readying the Company for the IPO including the costs related to auditing the Company's past and current financial statements. Cash used in operations in 2021 was approximately \$382,000 versus approximately \$212,000 in 2020 and cash inflows from financing activities in 2021 was approximately \$387,000 versus approximately \$210,000 in 2020.

## For the periods ended September 30, 2022 and 2021

Through September 30, 2022, the Company has not recorded any revenues and has an accumulated deficit of approximately \$3,700,000. Net loss from operations for the nine months ended September 30, 2022 was approximately \$2,107,000 versus \$425,000 in the 2021 period. The 2022 increase reflects the costs of engaging advisors and consultants and other costs associated with readying the Company for the IPO including the acquisition of two drug development programs, the costs related to auditing the Company's past and current financial statements. Cash used in operations in the nine months ended September 30, 2022 was approximately \$871,000 versus approximately \$294,000 in the same period in 2021.

For the period ended September 30, 2022 our Consolidated Statement of Operations reflects operating expenses of \$1,873,000 versus \$414,000 for the period ended September 30, 2021. The increase reflects the expansion of our management team, the acquisition of two drug development programs as well as an increase in professional services related to the intended IPO. Also included in this increase in the period ended September 30, 2022 is stock based compensation of \$291,000 versus \$75,000 in the 2021 period. The increase reflects the increase in the value of the shares of the Company's common stock to \$4.76 per share versus \$0.306 per share in 2021. The increased value reflects the license of two drug development candidates from universities in early 2022 and other developments.

## Liquidity and Capital Resources

In 2020, the Company received proceeds of approximately \$210,000 from the sale of a convertible note for \$200,000 and approximately \$10,000 under the SBA PPP loan program. In 2021, we received net proceeds of approximately \$387,000, primarily from the sale of a SAFE note (\$150,000) and a convertible promissory note (\$99,900) and three unsecured promissory notes (\$49,000) to a related party. In addition, in July and December 2021, the Company sold convertible bridge notes to two unrelated parties and received net proceeds of approximately \$88,000. Through September 30, 2022 the Company received net proceeds from the sale of Convertible Bridge Notes of approximately \$961,000 and repaid the unsecured promissory notes sold in 2021 in the amount of \$49,000.

In anticipation of the initial public offering, a management team with extensive deep industry experience has been identified and engaged as employees and consultants to assist the Company in preparing for the initial public offering and subsequently, to operate and function as a public company. Through 2021, the Company primarily operated with only one full time employee and a series of consultants. During this period the primary activities included: technology evaluation, acquisition and validation, capital acquisition and business development activities which in general, have readied the Company for contract services while exploring strategic partnering and asset acquisition. The Company expended approximately \$88,000 and \$206,000 on these activities in 2019 and 2020, respectively. The majority of this was paid to employees and consultants as compensation. In 2021, the Company used approximately \$382,000 on operating activities including approximately \$203,000 in salaries and approximately \$150,000 on professional services and fees directly related to preparation for the intended IPO. The Company also made payments totaling \$25,000 under two evaluation/option agreements for the two drug development programs licensed in 2022. In 2022, three consultants engaged by the Company became part time employees and the Company now has four employees. For the inner months ended September 30, 2022, the Company used approximately \$871,000 on operating activities versus approximately \$294,000 for the same period in 2021. The 2022 cash use included approximately \$388,000 in salaries, approximately \$438,000 in consulting and professional fees including legal, accounting and auditing fees for operational activities and approximately \$448,000 in technology license fees, patent cost reimbursements and minimum annual royalties which has been recorded as a research & development expense.

Through the period ended September 30, 2022, the Company has an accumulated deficit of approximately \$3,700,000 and funded its operations through the sale of common stock and debt. We anticipate that our expenses will increase in the future to support our service offerings, clinical and pre-clinical research and development activities associated with strategic partnering and collaborations as we well as acquired product candidates and the increased costs of operating as a public company. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside consultants, lawyers and accountants, among other expenses. Additionally, we anticipate increased costs associated with being a public company including expenses related to services associated with maintaining compliance with exchange listing and Securities and Exchange Commission requirements, insurance, and investor relations costs.

We will need substantial additional funds while we develop our services business and to significantly advance development of our licensed programs. The Company's existence

is dependent upon management's ability to develop profitable operations and to obtain additional funding sources, including the proceeds from this offering.

These factors raise substantial doubt about our ability to continue as a going concern.

The Company's current operations include BullFrog AI, Inc. and BullFrog Management, LLC. which are wholly owned subsidiaries of BullFrog AI Holdings, Inc., which is a holding company that depends upon the sale of its securities and cash generated through its subsidiaries to fund consolidated operations.

As of September 30, 2022, the Company received net proceeds of approximately \$961,000 from the sale of convertible promissory notes and warrants.

#### **Critical Accounting Policies**

In Footnote 3 of our Audited Financial Statements for the year ended December 31, 2021 found elsewhere in this filing, we included a discussion of the most critical accounting policies used in the preparation of our financial statements. There has been no material change in the policies and estimates used in the preparation of our financial statements since the completion of the 2021 audit.

#### **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements, as such term is defined in Item 303(a)(4) of Regulation S-K.

30

#### Financial operations overview

#### Revenue

We did not produce any revenues through September 2022, we do anticipate generating our first revenues in late 2022 from our services related to the strategic relationship with a leading NGO and from a pharmaceutical customer. We currently have multiple discussions underway and anticipate, although there can be no assurance, entering into additional service agreements and business relationships in 2022.

## **Operating Expenses**

We plan to classify our operating expenses into two categories: research and development and general and administrative. To date, our financial statements have not reflected research and development expenses as the first of our two acquired drug development programs was not licensed until early 2022 and we have not yet initiated development activities. Prior to 2022, most of our activities were related to: technology evaluation, acquisition and validation, capital acquisition and business development activities which in general, which we believe have readied the Company for contract services while exploring strategic partnering and asset acquisition. These activities and related expenditures have been recorded and reported as General and Administrative in our Financial Statements. In 2022 we licensed two drug development programs from universities and also entered into a new license with JHU-APL for new IP and other enhancements used with our bfLEAP<sup>TM</sup> platform. During the nine-months ended September 30, 2022, we expended appropriately \$448,000 on license related payments for our bfLEAP<sup>TM</sup> Al/ML platform and our two drug development programs from universities. We expect that our research and development expenses will increase in 2023 as we initiate development activities directed towards initiating preclinical IND enabling studies.

## Research and Development Costs and Expenses

Research and development costs and expenses consist primarily of costs related to the acquisition of licensed technology and fees paid to external service providers. We anticipate our research and development costs could become significant as we execute on our business plan and begin conducting preclinical research and development activities directed at filling Investigational New Drug (IND) applications for our licensed drug development programs describes in this filling, as well as under strategic partnerships and for other drug development programs we may acquire. Research and development expenses are recorded in operating expenses in the period in which they are incurred. Estimates will be used in determining the expense liability of certain costs where services have been performed but not yet invoiced. We will monitor levels of performance under each significant contract for external service providers, including the extent of patient enrollment and other activities through communications with the service providers to reflect the actual amount expended.

## General and Administrative Expenses

In anticipation of the initial public offering, a management team with deep industry experience has been identified and engaged as employees and consultants to assist the Company in preparing for the initial public offering and subsequently, to operate and function as a public company. Through 2021, the Company primarily operated with only one full time employee and a series of consultants. In 2022, three of the consultants became part time employees of the Company. During this period, the primary activities included: technology evaluation, acquisition and validation, capital acquisition and business development activities which in general, have readied the Company for contract services while exploring strategic partnering and asset acquisition as noted above. The Company's financial statements reflect an accumulated deficit of approximately \$3,700,000 as a result of these activities including the licensing costs for bfLEAPTM. Our 2021 Statement of Operation reflects approximately \$555,000 in operating expenses in 2021 versus approximately \$260,000 in 2020. For the period ended September 30, 2022 the Statement of Operation reflects approximately \$1,232,000 in operating expenses versus \$242,000 in the 2021 period The increase reflects the Company's preparation for its IPO including legal and accounting costs related to the audit of the Company's 2019 - 2021 financial statements. The Company also engaged the management team noted above which resulted in increased consulting and stock-based compensation expenses in 2021 and 2022. The 2022 Consolidated Statement of Operations reflects Salaries of approximately \$388,000, Consulting and other professional fees of approximately \$438,000 and Stock based compensation of \$291,000. For the 2021 nine-month period these amounts were approximately \$155,000, \$137,000 and \$75,000. We anticipate that our general and administrative expenses will increase in the future to support our service offerings, clinical and pre-clinical research and development activities associated with strategic partnering and collaborations as well as any newly acquired product candidates and the increased costs of operating as a public company. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside consultants, lawyers and accountants, among other expenses. Additionally, we anticipate increased costs associated with being a public company including expenses related to services associated with maintaining compliance with exchange listing and Securities and Exchange Commission requirements, insurance, and investor relations costs.

## BUSINESS

## Our Corporate History and Background

BullFrog Holdings AI, Holdings, Inc. was incorporated in the State of Nevada on February 6, 2020. Our principal business address is 325 Ellington Blvd, Unit 317, Gaithersburg, MD 20878. All of our operations are currently conducted through BullFrog AI Holdings, Inc. BullFrog AI, Inc., is a wholly owned subsidiary has the sole purpose of housing and protecting all of the organization's intellectual property, was acquired through a share exchange. BullFrog AI Management, LLC is a wholly owned subsidiary that handles all HR and payroll activities.

## Acquisition of BullFrog AI

In March of 2020, BullFrog AI, Inc. received an investment from TEDCO - the Technology Development Corporation of Maryland, a State of Maryland Investment Fund – pursuant to the issuance of a \$200,000 convertible note with an 18-month term, 6% annual interest rate, and a 20% discount. In June of 2020, BullFrog AI Holdings, Inc. acquired BullFrog AI, Inc. via a 1:1share exchange. Immediately prior to the share exchange, each authorized common share of BullFrog AI, Inc. was split into 25 shares of common stock. Share amounts in our financial statements for 2021 and 2020 have been adjusted to reflect this forward share split and shares exchange. All of our operations are

currently conducted through BullFrog AI Holdings, Inc. BullFrog AI, Inc., is a wholly owned subsidiary, has the sole purpose of housing and protecting all of the organization's intellectual property. BullFrog AI Management, LLC is a wholly owned subsidiary that handles all HR and payroll activities Pursuant to the agreement, 24,223,975 shares of the Company's common stock were issued to the shareholders of BullFrog AI, Inc. in exchange for 100% of the ownership interests of BullFrog AI, Inc. Upon completion of the Exchange, BullFrog AI, Inc. became the Company's wholly-owned subsidiary and the shareholders of BullFrog AI, Inc. own a 100% controlling interest in the Company. As a result, BullFrog AI, Inc. became BullFrog AI Holdings, Inc's wholly owned subsidiary and assumed a total of \$330,442 in net liabilities. All of the entities were controlled both before and after the transactions by the same controlling shareholder. This transaction is being accounted for as a common control transaction and all entities are being presented as if the transactions took place at the beginning of the earliest period presented. Share amounts in our financial statements for 2021 and 2020 have been adjusted to reflect this forward share split and shares exchange. BullFrog AI, Inc was incorporated in 2017 as discussed in the previous notes. All of our operations are currently conducted through BullFrog AI Holdings, Inc.

31

## **BullFrog AI Corporate History**

BullFrog AI, Inc. was incorporated in the State of Delaware on August 25, 2017. Vininder Singh is the founder, CEO and chairman of BullFrog AI

#### Our Strategy

We plan to achieve our business objectives by enabling the successful development of drugs and biologics using a precision medicine approach via our proprietary artificial intelligence platform bfLEAP. We will execute our plan by doing all or any of the following: partnering with biopharmaceutical companies in a fee for service model to assist and enable them with their drug development programs, acquiring rights to and rescuing drugs that have failed FDA review following pivotal Phase 2 or Phase 3 clinical trials (we refer to this rescue process as "drug rescue"), and acquiring rights to drugs that are in early stage clinical trials and have not failed, and discovering new drugs and biologics.

The process for enhancing developing and late-stage failed drugs is to:

- acquire the rights to the failed drug from a biopharmaceutical industry company or university,
- use the proprietary bfLEAPTM AI/ML platform to determine a multi-factorial profile for a patient that would best respond to the drug,
- Rapidly conduct a clinical trial likely with a partner to validate the drug's use for the defined "high-responder" population; and
- Divest/sell the rescued drug asset with new information back to the pharma industry, following positive results of the clinical trial.

We also plan to deploy this strategy for all discovery and early stage clinical candidates. The common objective is to monetize our assets as quickly as possible with no current plan to commercialize any asset. As part of our strategy, we will continue evolving our intellectual property, analytical platform and technologies, build a large portfolio of drug candidates, and implement a model that reduces risk and increases the frequency of cash flow from rescued drugs. This strategy will include strategic partnerships, collaborations, and relationships along the entire business value chain.

We did not produce any revenues through 2021, we do anticipate generating our first revenues in late 2022 from our services related to the strategic relationship with a leading NGO and a pharmaceutic company.

To date, we have not conducted clinical trials on any pharmaceutical drugs and our platform has not been used to identify a drug candidate that has received regulatory approval for commercialization. However, we currently have a strategic relationship with a leading rare disease non-profit organization for AI/ML analysis of late stage clinical data. We have also positioned the Company to acquire the rights to a series of preclinical and early clinical drug assets from universities, as well as a strategic collaboration with a world renowned research institution to create a HSV1 viral therapeutic platform to engineer immunotherapies for colorectal cancer. In addition, we have signed exclusive world-wide license agreements with Johns Hopkins University for a cancer drug that targets glioblastoma (brain cancer), pancreatic cancer, and other cancers. We have also signed an exclusive worldwide license with George Washington University for another cancer drug that targets hepatoceullar carcinoma (liver cancer), and other liver diseases.

Our platform was originally developed by the JHU-APL. JHU-APL uses the same technology for applications related to national defense. Over several years, the software and algorithms have been used to identify relationship, patterns, and anomalies, and make predictions that otherwise may not be found. These discoveries and insights provide an advantage when predicting a target of interest, regardless of industry or sector. We have applied the technology to various clinical data sets and have identified novel relationships that may provide new intellectual property, new drug targets, and other valuable information that may help with patient stratification for a clinical trial thereby improving the odds for success. The platform has not yet aided in the development of a drug that has reached commercialization. However, we own one drug candidate that has completed a phase 1 trial and a second candidate that is in the preclinical stages. Our aim is to use our technology on current and future available data to help us better determine the optimal path for development

## **Contract Services**

Our fee for service partnership offering is designed for biopharmaceutical companies, as well as other organizations, of all sizes that have challenges analyzing data throughout the drug development process. We provide the customer with an analysis of large complex data sets using our proprietary Artificial Intelligence / Machine Learning platform called bfLEAP<sup>TM</sup>. This platform is designed to predict targets of interest, patterns, relationships, and anomalies. Our service model involves a cash fee plus the potential for rights to new intellectual property generated from the analysis, which can be performed at the discovery, preclinical, or clinical stages of drug development.

## Collaborative Arrangements

We will enter into collaborative arrangements with pharmaceutical companies who have drugs that have failed late Phase 2 or Phase 3 trials. Our revenue will be based on achieving certain milestones as determined by each specific arrangement.

32

## Acquisition of Rights to Certain Drugs

In certain circumstances, we may also acquire rights to drugs that are in early stage clinical trials, use our technology to produce a successful later stage precision medicine trial, and divest the asset. The same process may apply to the discovery of new drugs.

## **Our Products**

## Product/Platform

bfLEAPTM – AI/ML platform for analysis of preclinical and/or clinical data

## Description

AI/ML analytics platform derived from technology developed at Johns Hopkins University Applied Physics Laboratory and licensed by the Company.

## Target Market/Indications

Biotechnology and pharmaceutical companies and other organizations.

siRNA targeting Beta2-spectrin in the treatment of human diseases developed at George Washington University licensed by the Company Hepatocellular carcinoma (HCC), treatment of obesity, non-alcoholic fatty liver disease, and non-alcoholic steatohepatitis. Has not yet initiated clinical testing.

siRNA

Glioblastoma. Has begun the process of clinical testing but has not received regulatory approval for commercialization.

On January 14, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from George Washington University (GWU) for rights to use siRNA targeting Beta2-spectrin in the treatment of human diseases, including hepatocellular carcinoma (HCC). The license covers methods claimed in three US and worldwide patent applications, and also includes use of this approach for treatment of obesity, non-alcoholic fatty liver disease, and non-alcoholic steatohepatitis. This program is currently in the preclinical stage of development. The Company has not yet initiated development activities or IND-enabling studies on this asset; however, the plan is to conduct this work over the next 24 months. All R&D to date on this candidate has been conducted by the licensor of the technology, George Washington University.

Non-alcoholic fatty liver disease (NAFLD) is a condition in which excess lipids, or fat, build up in the liver. This condition, which is more common in people who have obesity and related metabolic diseases including type 2 diabetes, affects as many as 24% of adults in the US and is associated with risk of progression to more serious conditions, including non-alcoholic steatohepatitis (NASH), with associated liver inflammation and fibrosis, and hepatocellular carcinoma (HCC). Evidence in animal models of obesity suggest that a protein called β2-spectrin may play a key role in lipid accumulation, tissue fibrosis, and liver damage, and targeting expression or activity of this protein may be a useful approach in treating NASH and liver cancer (Rao et al., 2021).

On February 22, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from Johns Hopkins University (JHU) for the use of an improved formulation of Mebendazole for the treatment of any human cancer or neoplastic disease. This formulation shows potent activity in animal models of different types of cancer, and has been evaluated in a Phase I clinical trial in patients with high-grade glioma (NCT01729260). The trial, an open-label dose-escalation study, assessed the safety of the improved formulation with adjuvant temozolomide in 24 patients with newly diagnosed gliomas. Investigators observed no dose-limiting toxicity in patients receiving all but the highest tested dose (200mg/kg/day). Four of the 15 patients receiving the maximum tested dose of 200mg/kg/day experienced dose-limiting toxicity, all of which were reversed by decreasing or eliminating the dose given. There were no serious adverse events attributed to mebendazole at any dose during the trial. The Company is currently formulating a strategy to find a partner to conduct additional clinical trials with this asset to enable evaluation of safety in humans.

We are able to leverage our drug rescue business by leveraging a powerful and proven AI/ML platform (trade name: bfLEAP<sup>TM</sup>) initially derived from technology developed at The Johns Hopkins University Applied Physics Laboratory (JHU-APL). The bfLEAP<sup>TM</sup> analytics platform is a potentially disruptive tool for analysis of pre-clinical and/or clinical data sets, such as the robust pre-clinical and clinical trial data sets being generated in translational R&D and clinical trial settings. The input data for bfLEAP<sup>TM</sup> can include raw data (preclinical and/or clinical readouts), categorical data, sociodemographic data of patients, and various other inputs. Thus, the bfLEAP<sup>TM</sup> platform is capable of capturing the "human experience" of patients in an unbiased manner, and contextualizing it against other disparate data sources from patients (e.g. molecular data, physiological data, etc.) for less biased and more meaningful conclusions (i.e. more ethical AI/ML). It is also uniquely scalable – the bfLEAP<sup>TM</sup> platform is able to perform analysis on large, high-volume data sets (i.e. 'big data') and also able to analyze highly disparate "short and wide" data as well. In terms of visualization, bfLEAP<sup>TM</sup> is able to integrate with most commonly used visualization tools for graph analytics.

33

The combination of a) scalable analytics (i.e., large data or short/wide data), b) state-of-the-art algorithms, c) unsupervised machine learning, and d) streamlined data ingestion/visualization makes bfLEAP<sup>TM</sup> one of the most flexible and powerful new platforms available on the market.

## **Our Platform Technology**

We will continue to evolve and improve bfLEAP<sup>TM</sup>, and some of the proceeds from this offering may be used toward that effort either in-house or with development partners like The Johns Hopkins University Applied Physics Lab. The bfLEAP<sup>TM</sup> platform is based on an exclusive, world-wide license granted by Johns Hopkins University.

We plan to leverage our proprietary AI/ML platform developed over several years at one of the top innovation institutions in the world which has already been successfully applied in multiple sectors. In terms of underlying intellectual property, we have secured a worldwide exclusive license from JHU-APL for the technology – this license covers 3 issued patents, as well as 1 new provisional patent application, non-patent rights to proprietary libraries of algorithms and other trade secrets, and also includes modifications and improvements. In addition, we have a unique business model designed to reduce risk and increase the frequency of cash flow.

The Company has recently licensed new technology from Johns Hopkins University Applied Physics Lab to evolve the bfLEAP platform to bfLEAP 2.0. This new and improved platform will enable more robust analysis of data with faster and higher precision prediction of the most important variables for identifying patient response to a drug.

Going forward, the Company will continue to evolve the platform and either develop or acquire new capabilities and technologies. These development efforts may be in house or in collaboration with an existing or new technology partners. The Company plans on hiring talent in data science and software development to bolster its in house capabilities.

Summary for CATIE Schizophrenia Case Study

BullFrog AI worked with the Lieber Institute for Brain Development to analyze data from the landmark CATIE Trials. The CATIE trials were the largest trials ever conducted for anti-psychotic medications. BullFrog analyzed CATIE data from ~200 schizophrenia patients, with a library of almost 1 million genetic data points for each patient, more than 200 non-genetic attributes per patient, and 4 different medications used in the trial. For each of the four medications used, bfLEAP<sup>TM</sup> analysis revealed new, previously unknown relationships between individual genetic variants and negative patient symptoms. The genetic loci identified represent potential druggable targets, as well as potential stratifying criteria for future clinical trials in schizophrenia.

We performed another analysis on the data using our new advanced clustering algorithms bfLEAP 2.0 but focused on one particular drug named Olanzapine. Our bfLEAP™ 2.0 analytical results identified previously unknown, multi-dimensional associations among newly identified genetic variants, drug clearance, clinical trial sites, and clinical outcome variables in schizophrenia patients.

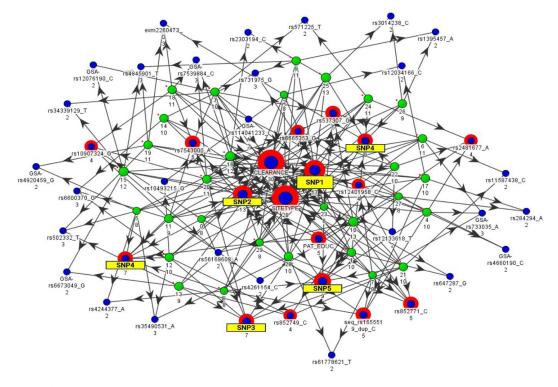
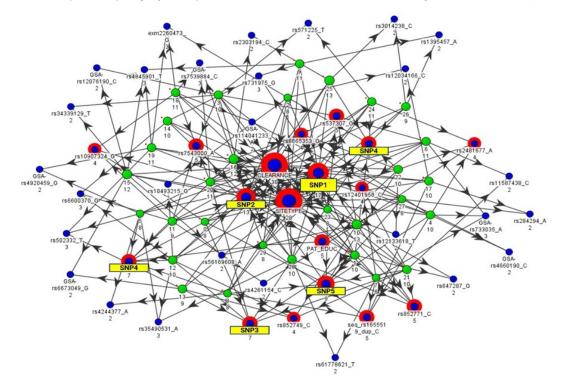
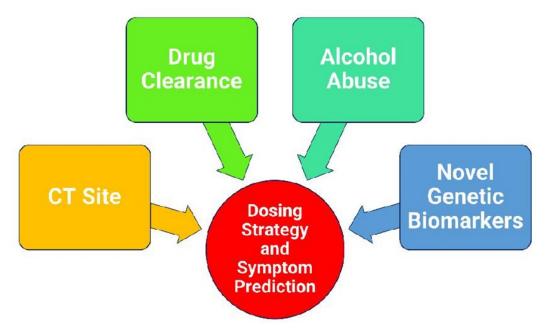


FIGURE 1 – bfLEAPTM Analytical Map

Each green node represents a different sampling of the data, and arrows point to attributes (blue nodes) which were found to be key indicators according to that sampling. Attribute importance is determined by how many samplings identify that attribute as an indicator (i.e., number of incoming arrows to each blue node).





Identification of clustered multi-variate associations (e.g., novel genetic variants, drug clearance, substance abuse) could help us 1) identify novel drug targets, 2) predict which patients are most likely to respond, and 3) identify modifiable factors that could contribute to better outcomes.

Summary for Cardiovascular Case Study

BullFrog AI worked with an international client in cardiovascular devices, to analyze data from an ongoing clinical trial for a new device. BullFrog analyzed data from ~55 patients, with a library of almost 15,000 unique attributes of data for each patient. The data also included adverse events, and key demographic information. For this client, bfLEAP<sup>TM</sup> analysis was able to provide ground truth for the company - confirming multiple correlations and non-correlations within the data. In terms of actionable output, the analytical results confirmed at least two demographic co-variates for the ongoing trial, and also provided a starting point for deeper physiological and molecular studies.

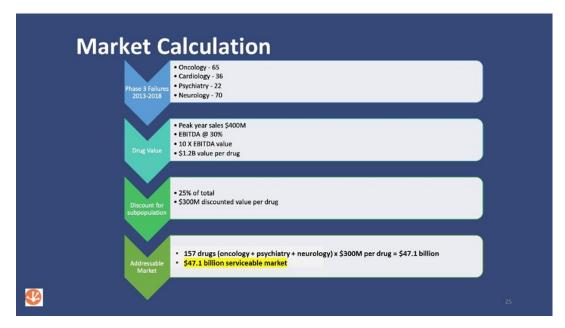
35

## **Our Supply Chain and Customer Base**

We are preparing to launch our businesses using funds from this offering and through our partnerships and relationships. We have a strategic relationship with FSHD Society, a leading non-governmental organization, for AI/ML analysis of clinical trial data for patients with a rare neuromuscular disorder. We also have several other developing strategic relationships in the project design phase. The Company has executed a joint development deal for a biologics discovery phase opportunity that is directed toward targeted cancer therapeutics. The Company has also obtained exclusive world wide exclusive rights to a phase 2 ready glioblatoma drug and a preclinical hepatocellular carcinoma drug from universities. Since we intend to conduct late-stage clinical trials with rescued therapeutic assets, there will be a requirement of drug product or other significant services to plan and execute our clinical development programs. The success of our clinical development programs will require adequate availability of raw materials and/or drug product for our R&D and clinical trials, and, in some cases, may also require establishment of third-party arrangements to obtain finished drug product that is manufactured appropriately under industry-standard guidelines, and packaged for clinical use or sale. Since we are a digital biopharmaceutical company, our clinical development programs will also require, in some cases, establishment of third-party relationships for execution and completion of clinical trials.

## Our Market Opportunity

One aim of our business is to "rescue" drugs that have failed in phase 3 clinical trials by using our technology to analyze all available data with the goal of designing a precision medicine clinical trial that will have a better chance of being successful. The graphic below illustrates the estimated market opportunity for these failed drugs. The top arrow shows the number of failed phase 3 trials for several disease categories over a 5 year period. The arrows below provide our assumptions for narrowing or discounting certain parameters associated with the market size calculation. The final arrow shows the math behind the \$47.1B. To date, we have not penetrated the failed drug market, however; we are actively searching for failed drug opportunities.

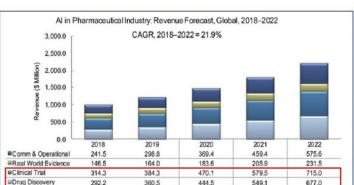


Identification of candidates with potential for rescue may be challenging and require significant resources, and once these assets are identified the Company may find it challenging to license them under favorable terms in order to create value for shareholders. Subsequent development of these assets for clinical testing may require significant effort and resources. Ultimately, these assets must undergo rigorous clinical testing and approval by FDA or comparable regulatory authorities in other countries in order to be marketed. A key part of our strategy is to partner our R&D programs. In addition, we do not intend on commercializing drugs and instead will seek to divest each drug asset to a company that will commercialize the drug.

The following graphic illustrates the global revenue forecast for applying AI in the pharmaceutical industry, as well as the increase in anticipated market spend and annual growth rate for AI solutions per certain application areas.

## Market - Al in the Pharmaceutical Industry

BullFrog is poised to impact multiple high-growth application areas



Year

Application Area(s)	CAGR (% 2018-2022)
Candidate Discovery & Validation	34-36%
Target Discovery & Validation	33-35%
Pre-Clinical Resarch	27-29%
Precision Genomics & Decision Support	23-24%

Solutions (2022) → \$1.85 billion

(1.02% of total industry R&D spend)

Source: Frost & Sullivan – "Growth Insight – Role of A.I. in the Pharmaceutical Industry" (Sept. 2019)

36

## **Intellectual Property**

cancer Activity

## Patents

We have exclusive worldwide rights to the following patents related to our intellectual property:

Johns Hopkins University Licensed Intellectual Property:

			Application			Patent	Expiration	
Title	Serial Number	File Date	Type	Country	Status	Number	Date	Assignee
An Improved								
Formulation of Mebendazole and Drug Combination	62/112,706	06 Feb 2015	Provisional	US	Expired			The Johns Hopkins University
to Improve Anti-								University

An Improved Formulation of Mebendazole and Drug Combination to Improve Anti- cancer Activity	PCT/US2016/016968	08 Feb 2016	РСТ	PCT - Parent	Expired		11 Aug 2016	The Johns Hopkins University
MEBENDAZOLE POLYMORPH FOR TREATEMENT AND PREVENTION OF TUMORS	15/548,959	04 Aug 2017	РСТ	US	GRANTED	11,110,079	08 Feb 2036	The Johns Hopkins University
Mebendazole Polymorph For Treatment And Prevention Of Tumors MEBENDAZOLE	16747414.7	08 Feb 2016	РСТ	EPO	GRANTED	Pending	08 Feb 2036	The Johns Hopkins University
POLYMORPH FOR TREATMENT AND PREVENTION OF TUMORS	253854	08 Feb 2016	PCT	Israel	GRANTED	253854	08 Feb 2036	The Johns Hopkins University
An Improved Formulation of Mebendazole and Drug Combination to Improve Anti- cancer Activity	2016800144274	08 Feb 2016	РСТ	China	GRANTED	1ZL20168- 0014427.4	08 Feb 2036	The Johns Hopkins University
An Improved Formulation of Mebendazole and Drug Combination to Improve Anti- cancer Activity	201717028684	08 Feb 2016	PCT	India	GRANTED	352734	08 Feb 2036	The Johns Hopkins University
Mebendazole Polymorph For Treatment And Prevention Of Tumors	2017-541687	08 Feb 2016	PCT	Japan	GRANTED	6796586	08 Feb 2036	The Johns Hopkins University
CONTINUATION: Mebendazole Polymorph For Treatment And Prevention Of Tumors	17/402,131	13 Aug 2021	CON	United States	PENDING			The Johns Hopkins University
				37				

George Washington University Licensed Intellectual Property:

The provisional patent numbers 63/113,745 and 63/147,141 were both converted into a single PCT application (PCT/US2021/059245) with an expiration date of November 12, 2041, as shown in table below.

GWU	Title	Serial Number	File Date	Application Type	Country	Status	Patent No.	Expiration Date	Composition MoU
020-030- Mishra- PRV	B-SPECTRIN (SPTBN1) DEFICIENCY PROTECTS MICE FROM HIGH-FAT DIET- INDUCED LIVER DISEASE AND CANCER DEVELOPMENT	63/113,745	13 Nov 2020	Provisional	us	CONVERTED TO PCT		13 Nov 2021	Both filed
020-030- Mishra- CON	B-SPECTRIN (SPTBN1) DEFICIENCY PROTECTS MICE FROM HIGH-FAT DIET- INDUCED LIVER DISEASE AND CANCER DEVELOPMENT	63/147,141	08 Feb 2021	Provisional- Continuation	US	CONVERTED TO PCT		13 Nov 2021 (PCT filed)	Both filed
020-030- Mishra- PCT	B-SPECTRIN (SPTBN1) DEFICIENCY PROTECTS MICE FROM HIGH-FAT DIET- INDUCED LIVER DISEASE AND CANCER DEVELOPMENT	PCT/US2021 /059245	12 Nov 21	PCT	US	PENDING		12 Nov 2041	Both filed

Title	Country	Status	Patent#	<b>Expiration Date</b>
B-Spectrin (SPTBN1) deficiency protects mice from high fat diet- induced liver disease and cancer development	us	Converted to PCT	63/113,745	11/13/21
B-Spectrin (SPTBN1) deficiency protects mice from high fat diet- induced liver disease and cancer development	US	Converted to PCT	63/147,141	11/13/21 PCT Filed
B-Spectrin (SPTBN1) deficiency protects mice from high fat diet- induced liver disease and cancer development	US	Pending	PCT/US2021/059245	Pending

38

John Hopkins University Applied Physics Lab Licensed Intellectual Property:

					Expiration	
Title	Serial Number	File Date	Country	Status	Date	Assignee
Apparatus and Method for Distributed Graph Processing	U.S. Patent 10,146,801	7/13/2015	US	Granted	3/2/2037	The Johns Hopkins University
Method and Apparatus for Analysis and Classification of High Dimensional Data Sets	U.S. Patent 10,936,965	10/5/2017	US	Granted	9/25/2038	The Johns Hopkins University
Generalized Low Entropy Mixture Model	U.S. Patent 10,839,256	4/2/2018	US	Granted	12/15/2038	The Johns Hopkins University

#### Licenses

We hold the following licenses related to our intellectual property:

Licensor	Licensee	Description of Rights Granted
Johns Hopkins University Applied Physics Lab	BullFrog AI, Inc.	Worldwide, exclusive rights for therapeutics development and analytical services
George Washington University	BullFrog AI Holdings	Worldwide, exclusive rights for therapeutics development
Johns Hopkins University	BullFrog AI Holdings	Worldwide, exclusive rights for therapeutics development

On February 7, 2018, we entered into a License Agreement (the "License Agreement") with The Johns Hopkins University Applied Physics Laboratory LLC, a Maryland limited liability company ("JHU"). Pursuant to the License Agreement, JHUAPL granted the Company exclusive rights to intellectual property of JHU related to analytical services for applications in biological and chemical derived pharmaceutical therapeutics. The License Agreement provides for the grant of an exclusive, world-wide, royalty-bearing license by JHU to the Company, with the right to sublicense, in order to conduct research using the patent rights and know-how and to develop and commercialize products in the field using the patent rights and know-how. In consideration of the rights granted to the Company under the License Agreement, the Company granted JHU received a warrant equal to five (5%) percent of the then fully diluted equity base of the Company, which shall be diluted following the closing of this offering. Under the terms of the License Agreement, the Company is required to use commercially reasonable efforts to meet certain development milestones and minimum net sales milestones, and JHU will be entitled to eight (8%) percent of net sales for the services provided by the Company in which the JHU license was utilized, as well as fifty (50%) percent of all sublicense revenues received by the Company. In addition, the Company is required to pay JHU an annual maintenance fee of \$1,500. The Company is also obligated to make minimum annual payments. These minimum annual payments to JHU were amended in September 3, 2020 to \$20,000 in calendar year 2022, \$80,000 in calendar year 2023, \$300,000 in calendar year 2024, and \$300,000 in calendar year 2025 and each year thereafter, which may be offset against royalties paid by the Company for the year in which the minimum annual royalty becomes due.

The License Agreement will, unless sooner terminated, continue in each country until the date of expiration of the last to expire patent included within the patent rights in that country, or if no patents issue, then for 10 years. The License Agreement may be terminated by the Company upon 60 days' written notice in its discretion. The License Agreement may also be terminated by JHU if the Company is in material breach of the License Agreement's and fails to cure such breach within a 60-day cure period commencing upon notice. A material breach by the Company may include a delinquency with respect to payment or the failure by the Company to timely achieve a specified milestone.

We also have exclusive, worldwide licenses to other intellectual property from JHU that is being held as trade secret related to our algorithm libraries, pattern recognition, shallow-and-wide data sets, and time series correlation. We anticipate that new intellectual property (patents, copyrights, trademarks, trade secrets, etc.) will be generated through the course of executing our strategic development projects, and also through the course of improving, modifying, and scaling our bfLEAP<sup>TM</sup> platform. In October 2021, we amended the agreement with JHU-APL to include additional advanced AI technology. Currently, the latest patent grant date was in March 2021.

## George Washington University - Beta2-spectrin siRNA License

On January 14, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from George Washington University (GWU) for rights to use siRNA targeting Beta2-spectrin in the treatment of human diseases, including hepatocellular carcinoma (HCC). The license covers methods claimed in three US and worldwide patent applications, and also includes use of this approach for treatment of obesity, non-alcoholic fatty liver disease, and non-alcoholic steatohepatitis. This program is currently in the preclinical stage of development. The Company has not yet initiated development activities or IND-enabling studies on this asset; however, the plan is to conduct this work over the next 24 months. All R&D to date on this candidate has been conducted by the licensor of the technology, George Washington University. The term of the agreement began on January 14, 2022 and ends on the expiration date of the last patent to expire or 10 years after the first sale of a licensed product if no patents have issued. The license can be terminated by the licensee upon 60 days' written notice, or by the licensor if the Company is more than 30 days late in paying amounts owed to the licensor and does not make payment upon demand, or in the event of any material breach of the license that is not cured within 45 days.

Non-alcoholic fatty liver disease (NAFLD) is a condition in which excess lipids, or fat, build up in the liver. This condition, which is more common in people who have obesity and related metabolic diseases including type 2 diabetes, affects as many as 24% of adults in the US and is associated with risk of progression to more serious conditions, including non-alcoholic steatohepatitis (NASH), with associated liver inflammation and fibrosis, and hepatocellular carcinoma (HCC). Evidence in animal models of obesity suggest that a protein called β2-spectrin may play a key role in lipid accumulation, tissue fibrosis, and liver damage, and targeting expression or activity of this protein may be a useful approach in treating NASH and liver cancer (Rao et al., 2021).

In consideration of the rights granted to the Company under the License Agreement, GWU received a \$20,000 License Initiation Fee. Under the terms of the License Agreement, GWU will be entitled to a three percent (3%) royalty on net sales subject to quarterly minimums once the first sale has occurred subsequent to regulatory approval, as well sublicense or assignment fees in the event the Company sublicenses or assigns their rights to use the technology. The Company will also reimburse GWU for previously incurred and ongoing patent costs. The Sublicense and Assignment fee amounts decline as the Company advances the clinical development of the licensed technology. The license agreement also contains milestone payments for clinical development through the approval of an NDA and commercialization.

Aggregate payments made to GWU to date include the \$20,000 License Initiation Fee and an additional \$6,550 to reimburse the licensor for past patent costs. Aggregate future milestone costs could reach \$860,000 if the drug successfully completes clinical trials and is the subject of a New Drug Application (NDA) to the US FDA. Future milestones on sales revenue are limited to \$1M on the first \$20M in net sales.

#### Johns Hopkins University - Mebendazole License

On February 22, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from Johns Hopkins University (JHU) for the use of an improved formulation of Mebendazole for the treatment of any human cancer or neoplastic disease. This formulation shows potent activity in animal models of different types of cancer, and has been evaluated in a Phase I clinical trial in patients with high-grade glioma (NCT01729260). The trial, an open-label dose-escalation study, assessed the safety of the improved formulation with adjuvant temozolomide in 24 patients with newly diagnosed gliomas. Investigators observed no dose-limiting toxicity in patients receiving all but the highest tested dose (200mg/kg/day). Four of the 15 patients receiving the maximum tested dose of 200mg/kg/day experienced dose-limiting toxicity, all of which were reversed by decreasing or eliminating the dose given. There were no serious adverse events attributed to mebendazole at any dose during the trial. The Company is currently formulating a strategy to conduct additional clinical trials with this asset to enable evaluation of safety in humans.

The license covers six (6) issued patents and one (1) pending application, with the term of the agreement beginning on February 22, 2022 and ending on the date of expiration of the last to expire patent. The license can be terminated by the licensee upon 90 days' written notice, or by the licensor in the event of any material breach of the license that is not cured within 30 days. In consideration of the rights granted to the Company under the License Agreement, JHU will receive a staggered Upfront License Fee of \$250,000, with the first \$50,000 payment due within 30 days of the effective date. The Company will also reimburse JHU for previously incurred and ongoing patent costs. Under the terms of the License Agreement, JHU will be entitled to three- and one-half percent (3.5%) royalty on net sales by the Company. In addition, the Company is required to pay JHU minimum annual royalty payments of \$5,000 for 2023, \$10,000 for 2024, \$20,000 for 2025, \$30,000 for 2026 and \$50,000 for 2027 and each year after until the first commercial sale after which the annual minimum royalty shall be \$250,000. The license agreement also contains milestone payments for clinical development steps through the approval of an NDA and commercialization. Aggregate payments made to date include the initial \$50,000 upfront fee and an additional \$79,232.53 to reimburse the licensor for past patent costs. Aggregate future milestone costs could reach \$1,500,000 if the drug successfully completes Phase II and III clinical trials and is approved for sale and marketing by the US FDA. Future milestones on sales revenue are \$1MO in the first year cumulative sales revenue exceeds \$100M, \$10M in the first year cumulative sales revenue exceeds \$100M, and \$20M in the first year cumulative sales revenue exceeds \$100M, and \$20M in the first year cumulative sales revenue exceeds \$100M.

#### JHU - Mebendazole Prodrug License

On October 13, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from Johns Hopkins University (JHU) and the Institute of Organic Chemistry and Biochemistry (IOCB) of the Czech Academy of Sciences for rights to commercialize N-substituted prodrugs of mebendazole that demonstrate improved solubility and bioavailability. The license covers prodrug compositions and use for treating disease as claimed in multiple US and worldwide patent applications. The term of the agreement began on October 13, 2022and continues until the date of expiration of the last to expire patent, or for 20 years from the effective date of the agreement if no patents issue. The license can be terminated by the Company upon 90 days' written notice, or by the licensor in the event of any material breach of the license that is not cured by the Company within 30 days.

In consideration for the rights granted to the Company under the License Agreement JHU and IOCB will receive a staggered upfront license fee of \$100,000. The Company will also reimburse JHU and IOCB for previously incurred patent costs totaling \$33,265 and will be responsible for reimbursing licensors for future patent costs. Under the terms of the License Agreement, the licensors will be entitled to a four percent (4%) royalty on net sales subject to annual minimums upon first commercial sale of a licensed product, as well sublicense or assignment fees in the event the Company sublicenses or assigns their rights to use the technology. The Sublicense fee amount declines as the Company advances the clinical development of the licensed technology. The Company is required to pay minimum annual royalties (MAR) beginning in year 4 of the agreement. The MAR for year 4 will be \$5,000, increasing to \$10,000 in year 5, \$20,000 in year 6, \$30,000 in year 7, and \$50,000 in year 8 and subsequent years. The Company will be responsible for milestone payments for patent issuance of up to \$50,000 and clinical development milestones up to and including approval of an NDA totaling up to \$2.3M. The Company will be required to pay a commercial milestone of \$1M once sales reach \$20M in the US, \$2M when sales in the US reach \$100M, \$10M when US sales reach \$500M, and \$20M when US sales exceed \$1B.

## Competition

The pharmaceutical and biotechnology industries are characterized by rapidly advancing technologies, intense competition, and a strong emphasis on proprietary products. The immuno-oncology, neuroscience, and rare disease segments of the industry in particular are highly competitive. While we believe that our technology, development experience and scientific knowledge provide competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical, and biotechnology companies, academic institutions and governmental agencies, and public and private research institutions.

Many of our competitors may have significantly greater financial resources, and expertise in research and development, manufacturing, preclinical studies, conducting clinical trials, obtaining regulatory approvals, and marketing approved medicines than we do. Mergers and acquisitions in the pharmaceutical, biotechnology, and diagnostic industries may result in even more resources being concentrated among a smaller number of our competitors. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and in establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to or necessary for our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

The key competitive factors affecting the success of all of our product candidates, if approved, are likely to be their efficacy, safety, convenience, price, the effectiveness of companion diagnostics in guiding the use of related therapeutics, if any, the level of generic competition and the availability of reimbursement from government and other third-party payors.

40

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize medicines that are safer, are more effective, have fewer or less severe side effects, are more convenient or are less expensive than any medicines we may develop. Our competitors also may obtain FDA or other regulatory approval for their medicines more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic medicines. There are many generic medicines currently on the market for certain of the indications that we are pursuing, and additional generics are expected to become available over the coming years. If our therapeutic product candidates are approved, we expect that they will be priced at a significant premium over competitive generic medicines.

product candidates of our priority programs are approved for the indications for which we are currently planning clinical trials, they will compete with the drugs discussed below and will likely compete with other drugs currently in development.

bfLEAP

The analytics industry and application of AI in healthcare is growing rapidly. Competition exists along the entire continuum of the drug development process from discovery to commercialization and beyond. We believe the weakness of the industry is the quality of the data and we believe bfLEAP provides several competitive advantages, that will position the Company for success, First, bfLEAP is highly scalable and can process data from small to extremely large complex data sets without the need for additional code being developed. Second, it is adept at processing and analyzing incomplete data and making predictions that we do not believe other technologies are capable of doing. Since data quality is a problem that exists in the healthcare industry, we see this as a major differentiator. The ability to make predictions, find relationships and patterns and anomalies in extremely large complex data sets has been demonstrated by the Applied Physics Lab in other applications and sectors. Finally, the algorithms used by bfLEAP are proprietary and protected, having been developed at Johns Hopkins University Applied Physics Lab. Most of the competitors rely on open source algorithms and we believe that we have already demonstrated our superiority via the August 2021 publication in DeepAI.org.

#### **Government Regulation**

The FDA does not currently require approval of AI technologies used to aid in therapeutics, but that could change in the future. The FDA will regulate any clinical trials conducted by the Company.

Our clinical development programs will, in some cases, require regulatory review of preclinical and/or clinical data by the FDA or other governing agencies, and subsequent compliance with applicable federal, state, local, and foreign statutes and regulations. The results of the clinical trials that we conduct will be evaluated by the FDA and other regulatory bodies. The comments and approvals that are obtained are expected to lead to milestone payments under the collaborative agreement. Accordingly, our ability to navigate the regulatory process is extremely important to the success of the Company. We believe that we have a competitive advantage in this process due to primarily focusing on drug candidates that already have some level of success in clinical trials. Previous success of a particular candidate in trials combined with our precision medicine approach to clinical trial design using our bfLEAP platform, will de-risk the development process and improve the chances for success.

## Government Regulation and Product Approval

Government authorities in the United States, at the federal, state and local level, and in other countries and jurisdictions extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of pharmaceutical products. The processes for obtaining regulatory approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

#### FDA Approval Process

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act (FD&C Act) and other federal and state statutes and regulations govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling and import and export of pharmaceutical products. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending new drug applications (NDAs), warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties and criminal prosecution.

Pharmaceutical product development for a new product or certain changes to an approved product in the U.S. typically involves preclinical laboratory and animal tests, the submission to FDA of an investigational new drug application (IND) which must become effective before clinical testing may commence, and adequate and well-controlled clinical trials to establish the safety and effectiveness of the drug for each indication for which FDA approval is sought. Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease.

41

Preclinical tests include laboratory evaluation of product chemistry, formulation and toxicity, as well as animal trials to assess the characteristics and potential safety and efficacy of the product. The conduct of the preclinical tests must comply with federal regulations and requirements, including good laboratory practices. The results of preclinical testing are submitted to FDA as part of an IND along with other information, including information about product chemistry, manufacturing and controls, and a proposed clinical trial protocol. Long-term preclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted. A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin. Clinical trials involve the administration of the investigational new drug to healthy volunteers or patients under the supervision of a qualified investigator. Clinical trials must be conducted: (i) in compliance with federal regulations; (ii) in compliance with good clinical practice, or GCP, an international standard meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, administrators and monitors; as well as (iii) under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol amendments must be submitted to FDA as part of the IND.

Clinical trials to support NDAs for marketing approval are typically conducted in three sequential phases, but the phases may overlap. In Phase 1, the initial introduction of the drug into healthy human subjects or patients, the drug is tested to assess metabolism, pharmacokinetics, pharmacological actions, side effects associated with increasing doses, and, if possible, early evidence of effectiveness. Phase 2 usually involves trials in a limited patient population to determine the effectiveness of the drug for a particular indication, dosage tolerance and optimum dosage, and to identify common adverse effects and safety risks. If a drug demonstrates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 trials are undertaken to obtain the additional information about clinical efficacy and safety in a larger number of patients, typically at geographically dispersed clinical trial sites, to permit FDA to evaluate the overall benefit-risk relationship of the drug and to provide adequate information for the labeling of the drug. In most cases, FDA requires two adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the drug. A single Phase 3 trial with other confirmatory evidence may be sufficient in rare instances, such as where the study is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of a clinically meaningful effect on mortality, irreversible morbidity or prevention of a disease with a potentially serious outcome and confirmation of the result in a second trial would be practically or ethically impossible.

After completion of the required clinical testing, an NDA is prepared and submitted to FDA. FDA approval of the NDA is required before marketing of the product may begin in the U.S. The NDA must include the results of all preclinical, clinical and other testing and a compilation of data relating to the product's pharmacology, chemistry, manufacture and controls. The cost of preparing and submitting an NDA is substantial. The submission of most NDAs is additionally subject to a substantial application user fee, and the applicant under an approved NDA is also subject to an annual program fee for each prescription product. These fees are typically increased annually. Sponsors of applications for drugs granted Orphan Drug Designation are exempt from these user fees.

FDA may also refer applications for novel drug products, or drug products that present difficult questions of safety or efficacy, to an outside advisory committee – typically a panel that includes clinicians and other experts – for review, evaluation and a recommendation as to whether the application should be approved. FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations.

Before approving an NDA, FDA will typically inspect one or more clinical sites to assure compliance with GCP. Additionally, FDA will inspect the facilities at which the drug is manufactured. FDA will not approve the product unless compliance with current good manufacturing practices (cGMPs) is satisfactory and the NDA contains data that provide substantial evidence that the drug is safe and effective in the indication studied.

#### Fast Track Designation

FDA is required to facilitate the development, and expedite the review, of drugs that are intended for the treatment of a serious or life-threatening disease or condition for which there is no effective treatment and which demonstrate the potential to address unmet medical needs for the condition. Under the Fast Track program, the sponsor of a new drug candidate may request that FDA designate the drug candidate for a specific indication as a Fast Track drug concurrent with, or after, the filing of the IND for the drug candidate. FDA must determine if the drug candidate qualifies for Fast Track Designation within 60 days of receipt of the sponsor's request.

If a submission is granted Fast Track Designation, the sponsor may engage in more frequent interactions with FDA, and FDA may review sections of the NDA before the application is complete. This rolling review is available if the applicant provides, and FDA approves, a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, FDA's time period goal for reviewing an application does not begin until the last section of the NDA is submitted. While we may seek Fast Track Designation, there is no guarantee that we will be successful in obtaining any such designation. Even if we do obtain such designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. A Fast Track Designation does not ensure that the product candidate will receive marketing approval or that approval will be granted within any particular timeframe. Additionally, Fast Track Designation may be withdrawn by FDA if FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

## Post-Approval Requirements

Once an NDA is approved, a product will be subject to certain post-approval requirements. For instance, FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the internet. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved labeling.

Adverse event reporting and submission of periodic reports are required following FDA approval of an NDA. FDA also may require post-marketing testing, known as Phase 4 testing, REMS and surveillance to monitor the effects of an approved product, or FDA may place conditions on an approval that could restrict the distribution or use of the product. In addition, quality control, drug manufacture, packaging and labeling procedures must continue to conform to cGMPs after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with FDA and certain state agencies. Registration with FDA subjects entities to periodic unannounced inspections by FDA, during which the Agency inspects manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money and effort in the areas of production and quality-control to maintain compliance with cGMPs. Regulatory authorities may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

#### Generic Competition

In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent whose claims cover the applicant's product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential generic competitors in support of approval of an abbreviated new drug application (ANDA). An ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths and dosage form as the listed drug and has been shown through bioequivalence testing to be therapeutically equivalent to the listed drug. Other than the requirement for bioequivalence testing, ANDA applicants are not required to conduct, or submit results of, preclinical or clinical tests to prove the safety or effectiveness of their drug product. Drugs approved in this way are commonly referred to as "generic equivalents" to the listed drug and can often be substituted by pharmacists under prescriptions written for the original listed drug.

The ANDA applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book. Specifically, the applicant must certify that (i) the required patent information has not been filed; (ii) the listed patent has expired; (iii) the listed patent has not expired but will expire on a particular date and approval is sought after patent expiration; or (iv) the listed patent is invalid or will not be infringed by the new product (a Paragraph IV certification). The ANDA applicant may also elect to submit a section viii statement certifying that its proposed ANDA label doe s not contain (or carve out) any language regarding the patented method-of-use rather than certify to a listed method-of-use patent. If the applicant does not challenge the listed patents or certifies that the listed patents will not be infringed by the new product, the ANDA application will not be approved until all the listed patents claiming the referenced product have expired. If the ANDA applicant has provided a Paragraph IV certification, the NDA and patent holders may then initiate a patent infringement lawsuit in response. The filing of a patent infringement lawsuit within 45 days of the receipt of a such certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months, expiration of the patent, settlement of the lawsuit, or a decision in the infringement case that is favorable to the ANDA applicant.

43

## Exclusivity

Upon NDA approval of a new chemical entity (NCE) that drug receives five years of marketing exclusivity during which FDA cannot receive any ANDA seeking approval of a generic version of that drug. An ANDA may be submitted one year before NCE exclusivity expires if a Paragraph IV certification is filed. If there is no listed patent in the Orange Book, there may not be a Paragraph IV certification, and, thus, no ANDA may be filed before the expiration of the exclusivity period. Certain changes to a drug, such as the addition of a new indication to the package insert, can be the subject of a three-year period of exclusivity if the application contains reports of new clinical investigations (other than bioavailability studies) conducted or sponsored by the sponsor that were essential to approval of the application. FDA cannot approve an ANDA for a generic drug that includes the change during the period of exclusivity.

## Patent Term Extension

After NDA approval, owners of relevant drug patents may apply for up to a five-year patent extension. The allowable patent term extension is calculated as half of the drug's testing phase (the time between IND application and NDA submission) and all of the review phase (the time between NDA submission and approval up to a maximum of five years). The time can be shortened if FDA determines that the applicant did not pursue approval with due diligence. The total patent term after the extension may not exceed 14 years, and only one patent can be extended. For patents that might expire during the application phase, the patent owner may request an interim patent extension. An interim patent extension increases the patent term by one year and may be renewed up to four times. For each interim patent extension granted, the post-approval patent extension is reduced by one year. The director of the United States Patent and Trademark Office must determine that approval of the drug covered by the patent for which a patent extension is being sought is likely. Interim patent extensions are not available for a drug for which an NDA has not been submitted.

## Other Healthcare Laws

In the United States, biotechnology company activities are subject to regulation by various federal, state and local authorities in addition to the FDA, including but not limited to, the Centers for Medicare & Medicaid Services (CMS), other divisions of the U.S. Department of Health and Human Services (e.g., the Office of Inspector General and the Office for Civil Rights), the U.S. Department of Justice (DOJ) and individual U.S. Attorney offices within the DOJ, and state and local governments. For example, research, sales, marketing and scientific/educational grant programs have to comply with the anti-fraud and abuse provisions of the Social Security Act, the federal false claims laws, the privacy and security provisions of the Health Insurance Portability and Accountability Act (HIPAA) and similar state laws, each as amended, as applicable.

Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

Data privacy and security regulations by both the federal government and the states in which business is conducted may also be applicable. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, imposes requirements relating to the privacy, security and transmission of individually identifiable health information. HIPAA requires covered entities to limit the use and disclosure of protected health information to specifically authorized situations and requires covered entities to implement security measures to protect health information that they maintain in electronic form. Among other things, HITECH made HIPAA's security standards directly applicable to business associates, independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

44

## Insurance Coverage and Reimbursement

Significant uncertainty exists as to the insurance coverage and reimbursement status of any products for which we may obtain regulatory approval. In the United States, sales of any product candidates for which regulatory approval for commercial sale is obtained will depend in part on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government authorities and health programs in the United States such as Medicare and Medicaid, managed care providers, private health insurers and other organizations. These third-party payors are increasingly reducing reimbursements for medical products and services. The process for determining whether a payor will provide coverage for a drug product may be separate from the process for setting the reimbursement rate that the payor will pay for the drug product. Third-party payors may limit coverage to specific drug products on an approved list, or formulary, which might not include all of FDA-approved drugs for a particular indication. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

#### **Employees**

As of November 28, 2022, the Company has 2 full-time employee and consultants and 2 part-time employees, advisors, and consultants, including its Chief Executive Officer Vininder Singh and its Chief Financial Officer, Dane Saglio. None of these employees are covered by a collective bargaining agreement, and we believe our relationship with our employees is good. We also engage consultants on an as-needed basis to supplement existing staff.

#### **Properties**

Currently, the Company does not own any real property. All of the Company's employees work virtually.

#### **Legal Proceedings**

The Company is not a party to any legal proceedings.

## **Corporate Information**

BullFrog Holdings AI, Inc. was incorporated in the State of Nevada on February 26, 2020. Our principal business address is 325 Ellington Blvd, Unit 317, Gaithersburg, MD 20878. Our website address is www.bullfrogai.com. The references to our website in this prospectus are inactive textual references only. The information on our website is neither incorporated by reference into this prospectus nor intended to be used in connection with this offering. All of our operations are currently conducted through BullFrog AI Holdings, Inc.

## Available Information

Reports we file with the Securities and Exchange Commission (SEC) pursuant to the Exchange Act, including annual and quarterly reports, and other reports we file, can be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street NE, Washington, D.C. 20549.

45

## MANAGEMENT AND BOARD OF DIRECTORS

## **Executive Officers and Directors**

The following table sets forth the name, age and position of each of our executive officers, key employees and directors.

Name	Age	Position(s)
Executive Officers:		
Vin Singh	53	Chief Executive Officer and Director
Dane Saglio	65	Chief Financial Officer
Non-Executive Directors:		
Don Elsey*	69	Director, Chair Audit Committee
	59	
William Enright*		Director and Chair of Compensation Committee
Jason Hanson*	53	Director and Chair of Nominating and Corporate Governance Committee

\*Director Nominee

Vininder (Vin) Singh is the Founder, Chairman, and CEO of BullFrog AI Holdings, Inc. since its inception in August 2017. Over the past five years, he has built the Company from scratch and during that time he led strategy, built a highly experienced team of leaders, spear headed the acquisition and development of BullFrog's core AI technology and drug assets, secured the first revenue, and raised approximately \$2M in financing. In February of 2020, he formed BullFrog AI Holdings, Inc. and BullFrog AI Inc. became a wholly owned subsidiary designated as the holder of core intellectual property. Vin is a serial entrepreneur and experienced executive with 25 years of experience in the life sciences and biotechnology industries. He has extensive start-up experience having founded and built several pioneering investor backed companies including BullFrog AI, which uses machine learning/AI to enable drug development, Next Healthcare Inc., a personalized diagnostics and adult cell banking service, and MaxCyte Inc. (MXCT), a cell therapy company. He was also an executive at GlobalStem Inc. and ThermoFisher Scientific, leading their global cell therapy services business. Vin has a BS in Electrical Engineering from Rutgers University, an MS in Biomedical Engineering from Rensselaer Polytechnic Institute, and an MBA from Johns Hopkins University. We believe that

Mr. Singh is qualified to serve as a member of our board of directors due to the perspective and experience that he brings as our Founder and Chief Executive Officer, his extensive experience in the science and biotechnology industries and in the management of startup companies.

Dane Saglio joined BullFrog Holdings AI, Inc. as Chief Financial Officer in September 2021. Mr. Saglio brings more than 40 years of financial management experience in both public and private companies across a number of business sectors. Previously, Mr. Saglio has served as CFO at Seneca Biopharma, RegeneRx Biopharmaceuticals since 2011, New Generation Biofuels 2010 until 2011, and EntreMed from 2000 until 2008, all public companies in the biotechnology arena. Prior to joining the Company, Mr. Saglio was the CFO of Seneca Biopharma, initially as a consultant in August 2019 and then as an employee in April 2020 until the Company merged with Leading Bio Sciences, forming Palisades Bio, Inc. in April 2021. He previously served as CFO at Celios Corporation from October 2017 until July 2019 and Helomics Corporation, a personalized medicine company in cancer from October 2014 through July 2017. He began his career at Informatics Corp, now Computer Associates International and then at Bressler & Reiner, a DC-based real estate developer and homebuilder. Dane has a BS from the University of Maryland is a licensed CPA in Maryland (inactive).

R. Don Elsey will be a director and chair of the Audit Committee of our board. Currently, Mr. Elsey serves as an advisor to the CEO of Lyra Therapeutics, a private company pioneering a new therapeutic approach to treat debilitating ear, nose and throat diseases. Mr. Elsey was the CFO of Lyra until his retirement in December 2020. Previously, from February 2015 to February 2019, Mr. Elsey served as Chief Financial Officer at Senseonics, Inc., a medical device company. From May 2014 until February 2015, Mr. Elsey served as Chief Financial Officer of Regado Biosciences, Inc., a biopharmaceutical company. From December 2012 to February 2014, Mr. Elsey served as Chief Financial Officer of LifeCell Corporation, a privately held regenerative medicine company. Mr. Elsey holds a B.A. in economics and an M.B.A. in finance from Michigan State University. We believe that Mr. Esley is qualified to serve as a member of our board of directors because of his extensive professional experience in science and biotechnology companies,

William "Bill" Enright is a seasoned biotech executive with more than thirty years of experience in building and financing both privately held and publicly held companies and will join the board on the effective date of this registration statement. He is currently the CEO and a Director of Vaccitech plc (NASDAQ: VACC), which he helped to take public in April 2021. Prior to Vaccitech, Bill spent more than ten years at Altimmune (NASDAQ: ALT) as a Director, President & CEO, moving multiple programs into clinical testing, completing several acquisitions, and eventually taking the company public. Prior to joining Altimmune, Bill spent six years with GenVec, Inc. (acquired by Intrexon) with increasing responsibilities, culminating as Head of Business Development.

Bill brings a breadth of experiences in a variety of positions within the life science/biotech industry, including time as a consultant, a bench scientist and 12 years with Life Technologies, Inc. (acquired by Thermo-Fisher), working in various senior level licensing, business management, manufacturing and research roles.

46

In addition to Vaccitech, Bill sits on the Board of Gravitas Therapeutics, Inc. and on a Business Advisory Board for Creaty MicroTech, Inc., both privately held companies.

Bill received a Master of Arts in Molecular Biology from SUNY at Buffalo and a Master of Science in Business Management from Johns Hopkins University.

We believe that Mr. Enright is qualified to serve as a member of our board of directors because of his extensive professional experience in life science/biotech companies and in the management of public companies

Jason Hanson will become a director on the effective date. He currently serves as President, Chief Executive Officer, and Director at enGene, Inc. ("enGene"), a position he has held since 2018. In this role, he has built "from the ground up" a new scientific, technical and strategic vision for enGene, a Montreal based gene therapy company with a ten plus year history, re-launched the company with new science, personnel and strategy within six months of joining the company. In addition, at enGene, Mr. Hanson continues to build on the new strategy by conceptualized a groundbreaking genetherapy product from ideation stage into a multi-billion dollar clinical stage asset, has assembled senior team experienced in R&D, oncology and gene therapy, and has successfully led efforts at FDA to expand BLA, clinical activities to first line NMIBC (Non-Muscle Invasive Bladder Cancer) effectively doubling addressable market from \$3B to \$6B Previously, Mr. Hanson served as President and Chief Executive Officer of Ohana Biosciences, a biotechnology company based in Cambridge, MA. Mr. Hanson previously served as Executive Vice President and Chief Strategy Officer for NuVasive, Inc. and as Corporate Vice President of General Electric Company and member of the senior executive team of GE Healthcare, a \$20-plus billion dollar global pharmaceutical, medical device and healthcare services business. At GE Healthcare he had global business responsibilities for a range of portfolio management, corporate development, legal, compliance, and government relations activities. Prior to joining GE Healthcare, Mr. Hanson served as company Group Chairman and Executive Vice President at Valeant Pharmaceuticals with responsibility for the company's Consumer, Ophthalmology, Latin American and Dental businesses, as well as the manufacturing and supply chain, R&D, regulatory and medical affairs teams. Previously, he served as Executive Vice President and Chief Operating Officer at Medicis Pharmaceutical Corporation, where he led R&D and other critical

## Corporate Governance

## Director Independence

No members of our Board of Directors are independent using the definition of independence under Nasdaq Listing Rule 5605(a)(2) and the standards established by the SEC. Prior to closing the offering we plan to increase the size the Board of Directors to satisfy Nasdaq's requirement that the majority of the Board of Directors be independent.

## Committees of our Board

Audit Committee. We did not during 2020, and do not currently, have an audit committee. If and when we satisfy the other initial listing standards for listing our common stock on Nasdaq or another national exchange, we intend to establish an audit committee of the Board of Directors. Don Elsey will Chair the Audit Committee.

Compensation Committee. We did not during 2020, and do not currently, have a compensation committee. If and when we satisfy the other initial listing standards for listing our common stock on Nasdaq or another national exchange, we intend to establish a compensation committee of the Board of Directors.

Nominating Committee. We did not during 2020, and do not currently, have a nominating committee. If and when we satisfy the other initial listing standards for listing our common stock on Nasdaq or another national exchange, we intend to establish a nominating committee of the Board of Directors.

## Term of office

All directors hold office until the next annual meeting of the stockholders of the company and until their successors have been duly elected and qualified. Officers are elected by and serve at the discretion of our Board.

47

## Code of Business Conduct and Ethics

We have not adopted a Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have at this time very limited personnel resources and only one officer. Nevertheless, we intend to work with legal counsel in order

to prepare a Code of Business Conduct and Ethics appropriate to the nature of our business and the functions performed by the executive management of the Company. Upon adoption of the Code of Business Conduct and Ethics, we will file it with the SEC and post a copy on our website.

#### **Family Relationships**

There are no family relationships among and between the issuer's directors, officers, persons nominated or chosen by the issuer to become directors or officers, or beneficial owners of more than ten percent of any class of the issuer's equity securities.

#### **Involvement in Certain Legal Proceedings**

From time to time, we may become involved in litigation relating to claims arising out of its operations in the normal course of business. Currently there are no legal proceedings, government actions, administrative actions, investigations or claims are currently pending against us or that involve the Company or any of its affiliates which, in the opinion of the management

### EXECUTIVE AND DIRECTOR COMPENSATION

No compensation was paid to our principal executive officer and our two other most highly compensated executive officers during the past two fiscal years.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	All Other Compensation (\$)	Total Compensation (\$)
Vininder Singh Chief Executive Officer and Director	2021 2020	\$ 116,000- \$ 118,000-	\$ - -	\$ -	\$ -	\$ -	\$ 116,000 118,000
Dane Saglio Chief Financial Officer	2021 2020	\$ -	\$ -	\$ 17,600-	\$ -	\$ -	\$ 17,600

#### **Employment Agreements**

On May 16, 2022, we entered into an employment agreement with Vininder Singh, pursuant to which he will receive received an annual base salary of \$400,000, which is subject to bi-annual review by the Company. Mr. Singh will also be eligible for an annual bonus based on the achievement of certain goals and performance criteria established by the Board. Mr. Singh's target annual bonus for the fiscal years ended 2022 through 2025 will be a minimum of twenty (20%) percent of the current base salary, with a maximum payout of up to one-hundred (100%) percent based on target achievement. For 2022, the criteria to determine Mr. Singh's bonus will include the following: (i) the Company achieves \$500,000 in sales; (ii) the filing of an Investigational New Drug (IND) Application with the FDA for mebandazole; (iii) the Company enters into two (2) strategic partnerships; and (iv) the Company commences partner negotiations with a third party for HSV-1, bf-114 or bf-222. Mr. Singh will also be eligible to participate in the Company's stock incentive plan, subject to Board approval. The agreement with Mr. Singh shall continue until either his resignation, termination for cause by the Company, or death or disability of Mr. Singh.

48

### **Consulting Agreements**

We have also entered into a consulting agreement (the "Newman Agreement") with Gerald Newman pursuant to which Mr. Newman will assist the Company with general business consulting, strategic relationships and the recruiting of certain key personnel. The Newman Agreement will terminate on June 23, 2023 and may be renewed upon mutual written agreement by both parties. Pursuant to the Newman Agreement, Newman will receive: (i) a monthly fee of \$7,500 per month payable for eight months commencing on the date of this Offering, payable on the last day of each month; and (ii) 500,000 shares of the Company's common stock which will be conducted prior to this Offering.

Further, we have entered into an advisory agreement (the "Greentree Agreement") with Greentree Financial Group, Inc. ("Greentree") to render certain professional services to the Company including but not limited to responding to comments from the NASDAQ Listing Qualifications Staff as necessary, assist the Company in preparing a Code of Conduct applicable to directors, officers and employees, and advising on all documents and accounting systems relating to its finances and transactions, with the purpose of bringing such documents and systems into compliance with Generally Accepted Accounting Principles or disclosures required by the SEC. Pursuant to the Greentree Agreement, Greentree will receive 350,000 shares of the Company's common stock.

### **Director Compensation**

Mr. Singh has been and is currently our sole director. No compensation has been paid out to the director nominees and any compensation will be subject to closing of this Offering.

#### Outstanding Equity Awards at Fiscal Year-End

There are no outstanding equity awards held by the Company's named executive officers or directors as of December 31, 2021.

### 2022 Equity Incentive Plan

Prior to the completion of this offering, we expect our Board of Directors to adopt the 2022 Equity Incentive Plan, or 2022 PlanWe expect our 2022 Plan will become effective on the date of the underwriting agreement related to this offering. Our 2022 Plan will come into existence upon its adoption by our board of directors, but no grants will be made under our 2022 Plan prior to its effectiveness. Once our 2022 Plan becomes effective, no further grants will be made under the Company's existing Incentive Plan.

#### CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

### Certain Relationships and Related Party Transactions

On July 8, 2021, the Company entered into a Simple Agreement for Future Equity (SAFE), with a related party, Tivoli Trust, our second largest shareholder (the "Investor"), with an amount of \$150,000, with 0% interest. Under the SAFE agreement, if there is an Equity Financing before the termination of this SAFE, on the initial closing of such Equity Financing, this SAFE will automatically convert into the number of shares of SAFE Preferred Stock equal to the Purchase Amount divided by the Conversion Price, which means either: (1) the Safe Price (the price per share equal to the Post-Money Valuation Cap divided by the Company Capitalization) or (2) the Discount Price (the price per share of the Standard Preferred Stock sold in the Equity Financing multiplied by the Discount Rate), whichever calculation results in a greater number of shares of Safe Preferred Stock

If there is a Liquidity Event before the termination of this SAFE, this SAFE will automatically be entitled (subject to the liquidation priority set forth in Section 1(d) below) to receive a portion of Proceeds, due and payable to the Investor immediately prior to, or concurrent with, the consummation of such Liquidity Event, equal to the greater of (i) the Purchase Amount (the "Cash-Out Amount") or (ii) the amount payable on the number of shares of Common Stock equal to the Purchase Amount divided by the Liquidity Price (the "Conversion Amount"). If any of the Company's securityholders are given a choice as to the form and amount of Proceeds to be received in a Liquidity Event, the Investor will be given the same choice, provided that the Investor may not choose to receive a form of consideration that the Investor would be ineligible to receive as a result of the Investor's failure to satisfy any requirement or limitation generally applicable to the Company's securityholders, or under any applicable laws.

This SAFE will automatically terminate (without relieving the Company of any obligations arising from a prior breach of or non-compliance with thisSAFE) immediately following the earliest to occur of: (i) the issuance of Capital Stock to the Investor pursuant to the automatic conversion of this SAFE under agreement; or (ii) the payment, or setting aside for payment, of amounts due the Investor pursuant to the agreement.

As of December 31, 2021, the \$150,000 received from SAFE was recorded at6% imputed interest. The maturity date of the loan is defined by the SAFE agreement as discussed above.

On August 19, 2021, the company entered into a convertible loan agreement with a related party, with a principal balance of \$99,900 at 9% interest. The noteholder has the right to convert the principal and interest into common shares of the Company. This loan included an original issuance discount of 5% and included 99,900 Warrants at an exercise price of \$1, exercisable for 5 years from the issue date on the face of the Warrant. The maturity date of the loan was February 19, 2022. In May 2022, the Company and the note holder agreed to cancel and void previous warrants and entered into a new agreement for 115,185 warrants with an exercise price of \$2.50. As of September 30, 2022, the \$99,900 principal and the \$4,950 overpayment of the note remained outstanding and had accrued interest of \$10,165. The warrants discussed above were initially discounted against the notes, subsequent to year end December 31, 2021, they were deemed voided and new warrants in accordance with the new terms were issued. We assessed the differences in fair value and determined that they were de minimis and expensed the full value of the new warrants.

On June 15, 2021, the company entered into a unsecured short term loan agreement with the Investor for an aggregate principal balance of \$34,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest.

On November 19, 2021, 2021, the company entered into an unsecured short term loan agreement with the Investor for an aggregate principal balance of \$5,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest.

On December 13, 2021, the company entered into an unsecured short term loan agreement with the Investor for an aggregate principal balance of \$10,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest.

On October 5, 2022, the Company entered into an exchange agreement with the Investor whereby all of his common stock, 734,493 shares, were exchanged into shares of Series A Convertible Preferred Stock. The Series A Preferred Stock is the economic equivalent of the common stock but has no voting rights and is subject to a blocker which prohibits the conversion into common stock if it would result in the Investor owning more than 4.99% of the Company's outstanding common stock at such time. For a description of the rights and preferences of the Series A Preferred Stock, see "Description of Securities- Series A Convertible Preferred Stock".

#### **Related Person Transaction Policy**

Prior to this offering, we have not had a formal policy regarding approval of transactions with related parties. We expect to adopt a related person transaction policy that sets forth our procedures for the identification, review, consideration and approval or ratification of related person transactions. For purposes of our policy only, a related person transaction is a transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we and any related person are, were or will be participants in which the amount involved exceeds the lesser of \$120,000 or 1% of the average of our total assets at year-end. Transactions involving compensation for services provided to us as an employee or director are not covered by this policy. A related person is any executive officer, director or beneficial owner of more than 5% of any class of our voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated or any transaction that was not initially identified as a related person transaction prior to consummation, our management must present information regarding the related person transaction to our audit committee, or, if audit committee approval would be inappropriate, to another independent body of our Board of Directors, for review, consideration and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to us of the transaction and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party or to or from employees generally. Under the policy, we will collect information that we deem reasonably necessary from each director, executive officer and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related-person transactions and to effectuate the terms of the policy. In addition, under our code of business conduct and ethics, our employees and directors will have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest. In considering related person transactions, our audit committee, or other independent body of our Board of Directors, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event that the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

The policy requires that, in determining whether to approve, ratify or reject a related person transaction, our audit committee, or other independent body of our Board of Directors, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, our best interests and those of our stockholders, as our audit committee, or other independent body of our Board of Directors, determines in the good faith exercise of its discretion.

50

# SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding the beneficial ownership of our common stock as of November 28, 2022 by:

- each of our named executive officers:
- each of our directors:
- all of our current directors and executive officers as a group; and
- each stockholder known by us to own beneficially more than five percent of our common stock.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. Shares of common stock that may be acquired by an individual or group within 60 days of November 28, 2022, pursuant to the exercise of options or warrants and convertible debt are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or group. Percentage of ownership is based on 4,021,935 shares of common stock outstanding on November 28, 2022 and 5,671,881 after giving effect to the sale of 1,317,647 shares in this offering.

Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them, based on information provided to us by such stockholders. Unless otherwise indicated, the address of all listed stockholders is c/o Bullfrog AI Holdings, Inc., 325 Ellington Blvd., Unit 317, Gaithersburg, MD 20878.

Name of Beneficial Owner	Common Stock Beneficially Owned	Percentage of Common Stock Before	Percentage of Common Stock After Offering <sup>(1)</sup>
Directors and Officers:	Beneficially Owned	Offering	Stock After Offernig
Vininder Singh			
Chief Executive Officer and Director	2,742,446	68.19%	48.35%
Dane Saglio			
Chief Financial Officer	57,142	1.42%	1.01%
C.III I IIIIII CIII CIII	57,112	11.12/0	110170
All officers and directors 2 persons)	2,799,588	69.61%	49.36%
Beneficial owners of more than 5%			
Tivoli Trust (2)	905,464	21.60%	15.5%
11von 11ust (2)	703,404	21.00/0	13.370
Gerald Newman	500,000	12.43%	8.82%
Green tree Financial (3)	575,000	14.35%	10.37%
TEDCO	205.094	5 120/	2.620/
TEDCO	205,984	5.12%	3.63%
Johns Hopkins University Applied Physics Laboratory, LLC	218,450	5.43%	3.73%
1 11 5 11 5	-,		

- (1) Assumes i) no exercise by the underwriter of its option to purchase additional shares of common stock to cover over-allotments, if any; ii) no exercise of the underwriter's warrants; and (iii) 1,317,647 shares of common stock sold in this offering.
- (2) Comprised of 73,449 shares of non-voting Series A Preferred Stock, 115,185 warrants exercisable at \$2.50 per shares and 55,787 shares r lated to two convertible debt instruments that convert at a discount to the IPO price Assumes the conversion of all Series A Preferred Stock into common stock in an amount equal to ten shares of common stock for each one share of Series A Preferred Stock.
- (3) Consists of (i) 350,000 shares of common stock and (ii) shares of common stock upon exercise of common stock purchase warrants at an exercise price of \$2.50 per share. Chris Cottone, principal of the GreenTree Financial Group Inc., has the power to vote or dispose of the shares held of record by GreenTree Financial Group Inc. and may be deemed to beneficially own those shares.

51

#### SHARES ELIGIBLE FOR FUTURE RESALE

Prior to this offering, there has been no market for our common stock. Future sales of substantial amounts of our common stock in the public market or the perception that such sales might occur could adversely affect market prices prevailing from time to time. Furthermore, because only a limited number of shares will be available for sale shortly after this offering due to existing contractual and legal restrictions on resale as described below, there may be sales of substantial amounts of our common stock in the public market after the restrictions lapse. This may adversely affect the prevailing market price of our common stock and our ability to raise equity capital in the future.

After completion of this offering, we will have shares of common stock outstanding (or shares if the underwriters' option to purchase additional shares is exercised in full).

All of the shares of common stock sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, unless the shares are purchased by our "affiliates" as that term is defined in Rule 144 and except certain shares that will be subject to the lock-up period described below after completion of this offering. Any shares owned by our affiliates may not be resold except in compliance with Rule 144 volume limitations, manner of sale and notice requirements, pursuant to another applicable exemption from registration or pursuant to an effective registration statement.

Any of the shares held by our directors, officers and holders of at least 5% of the Company's outstanding securities will be subject to a 12-month lock-up restriction described under "Underwriting" on page 53. Accordingly, there will be a corresponding increase in the number of shares that become eligible for sale after the lock-up period expires. As a result of these agreements, subject to the provisions of Rule 144 or Rule 701, shares will be available for sale in the public market as follows:

- beginning on the date of this prospectus, all of the shares sold in this offering will be immediately available for sale in the public market (except as described above);
- beginning six (6) months after this offering is completed, at the expiration of the lock-up period for our officers, directors and holders of at least 5% of the Company's outstanding securities, 2,799,588 additional shares will become eligible for sale in the public market, all of which shares will be held by affiliates and subject to the volume and other restrictions of Rule 144 and Rule 701 as described below.

52

### Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell those shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then that person would be entitled to sell those shares without complying with any of the requirements of Rule 144.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell upon expiration of the lock-up agreements described above, within any three-month period, a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering; or
- the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

#### **Rule 701**

Rule 701 generally allows a stockholder who purchased shares of our common stock pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days to sell these shares in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required by that rule to wait until 90 days after the date of this prospectus before selling those shares pursuant to Rule 701 and are subject to the lock-up agreements described above.

### UNDERWRITING

WallachBeth Capital LLC (is acting as the sole book-running manager and the representative of the underwriters of this offering (the "Representative"). Subject to the terms and conditions of the underwriting agreement between us and the Representative, we have agreed to sell to the underwriters and the underwriters have agreed to purchase from us, at the public offering price per share less the underwriting discounts set forth on the cover page of this prospectus, the number of Units listed next to its name in the following table:

Underwriter	Number of Units
WallachBeth Capital LLC	
Total	

The underwriters are committed to purchase all the Units offered by us other than those covered by the option to purchase additional shares described below, if they purchase any shares. The obligations of the underwriters may be terminated upon the occurrence of certain events specified in the underwriting agreement. Furthermore, pursuant to the underwriting agreement, the underwriters' obligations are subject to customary conditions, representations and warranties contained in the underwriting agreement, such as receipt by the underwriters of officers' certificates and legal opinions.

53

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the Units, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

#### **Over-allotment Option**

We have granted the underwriters an option, exercisable on or more times in whole or in part within 45-days after the closing of this offering to purchase up to an additional 197,647 shares of our common stock at a price of \$6.365 per share and/or Warrants to purchase up to an additional 197,647 shares of common stock at a price of \$0.01 per Warrant to purchase one share of common stock, in each case, less the underwriting discount, solely for the purpose of cover over-allotments. If this option is exercised in full, the total offering price to the public will be \$9,660,000 and the total net proceeds, before expenses, to us will be \$8,529,000.

# **Discount and Commissions; Expenses**

The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. The information assumes either no exercise or full exercise by the underwriters of their over-allotment option.

		Total	Total
		Without Over-	With Over-
		Allotment	Allotment
	Per Unit	Option	Option
Public offering price	\$	\$	\$
Underwriting discount (8.0%)	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The underwriters propose to offer the Units offered by us to the public at the public offering price per Units set forth on the cover of this prospectus. In addition, the underwriters may offer some of the shares to other securities dealers at such price less a concession of \$ per Unit. If all of the Units offered by us are not sold at the public offering price per Unit, the underwriters may change the offering price per share and other selling terms by means of a supplement to this prospectus.

We have also agreed to reimburse the underwriters for reasonable out-of-pocket expenses not to exceed \$140,000 in the aggregate whether or not there is a closing of this offering. We estimate that total expenses payable by us in connection with this offering, other than the underwriting discount will be approximately \$260,000. In addition, we have also agreed to pay to the underwriters a non-accountable expense allowance in the amount of 1% of the gross offering amount (including shares purchased upon exercise of the over-allotment option).`

The underwriting agreement, however, provides that in the event the offering is terminated, any advance expense deposits paid to the underwriters will be returned to the extent that offering expenses are not actually incurred in accordance with FINRA Rule 5110(f)(2)(C).

# Representative's Warrants

We have agreed to issue to the Representative (or its designed affiliates) share purchase warrants (the "Representative's Warrants") to purchase up to a total of 6% of the shares of common stock sold in this offering at an exercise price that is equal to 110% of the public offering price of the shares. The Representative's Warrants will be non-exercisable for six (6) months after the effective date of the registration statement of which this prospectus forms a part and will expire five (5) years from the closing of this offering. The

54

### **Discretionary Accounts**

The underwriters do not intend to confirm sales of the securities offered hereby to any accounts over which they have discretionary authority.

#### Indemnification

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

#### Right of First Refusal

For a period of eighteen (18) months from the closing of the offering, the Representative is granted the right of first refusal to act as lead underwriter or book running manager or placement agent for any and all of our future public and private equity, equity-linked, convertible or debt (excluding commercial bank debt) offerings during such eighteen (18) month period of the Company, or any successor to or any subsidiary of the Company.

#### **Pricing of this Offering**

Prior to this offering, there has not been an active market for our common stock. The public offering price for our common stock will be determined through negotiations between us and the underwriters. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the public offering price of our common stock will correspond to the price at which our common stock will trade in the public market subsequent to this offering or that an active trading market for our common stock and warrants will develop and continue after this offering.

#### Lock-Up Agreements

We and each of our officers, directors, and 5% of greater stockholders have agreed, subject to certain exceptions, not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any shares of our common stock or other securities convertible into or exercisable or exchangeable for shares of our common stock for a period of six months after this offering is completed without the prior written consent of the Representative.

The Representative may in its sole discretion and at any time without notice release some or all of the shares subject to lock-up agreements prior to the expiration of the lock-up period. When determining whether or not to release shares from the lock-up agreements, the representative will consider, among other factors, the security holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time.

#### Trading; Nasdaq Capital Market Listing

We intend to apply to list our common stock and Warrants offered in the offering on the Nasdaq Capital Market under the symbol "BFRG" and "BFRGW," respectively. No assurance can be given that our listing application will be approved by the Nasdaq Capital Market. The consummation of this offering is conditioned on obtaining Nasdaq approval.

55

#### Price Stabilization, Short Positions and Penalty Bids

In connection with this offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act:

- Stabilizing transactions permit bids to purchase securities so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of securities in excess of the number of securities the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of securities over-allotted by the underwriters is not greater than the number of securities that they may purchase in the over-allotment option. In a naked short position, the number of securities involved is greater than the number of securities in the over-allotment option. The underwriters may close out any covered short position by either exercising its over-allotment option and/or purchasing securities in the open market.
- Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of securities to close out the short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market as compared to the price at which they may purchase securities through the over-allotment option. A naked short position occurs if the underwriters sell more securities than could be covered by the over-allotment option. This position can only be closed out by buying securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in this offering.
- Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when securities originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our securities or preventing or retarding a decline in the market price of the securities. As a result, the price of our shares of common stock and warrants may be higher than the price that might otherwise exist in the open market. These transactions may be discontinued at any time.

Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our shares of common stock and warrants. In addition, neither we nor the underwriters make any representation that the underwriters will engage in these transactions or that any transaction, if commenced, will not be discontinued without notice.

#### Electronic Offer, Sale and Distribution of Shares

A prospectus in electronic format may be made available on a website maintained by the Representative and may also be made available on a website maintained by other underwriters. The underwriters may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the Representative to underwriters that may make Internet distributions on the same basis as other allocations. In connection with the offering, the underwriters or syndicate members may distribute prospectuses electronically. No forms of electronic prospectus other than prospectuses that are printable as Adobe® PDF will be used in connection with this offering.

The underwriters have informed us that they do not expect to confirm sales of shares offered by this prospectus to accounts over which they exercise discretionary authority.

Other than the prospectus in electronic format, the information on any underwriter's website and any information contained in any other website maintained by an underwriter is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or any underwriter in its capacity as underwriter and should not be relied upon by investors.

56

#### Other

From time to time, the underwriters and/or their affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services it has received and, may in the future receive, customary fees. Except for the services provided in connection with this offering and other than as described below, the underwriters have not provided any investment banking or other financial services during the 180-day period preceding the date of this prospectus.

#### Offers Outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

#### DETERMINATION OF OFFERING PRICE

Prior to this offering, there has been no public market for our common stock or Warrants. The initial public offering price will be negotiated between the underwriters and us. In determining the initial public offering price of our Units, the underwriters will consider, among other things:

- the prospects for our company and the industry in which we operate;
- our financial information;
- financial and operating information and market valuations of publicly traded companies engaged in activities similar to ours;
- the prevailing conditions of U.S. securities markets at the time of this offering;
- the recent market prices of, and the demand for, publicly traded shares of generally comparable companies;
- · our past and present financial and operating performance; and
- other factors deemed relevant by us and the underwriters.

Neither we nor the underwriters can assure investors that an active trading market will develop for our common shares or Warrants, or that the shares or Warrants will trade in the public market at or above the initial public offering price.

#### **EXPERTS**

The financial statements of Bullfrog AI Holdings, Inc. from February 26, 2020 (Inception) through period ending December 31, 2021 have been audited by M&K CPAs, an independent registered public accounting firm as set forth in its report and are included in reliance upon such report given on the authority of such firm as experts in accounting.

# LEGAL MATTERS

Sichenzia Ross Ference LLP, New York, New York, will pass upon the validity of the shares of our common stock to be sold in this offering. Carmel, Milazzo & Feil LLP, New York, NY, will pass upon certain legal matters for the underwriters.

57

# WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the securities we are offering to sell. This prospectus, which constitutes part of the registration statement, does not include all of the information contained in the registration statement and the exhibits, schedules and amendments to the registration statement. For further information with respect to us and our securities, we refer you to the registration statement and to the exhibits and schedules to the registration statement. Statements contained in this prospectus about the contents of any contract, agreement or other document are not necessarily complete, and, in each instance, we refer you to the copy of the contract, agreement or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

The SEC maintains a website, which is located at <a href="www.sec.gov">www.sec.gov</a>, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. You may access the registration statement of which this prospectus is a part at the SEC's website.

Upon completion of this offering, we will be subject to the information reporting requirements of the Securities Exchange Act of 1934, and we will file reports, proxy statements and other information with the SEC. All documents filed with the SEC are available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at www.precisionopinion.com. You may access our reports, proxy statements and other information free of charge at this website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information on such website is not incorporated by reference and is not a part of this prospectus.

### BULLFROG AI HOLDINGS, INC. INDEX TO FINANCIAL STATEMENTS

#### Audited Financial Statements for the Years Ended December 31, 2020 and 2021:

Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets	F-3
Consolidated Statements of Operations	F-4
Consolidated Statements of Shareholders' Deficit	F-5
Consolidated Statements of Cash Flows	F-6
Notes to Consolidated Financial Statements	F-7
Unaudited Interim Consolidated Financial Statements for the Three and Nine Months Ended September 30, 2021 and	
Balance Sheets	F-24
Statements of Operations	F-25
Statements of Changes in Stockholders' Deficit	F-26
Statements of Cash Flows	F-27
Notes to Financial Statements	F-28

#### BULLFROG AI HOLDINGS, INC. AUDITED FINANCIAL STATEMENTS 2021 and 2020

F-1

### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Bullfrog AI Holdings, Inc.

### **Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Bullfrog AI Holdings, Inc. (the Company) as of December 31, 2021 and 2020, and the related consolidated statements of operations and comprehensive loss, changes in stockholders' deficit, and cash flows for the years ended December 31, 2021 and 2020, and the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020 and the results of its operations and its cash flows for flows for the two-year period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

#### Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has continued to incur net losses from operations and negative cash flows in operations, which raises substantial doubt about its ability to continue as a going concern. Management's plans regarding those matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

### **Basis for Opinion**

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

# Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which they relate.

As discussed in Note 2, the Company had a going concern disclosure due to continued net losses from operations and negative cash flows in operations. Auditing management's evaluation of a going concern can be a significant judgment given the fact that the Company uses management estimates on future revenues and expenses, which are difficult to substantiate.

We evaluated the appropriateness of the going concern, we examined and evaluated the financial information along with management's plans to mitigate the going concern and management's disclosure on going concern.

/s/ M&K CPAS, PLLC

We have served as the Company's auditor since 2021. Houston, Texas June 10, 2022

# Bullfrog AI Holdings, Inc. Consolidated Balance Sheets

	D	ecember 31 2021	D	ecember 31 2020
ASSETS	<u> </u>		'	
CURRENT ASSETS:				
Cash	\$	10,014	\$	5,019
Total Current Assets	\$	10,014	\$	5,019
TOTAL ASSETS	\$	10,014	\$	5,019
LIABILITIES AND STOCKHOLDERS' DEFICIT				
CURRENT LIABILITIES:				
Accounts payable	\$	68,594	\$	94,447
Accrued expenses		68,557		41,173
Accrued expenses-related party		285,666		200,000
Deferred revenue		10,000		-
Notes payable		-		9,917
Notes payable-related party		49,000		-
Convertible notes, net of \$12,962 and \$0 debt discount, respectively		284,038		200,000
Convertible notes-related party, not of \$1,584 and \$0 debt discount, respectively		253,266		-
Total Current Liabilities	\$	1,019,121	\$	545,537
TOTAL LIABILITIES	\$	1,019,121	\$	545,537
STOCKHOLDERS' DEFICIT:				
Preferred stock, \$0.00001 par value, 10,000,000 shares authorized; no shares are issued and outstanding, Common stock, \$0.00001 par value, 100,000,000 shares authorized; 27,259,547 25,223,975 shares are issued		-		-
and outstanding as of December 31, 2021 and 2020, respectively		272		252
Subscription receivable		-		(100)
Additional paid-in capital		587,189		470,058
Accumulated deficit		(1,596,568)		(1,010,728)
Total BullFrog stockholders' deficit	\$	(1,009,107)	\$	(540,518)
TOTAL STOCKHOLDERS' DEFICIT		(1,009,107)		(540,518)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	\$	10,014	\$	5,019

The accompanying notes are an integral part of these financial statements

F-3

# Bullfrog AI Holdings, Inc. Consolidated Statements of Operations

	December 31 2021	December 31 2020
NET REVENUES:		
Revenues, net	\$	- \$
TOTAL NET REVENUES		
COST OF GOODS SOLD:		
Cost of goods sold		-
TOTAL COST OF GOODS SOLD		
GROSS PROFIT		-
OPERATING EXPENSES:		
General and administrative expenses	253,375	8 70,6
Payroll and salary-related party	203,033	3 189,4
Stock based compensation	98,95	1 87,12
TOTAL OPERATING EXPENSES	555,362	2 260,0
(LOSS) FROM OPERATIONS	(555,362	2) (260,00
OTHER INCOME (EXPENSE):		
Interest expense, net	(40,39)	5) (11,7)

Gain on debt forgiveness	9,917	17,270
TOTAL OTHER INCOME (EXPENSE)	(30,478)	(81,623)
NET (LOSS)	(585,840)	(341,690)
NET (LOSS) PER COMMON SHARE:		
Basic and diluted	\$ (0.02)	\$ (0.01)
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:		
Basic and diluted	 26,145,603	 24,803,210

The accompanying notes are an integral part of these financial statements

F-4

# Bullfrog AI Holdings, Inc. Consolidated Statements of Stockholders' Deficit

	Commo	on Stocl	k	Additional Paid in	Additional Paid in Subscription		Accumulated	
	Shares	Ar	nount	Capital		ivables	Deficit	Total
Balances, December 31, 2018	24,026,050	\$	240	\$ 238,545	\$	-	\$ (475,238)	\$ (236,453)
Issuance of shares for cash	197,925		2	94,998		-	-	95,000
Equity compensation	-		-	11,544		-	-	11,544
Net Income/(Loss)			_			-	(193,800)	(193,800)
Balances, December 31, 2019	24,223,975	\$	242	\$ 345,087	\$	-	\$ (669,038)	\$ (323,709)
Issuance of Shares for cash to be received	1,000,000		10	90		(100)	-	-
Warrant issued for common stocks payable settlement	-		-	37,730		-	-	37,730
Equity compensation	-		-	87,126		-	-	87,126
Capital Contribution	-		-	25		-	-	25
Net Income/(Loss)	<u> </u>		-			-	(341,690)	(341,690)
Balances, December 31, 2020	25,223,975	\$	252	\$ 470,058	\$	(100)	\$ (1,010,728)	\$ (540,518)
Cash from subscription receivables						100		100
Warrant issued with convertible notes				13,661				13,661
Imputed Interest				4,539				4,539
Equity compensation	-		-	9,385		-	-	9,385
Shares issued for services	2,035,572		20	89,546		-	-	89,566
Net Income/(Loss)	<u>-</u>		_			-	(585,840)	(585,840)
Balances, December 31, 2021	27,259,547	\$	272	\$ 587,189	\$	-	\$ (1,596,568)	\$ (1,009,107)

The accompanying notes are an integral part of these financial statements

F-5

# Bullfrog AI Holdings, Inc. Consolidated Statements of Cash Flows

	 December 31		
	2021		2020
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net (loss)	\$ (585,840)	\$	(341,690)
Adjustment to reconcile change in net (loss) to net cash and cash equivalents used in operating activities:			
Gain on debt forgiveness	(9,917)		(17,270)
Stock-based compensation	98,951		87,126
Amortization of debt discount	12,665		-

Imputed Interest		4,539		-
Channel in an artist and Habilities				
Changes in operating assets and liabilities:		(25.952)		60,126
Accounts payable Accrued expenses		(25,853) 27,384		60,126
Accrued expenses Accrued expenses-related party		85,666		-
Deferred revenue				-
Deferred revenue		10,000	_	
NET CASH USED IN OPERATING ACTIVITIES		(382,405)		(211,708)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Borrowings - Related Party		298,900		200,000
Borrowings on debt		88,400		9,917
Capital contribution		<u>-</u>		25
Proceeds from subscription receivable		100		-
NET CASH FROM FINANCING ACTIVITIES		387,400		209,942
Net increase/(decrease) in cash and cash equivalents		4,995		(1,766)
Cash, beginning of year		5,019		6,785
Cash, end of period	<u>\$</u>	10,014	\$	5,019
SUPPLEMENTAL CASH FLOW INFORMATION:				
Cash paid for interest	\$		•	
Cash paid for taxes	φ Φ		Φ.	
Cash paid for taxes	2	<del>-</del>	\$	
SUPPLEMENTAL DISCLOSURE of NON-CASH ACTIVITY:				
Warrant issued with convertible notes	\$	13,661	\$	-
Shares issued to settle Accrued Severance	\$	-	\$	37,730
Common stocks issued for services	\$	20	\$	
The accompanying notes are an integr	al part of these financial statements			

The accompanying notes are an integral part of these financial statements

F-6

### BULLFROG AI HOLDINGS, INC. NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2021 and 2020

#### NOTE 1 – ORGANIZATION AND NATURE OF BUSINESS

Bullfrog AI Holdings, Inc. was incorporated in the State of Nevada on February 6, 2020. Bullfrog AI Holdings, Inc. is the parent company of Bullfrog AI, Inc. and Bullfrog AI Management, LLC. which were incorporated in Delaware and Maryland, in 2017 and 2021, respectively. All of our operations are currently conducted through BullFrog AI Holdings, Inc., which began operations on February 6, 2020 We are a digital biopharmaceutical company focused specifically on advanced AI/ML-driven analysis of complex data sets in medicine and healthcare. Our objective is to utilize our platform for precision medicine approach to drug asset enablement through external partnerships and selective internal development.

In June of 2020, BullFrog AI Holdings, Inc. acquired BullFrog AI, Inc. via a 1:1share exchange. Immediately prior to the share exchange, each authorized common share of BullFrog AI, Inc. was split into 25 shares of common stock. Share amounts in our financial statements for 2021 and 2020 have been adjusted to reflect this forward share split and shares exchange. All of our operations are currently conducted through BullFrog AI Holdings, Inc. BullFrog AI, Inc., is a wholly owned subsidiary, has the sole purpose of housing and protecting all of the organization's intellectual property. BullFrog AI Management, LLC is a wholly owned subsidiary that handles all HR and payroll activities Pursuant to the agreement, 24,223,975 shares of the Company's common stock were issued to the shareholders of BullFrog AI, Inc. in exchange for 100% of the ownership interests of BullFrog AI, Inc. Upon completion of the Exchange, BullFrog AI, Inc. became the Company's wholly-owned subsidiary and the shareholders of BullFrog AI in net liabilities. All of the entities were controlled both before and after the transactions by the same controlling shareholder. This transaction is being accounted for as a common control transaction and all entities are being presented as if the transactions took place at the beginning of the earliest period presented. Share amounts in our financial statements for 2021 and 2020 have been adjusted to reflect this forward share split and shares exchange. BullFrog AI, Inc was incorporated in 2017 as discussed in the previous notes. All of our operations are currently conducted through BullFrog AI Holdings, Inc.

Most new therapeutics will fail at some point in preclinical or clinical development. This is the primary driver of the high cost of developing new therapeutics. A major part of the difficulty in developing new therapeutics is efficient integration of complex and highly dimensional data generated at each stage of development to de-risk subsequent stages of the development process. Artificial Intelligence and Machine Learning (AI/ML) has emerged as a digital solution to help address this problem.

We are an artificial intelligence-driven biotech company committed to improving the probability of success and the time and cost involved developing therapeutics. Most current AI/ML platforms still fall short in their ability to synthesize disparate, high-dimensional data for actionable insight. Our platform technology, named, bfLEAP<sup>TM</sup> is an analytical AI/ML platform developed at The Johns Hopkins University Applied Physics Laboratory (JHU-APL) which is able to surmount the challenges of scalability and flexibility currently hindering researchers and clinicians by providing a more precise, multi-dimensional understanding of their data. We are deploying bfLEAP<sup>TM</sup> for use at several critical stages of development for internal programs and through strategic partnerships and collaborations with the intention of streamlining data analytics in therapeutics development, decreasing the overall development costs by decreasing failure rates for new therapeutics, and impacting the lives of countless patients that may otherwise not receive the therapies they need.

The bfLEAP<sup>TM</sup> platform utilizes both supervised and unsupervised machine learning – as such, it is able to reveal real/meaningful connections in the data without the need for an a priori hypothesis. Algorithms used in the bfLEAP<sup>TM</sup> platform are designed to handle highly imbalanced data sets to successfully identify combinations of factors that are associated with outcomes of interest.

Our primary goal is to improve the odds of success at any stage of pre-clinical and clinical therapeutics development, for in house programs, and our strategic partners and collaborators. Our primary business model is enabling the success of ongoing clinical trials or rescue of late stage failed drugs (i.e., Phase 2 or Phase 3 clinical trial failures) for development and divestiture; although, we will also consider collaborations for earlier stage drugs. We hope to accomplish this through strategic acquisitions of current clinical stage and failed drugs for in-house development, or through strategic partnerships with biopharmaceutical industry companies. We are able to pursue our drug asset

enhancement business by leveraging a powerful and proven AI/ML platform (trade name: bfLEAPTM) initially developed at JHU-APL. We believe the bfLEAPTM analytics platform is a potentially disruptive tool for analysis of pre-clinical and/or clinical data sets, such as the robust pre-clinical and clinical trial data sets being generated in translational R&D and clinical trial settings.

### NOTE 2 – GOING CONCERN AND MANAGEMENT'S LIQUIDITY PLANS

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As shown in the accompanying financial statements, for the year-ended December 31, 2021, the Company incurred net losses from operations of \$585,840 and used cash in operations of \$382,405. These factors among others raise substantial doubt that the Company will be able to continue as a going concern for a reasonable period of time.

F-7

The Company's primary source of operating funds for the years ended December 31, 2020 and 2021 has been from investors and related parties. The Company has experienced net losses from operations since inception but expects these conditions to improve in 2022 and beyond, as it continues to develop its direct sales and marketing programs; however, no assurance can be provided that the Company will not continue to experience losses in the future. The Company has stockholders' deficiencies at December 31, 2020 and December 31, 2021 and requires additional financing to fund future operations.

A significant component of the Company's plan to secure capital to both establish its operating base and also to execute on its business plan is the intention of the Company to seek to be listed on a national exchange through an initial public offering ("IPO") of its common stock. In this regard, the Company has entered into a number of advisory and consulting agreements with entities and individuals providing services and advice to the Company. The Company has compensated these advisors and consultants using equity instruments issued by Bull Frog AI Holdings, Inc. as will be more thoroughly explained below.

The Company's existence is dependent upon management's ability to develop profitable operations and to obtain additional funding sources, including an IPO. There can be no assurance that the Company's financing efforts will result in profitable operations or the resolution of the Company's liquidity problems. There can be no assurance that the Company will be successful in developing profitable operations or that it will be able to obtain financing on favorable terms, if at all. The accompanying statements do not include any adjustments that might result should the Company be unable to continue as a going concern.

### NOTE 3 –SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Estimates include, but are not limited to, revenue recognition, allowances for doubtful accounts, recoverability of deferred tax assets and certain other of our accrued liabilities. Actual results could differ from those estimates.

### Financial Instruments

The carrying value of short-term instruments, including cash and cash equivalents, accounts payable and accrued expenses approximate fair value due to the relatively short period to maturity for these instruments.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value maximize the use of observable inputs and minimize the use of unobservable inputs. The Company utilizes a three-level valuation hierarchy for disclosures of fair value measurements, defined as follows:

Level 1 - inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 - inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the assets or liability, either directly or indirectly, for substantially the full term of the financial instruments.

Level 3 - inputs to the valuation methodology are unobservable and significant to the fair value.

The Company does not have any assets or liabilities that are required to be measured and recorded at fair value on a recurring basis.

F-8

### Revenue Recognition

For annual reporting periods after December 15, 2017, the Financial Accounting Standards Board ("FASB") made effective ASU 2014-09 "Revenue from Contracts with Customers," to supersede previous revenue recognition guidance under current U.S. GAAP. Revenue is now recognized in accordance with FASB ASC Topic 606, Revenue Recognition. The objective of the guidance is to establish the principles that an entity shall apply to report useful information to users of financial statements about the nature, amount, timing, and uncertainty of revenue and cash flows arising from a contract with a customer. The core principle is to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Two options were made available for implementation of the standard: the full retrospective approach or modified retrospective approach. The guidance became effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, with early adoption permitted. We have adopted FASB ASC Topic 606 for our reporting period as of the year-ended December 31, 2019. As of December 31, 2021 and December 31, 2020, we have had no revenue. For the year-ended December 31, 2021 and December 31, 2020, there were no incomplete contracts although we did receive a customer down payment in late 2021 which is reflected on the balance sheet as of December 31, 2021 as unearned revenue in the amount of \$10,000. As is more fully discussed below, we are of the opinion that none of our contracts for products contain significant financing components that require revenue adjustment under FASB ASC Topic 606. Under ASC 606, the Company recognizes revenue from the commercial sales of products, licensing agreements and contracts to perform pilot studies by applying the following steps: (1) identifying the contract with a customer; (2) identify the performance obli

The five step model provides:

### Identification of the contract with a customer

Contracts included in our application of FASB ASC Topic 606, consist completely of sales/service contracts between us and our customers that create enforceable rights and obligations. Contracts are initiated by entering into Master Services Agreements, which establishes the contractual elements of the relationship between the Company is its customers. Services to be provided under each MSA will be contracted under a Statement of Work which describes the services to be performed, the time frame in which services will be performed, and establishes the customer payment obligations.

### - Identification of the performance obligations in the contract

In analyzing our sales contracts, our policy is to identify the distinct performance obligations in a services contract arrangement. SOWs constitute the company's performance obligation(s) and Terms and conditions of services, which are explicitly outlined. Current contract(s) contain a single performance obligation; the analysis of data received from our customer and delivery of the analysis report.

#### Determination of the transaction price

The service fee in our SOW is the amount of consideration we expect to be entitled to for providing the promised services. Transaction price is determined by current market conditions and costs of delivering our obligations.

#### Allocation of the transaction price to the performance obligations in the contract

Our SOWs require the fulfillment of a single performance obligation. As such, we allocate the full transaction price to the single performance obligation.

#### - Recognition of revenue when, or as, the Company satisfies a performance obligation

In accordance with ASC 606, we recognize revenue once final analysis reports are completed and delivered to customers. Upon delivery of analysis reports, control of the good is deemed transferred and the company's performance obligation is determined satisfied.

#### Contract Services

The Company anticipates that the majority of revenues to be recognized in the near future will result from our fee for service partnership offering, designed for biopharmaceutical companies, as well as other organizations, of all sizes that have challenges analyzing data throughout the drug development process. The Company provides the customer with an analysis of large complex data sets using the Company's proprietary Artificial Intelligence / Machine Learning platform called bfLEAP<sup>TM</sup>. This platform is designed to predict targets of interest, patterns, relationships, and anomalies. The Company believes that there will be additional on-going work requested from partners therefore the service model utilizes a master services agreement with work or task orders issued for discrete analysis performed at the discovery, preclinical, or clinical stages of drug development. The Company receives a cash fee and in some instances the potential for rights to new intellectual property generated from the analysis.

F-9

#### Collaborative Arrangements

The Company also intends to enter collaborative arrangements with pharmaceutical companies who have drugs that have failed late Phase 2 or Phase 3 trials. These arrangements could take several forms including true partnerships where BullFrog contributes data analysis using the bfLEAP™ platform with the partner contributing the drug candidate and other resources needed to continue development towards commercialization with BullFrog receiving an equity or royalty right in the commercialized product. In other arrangements the Company may earn cash payments based on achieving certain milestones as determined under each specific arrangement.

### Acquisition of Rights to Certain Drugs

In certain circumstances, we may also acquire rights to drugs that are in early-stage clinical trials, use our technology to sponsor and support a successful later stage precision medicine trial, and divest the asset. The same process may apply to the discovery of new drugs. In these instances, divestiture may be in the form of an outright sale of all rights or possibly a license to develop and commercialize enhanced development candidates. License agreements could include developmental and commercial milestones in addition to royalties.

### Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates include the fair value of the Company's stock, stock-based compensation, fair values relating to derivative liabilities, debt discounts and the valuation allowance related to deferred tax assets. Actual results may differ from these estimates.

### Cash

The Company considers cash to consist of cash on hand and temporary investments having an original maturity of 90 days or less that are readily convertible into cash. As of December 31, 2021 and December 31, 2020, cash balances were \$10,014 and \$5,019, respectively.

### Concentrations of Credit Risk

The Company's financial instruments that are exposed to a concentration of credit risk are cash and accounts receivable. Occasionally, the Company's cash in interest-bearing accounts may exceed FDIC insurance limits. The financial stability of these institutions is periodically reviewed by senior management.

#### Accounts Receivable

Trade receivables are carried at their estimated collectible amounts. Trade credit is generally extended on a short-term basis. Thus, trade receivables do not bear interest. Trade accounts receivable are periodically evaluated for collectability based on past credit history with customers and their current financial condition.

### Allowance for Doubtful Accounts

Any charges to the allowance for doubtful accounts on accounts receivable are charged to operations in amounts sufficient to maintain the allowance for uncollectible accounts at a level management believes is adequate to cover any probable losses. Management determines the adequacy of the allowance based on historical write-off percentages and the current status of accounts receivable. Accounts receivables are charged off against the allowance when collectability is determined to be permanently impaired. As of December 31, 2021 and 2020, allowance for doubtful accounts was \$0.

F-10

### Inventories

The Company does not have inventory and does not plan to have inventory in the near future.

#### Cost of Sales

Cost of sales is comprised of cost of outsourced services provided to the Company related to customer service contracts.

#### Property and Equipment

Property and equipment are stated at cost. When retired or otherwise disposed, the related carrying value and accumulated depreciation are removed from the respective accounts and the net difference less any amount realized from disposition, is reflected in earnings. For financial statement purposes, property and equipment are recorded at cost and depreciated using the straight-line method over their estimated useful lives.

#### Advertising

The Company follows the policy of charging the costs of advertising to expense as incurred.

#### Income Taxes

Deferred income tax assets and liabilities are determined based on the estimated future tax effects of net operating loss and credit carry forwards and temporary differences between the tax basis of assets and liabilities and their respective financial reporting amounts measured at the current enacted tax rates. The Company records an estimated valuation allowance on its deferred income tax assets if it is not more likely than not that these deferred income tax assets will be realized.

The Company recognizes a tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the condensed consolidated financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. As of December 31, 2021 and 2020, the Company has not recorded any unrecognized tax benefits.

#### Stock-Based Compensation

Employee and non-employee share-based compensation is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the requisite service period.

#### Net Loss per Share

We report both basic and diluted loss per share. Loss earnings per share is calculated based on the weighted average number of shares of common stock outstanding and excludes the dilutive effect of warrants, stock options or any other type of convertible securities. Diluted loss per share is calculated based on the weighted average number of shares of common stock outstanding and the dilutive effect of stock options, warrants and other types of convertible securities are included in the calculation. Dilutive securities are excluded from the diluted earnings per share calculation because their effect is anti-dilutive. As of December 31, 2021 and 2020, the Company's potentially dilutive shares and options, which were not included in the calculation of net loss per share, included options and warrants for 9,354,328 and 4,983,206 common shares, respectively.

#### Recent Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842). This ASU requires lessees to recognize a lease liability, on a discounted basis, and a right-of-use asset for substantially all leases, as well as additional disclosures regarding leasing arrangements. In July 2018, the FASB issued ASU 2018-11, Leases (Topic 842), which provides an optional transition method of applying the new lease standard. Topic 842 can be applied using either a modified retrospective approach at the beginning of the earliest period presented, or as permitted by ASU 2018-11, at the beginning of the period in which it is adopted.

F-11

We adopted this standard using a modified retrospective approach since inception of the company. The modified retrospective approach includes a number of optional practical expedients relating to the identification and classification of leases that commenced as of the inception of the company; initial direct costs for leases that commenced as of inception of the company; and, the ability to use hindsight in evaluating lessee options to extend or terminate a lease or to purchase the underlying asset.

The Company elected the package of practical expedients permitted under ASC 842 allowing it to account for its prior operating lease that commenced before the adoption date as an operating lease under the new guidance without reassessing (i) whether the contract contains a lease; (ii) the classification of the lease; or (iii) the accounting for indirect costs as defined in ASC 842.

All staff are working remotely; therefore, the Company does not currently have a lease or rent office space.

Consistent with ASC 842-20-50-4, for the Company's quarterly financial statements for the years ended December 31, 2020 and 2021, the Company does not have a monthly rent obligation. The Company had no cash flows arising from a lease, no finance lease cost, short term lease cost, or variable lease costs. The Company does not produce any sublease income or any net gain or loss recognized from sale and leaseback transactions. As a result, the Company did not need to segregate amounts between finance and operating leases for cash paid for amounts included in the measurement of lease liabilities, segregated between operating and financing cash flows; supplemental non-cash information on lease liabilities arising from obtaining right-of-use assets; weighted-average calculations for the remaining lease term; or the weighted-average discount rate.

The adoption of this guidance resulted in no significant impact to the Company's results of operations or cash flows.

In December 2019, the FASB issued ASU No. 2019-12 - Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes ("ASU 2019-12"). ASU 2019-12 is part of the FASB's overall simplification initiative and seeks to simplify the accounting for income taxes by updating certain guidance and removing certain exceptions. The updated guidance is effective for fiscal years beginning after December 15, 2020 and interim periods within those fiscal years. Early adoption is permitted. The adoption of this update did not have a material effect on the Company's financial statements.

In August 2020, the FASB issued ASU 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity ("ASU 2020-06"), which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity. This ASU (1) simplifies the accounting for convertible debt instruments and convertible preferred stock by removing the existing guidance in ASC 470-20, Debt: Debt with Conversion and Other Options, that requires entities to account for beneficial conversion features and cash conversion features in equity, separately from the host convertible debt or preferred stock; (2) revises the scope exception from derivative accounting in ASC 815-40 for freestanding financial instruments and embedded features that are both indexed to the issuer's own stock and classified in stockholders' equity, by removing certain criteria required for equity classification; and (3) revises the guidance in ASC 260, Earnings Per Share, to require entities to calculate diluted earnings per share (EPS) for convertible instruments by using the if-converted method. In addition, entities must presume share settlement for purposes of calculating diluted EPS when an instrument may be settled in cash or shares. For SEC filers, excluding smaller reporting companies, ASU 2020-06 is effective for fiscal years beginning after December 15, 2021 including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2021 including interim periods within those fiscal years beginning after December 15, 2021 including interim periods adoption and cannot adopt the guidance in an interim reporting period. The Company elected early adoption, effective January 1, 2021. Considering that the Common shares of the Company were not publicly traded as of December 31, 2021, the convertible options are

In October 2020, the FASB issued ASU 2020-10, Codification Improvements, which updates various codification topics by clarifying or improving disclosure requirements to align with the SEC's regulations. The Company adopted ASU 2020-10 as of the reporting period beginning January 1, 2021. The adoption of this update did not have a material effect on the Company's financial statements.

The Company does not believe that any other recently issued effective pronouncements, or pronouncements issued but not yet effective, if adopted, would have a material effect on the accompanying financial statements.

### COVID-19 - Going Concern

In March 2020, the World Health Organization declared the global emergence of the COVID-19 pandemic. The impact of COVID-19 on the Company's business is currently unknown. The Company will continue to monitor guidance and orders issued by federal, state, and local authorities with respect to COVID-19. As a result, the Company may take actions that alter its business operations as may be required by such guidance and orders or take other steps that the Company determines are in the best interest of its employees, customers, partners, suppliers and stockholders.

Any such alterations or modifications could cause substantial interruption to the Company's business and could have a material adverse effect on the Company's business, operating results, financial condition, and the trading price of the Company's common stock, and could include temporary closures of one or more of the Company's facilities; temporary or long-term labor shortages; temporary or long-term adverse impacts on the Company's supply chain and distribution channels; and the potential of increased network vulnerability and risk of data loss resulting from increased use of remote access and removal of data from the Company's facilities. In addition, COVID-19 could negatively impact capital expenditures and overall economic activity in the impacted regions or depending on the severity, globally, which could impact the demand for the Company's products and services.

It is unknown whether and how the Company may be impacted if the COVID-19 pandemic persists for an extended period of time or if there are increases in its breadth or in its severity, including as a result of the waiver of regulatory requirements or the implementation of emergency regulations to which the Company is subject. The COVID-19 pandemic poses a risk that the Company or its employees, contractors, suppliers, and other partners may be prevented from conducting business activities for an indefinite period.

The Company may incur expenses or delays relating to such events outside of its control, which could have a material adverse impact on its business, operating results, financial condition and the trading price of its common stock.

### NOTE 4 - ACCOUNTS PAYABLE AND ACCRUED EXPENSES

As of December 31, 2021 and December 31, 2020, the Company had accounts payable and accrued expenses totaling \$432,817 and \$335,620, respectively.

#### NOTE 5 - NOTES PAYABLE

On May 5, 2020 the Company received an SBA PPP loan in the amount of \$9,917, at 1% interest. The loan was forgiven on May 1, 2021.

On December 20, 2021, the company entered into a loan agreement with an unrelated party, with a principal balance of \$25,000 at 6% interest. The maturity date of the loan is December 19, 2022. As of December 31, 2021, the loan remained outstanding had accrued interest of \$42. The holder will also be issued warrants equal to 50% of the shares issued upon conversion. The warrant exercise price will be the IPO price.

#### NOTE 6 -NOTES PAYABLE RELATED PARTY

On June 15, 2021, the company entered into a unsecured short term loan agreement with a related party for an aggregate principal balance of \$34,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest.

F-13

On November 19, 2021, the company entered into an unsecured short term loan agreement with a related party for an aggregate principal balance of \$5,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest.

On December 13, 2021, the company entered into an unsecured short term loan agreement with a related party for an aggregate principal balance of \$10,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest.

As of December 31, 2021, the loan remained outstanding and had accrued interest of \$994 and imputed interest expense of \$4,539, respectively.

### NOTE 7 – CONVERTIBLE NOTES PAYABLE

On March 27, 2020, the company entered into a convertible loan agreement with the Maryland Technology Development Corporation with a principal balance of \$200,000 at 6% interest. The maturity date of the loan was September 27, 2021. As of December 31, 2021, the loan remained outstanding had accrued interest of \$21,173. The Company understands that the holder intends to convert the loan into equity prior to the Company becoming a public reporting company.

On December 20, 2021, the company entered into a loan agreement with an unrelated party, with a principal balance of \$25,000 at 6% interest. The maturity date of the loan is December 19, 2022. As of December 31, 2021, the loan remained outstanding had accrued interest of \$42. Should the Company complete an IPO prior to the maturity date, the note will automatically convert into the Company's common stock, at a 20% discount to the IPO price. The holder will also be issued warrants equal to 50% of the shares issued upon conversion. The warrant exercise price will be the IPO price.

On August 9, 2021, the company entered into a convertible loan agreement an unrelated party to loan up to \$195,000 at 9% interest, with a principal balance of \$72,000, as of December 31, 2021. This loan included an original issuance discount of 5% and included 195,000 Warrants at an exercise price of \$1, exercisable for 5 years from the issue date on the face of the Warrant. The noteholder has the right to convert the principal and interest into common shares of the Company. The maturity date of the loan was amended to February 9, 2023. As of December 31, 2021, the loan remained outstanding and had accrued interest of \$2,232.

In August 2020, the FASB issued ASU 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470- 20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity ("ASU 2020-06"), which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity. The Company specified that an entity should adopt the guidance as of the beginning of its annual fiscal year. After adoption of ASU 2020-06, if the equity securities underlying the conversion option are not readily convertible to cash, and the conversion option requires gross physical settlement of the underlying shares, the embedded conversion option may not meet the net settlement criterion, and therefore would not meet the definition of a derivative.

Considering that the Common shares of the Company were not publicly traded as of December 31, 2021, the convertible options are not considered to be readily convertible to cash. In addition, the beneficial conversion feature was eliminated under ASU 2020-06. Therefore, no derivative liabilities will be triggered from these convertible notes.

### NOTE 8 – CONVERTIBLE NOTES PAYABLE RELATED PARTY

On July 8, 2021, the company entered into a Simple Agreement for Future Equity (SAFE), with a related party, with an amount of \$150,000, with 0% interest. Under the SAFE agreement, if there is an Equity Financing before the termination of this SAFE, on the initial closing of such Equity Financing, this SAFE will automatically convert into the number of shares of SAFE Preferred Stock equal to the Purchase Amount divided by the Conversion Price, which means either: (1) the Safe Price (the price per share equal to the Post-Money Valuation Cap divided by the Company Capitalization) or (2) the Discount Price (the price per share of the Standard Preferred Stock sold in the Equity Financing multiplied by the Discount Rate), whichever calculation results in a greater number of shares of Safe Preferred Stock

F-14

If there is a Liquidity Event before the termination of this SAFE, this SAFE will automatically be entitled (subject to the liquidation priority set forth in Section 1(d) below) to receive a portion of Proceeds, due and payable to the Investor immediately prior to, or concurrent with, the consummation of such Liquidity Event, equal to the greater of (i) the Purchase Amount (the "Cash-Out Amount") or (ii) the amount payable on the number of shares of Common Stock equal to the Purchase Amount divided by the Liquidity Price (the "Conversion Amount"). If any of the Company's securityholders are given a choice as to the form and amount of Proceeds to be received in a Liquidity Event, the Investor will be given the same choice, provided that the Investor may not choose to receive a form of consideration that the Investor would be ineligible to receive as a result of the Investor's failure to satisfy any requirement or limitation generally applicable to the Company's securityholders, or under any applicable laws.

This SAFE will automatically terminate (without relieving the Company of any obligations arising from a prior breach of or non-compliance with thisSAFE) immediately following the earliest to occur of: (i) the issuance of Capital Stock to the Investor pursuant to the automatic conversion of this SAFE under agreement; or (ii) the payment, or setting aside for payment, of amounts due the Investor pursuant to the agreement.

As of December 31, 2021, the \$150,000 received from SAFE was recorded at6% imputed interest. The maturity date of the loan is defined by the SAFE agreement as discussed above.

On August 19, 2021, the company entered into a convertible loan agreement with a related party, with a principal balance of \$99,900 at 9% interest. The noteholder has the right to convert the principal and interest into common shares of the Company. This loan included an original issuance discount of 5% and included 99,900 Warrants at an exercise price of \$1, exercisable for 5 years from the issue date on the face of the Warrant. The maturity date of the loan was February 19, 2022. As of December 31, 2021, the \$99,900 principal and the \$4,950 overpayment of the note remained outstanding and had accrued interest of \$3,347.

The Company specified that an entity should adopt ASU 2020-06 as of the beginning of its annual fiscal year. After adoption of ASU 2020-06, no derivative liabilities will be triggered from these convertible notes. See Note 7 for details.

#### NOTE 9 - RELATED PARTY

During the year-ended December 31, 2020, there were 1,000,000 common shares issued to CEO Vin Singh, for a subscription payable.

During the year-ended December 31, 2021, there were 400,000 common shares issued to CFO Dane Saglio, for services rendered.

As of December 31, 2021 and 2020, the accrued salary for related parties were \$276,666 and \$200,000, respectively.

During the year ended December 31, 2021, the Company entered into loans with related parties, with total principal balance of \$303,850 and accrued and imputed interest of \$7,687. There were also 99,900 warrants attached to the loans. See Note 6 and Note 8 for details.

During the year ended December 31, 2021, the Company issued totaling 205,000 shares of options to related party for services renderedThe options have an original life of ten years and vest at different rates over as much as 24 months. During the years ended December 31, 2021, the Company recognized \$157 of stock-based compensation related to outstanding stock options, respectively.

### NOTE 10-SHAREHOLDER'S EQUITY

### Preferred Stock

The Company has 10,000,000 shares of preferred stock authorized at a par value of \$0.00001. As of December 31, 2020 and 2021, there were no preferred shares issued.

F-15

### Common Stock

In June of 2020, BullFrog AI Holdings, Inc. acquired BullFrog AI, Inc. via a 1:1 share exchange. Immediately prior to the share exchange, each authorized common share of BullFrog AI, Inc. was split into 25 shares of common stock. Share amounts in our financial statements for 2021 and 2020 have been adjusted to reflect this forward share split and shares exchange. All of our operations are currently conducted through BullFrog AI Holdings, Inc. BullFrog AI, Inc., is a wholly owned subsidiary, has the sole purpose of housing and protecting all of the organization's intellectual property. BullFrog AI Management, LLC is a wholly owned subsidiary that handles all HR and payroll activities Immediately prior to the share exchange, each authorized common share of BullFrog AI, Inc. was split into 25 shares of common stock. Share amounts in our financial statements for 2021 and 2020 have been adjusted to reflect this forward share split and shares exchange. All of our operations are currently conducted through BullFrog AI Holdings, Inc. BullFrog AI, Inc., is a wholly owned subsidiary, has the sole purpose of housing and protecting all of the organization's intellectual property. BullFrog AI Management, LLC is a wholly owned subsidiary that handles all HR and payroll activities Pursuant to the agreement, 24,223,975 shares of the Company's common stock were issued to the shareholders of BullFrog AI, Inc. in exchange for 100% of the ownership interests of BullFrog AI, Inc. Upon completion of the Exchange, BullFrog AI, Inc. became the Company's wholly-owned subsidiary and the shareholders of BullFrog AI, Inc. own a 100% controlling interest in the Company. As a result, BullFrog AI, Inc. became BullFrog AI Holdings, Inc's wholly owned subsidiary and assumed a total of \$330,442 in net liabilities. All of the entities were controlled both before and after the transactions by the same controlling shareholder. This transaction is being accounted for as a common control transaction and all entities are being presented as if the tra

The Company has 100,000,000 shares of common stock authorized at a par value of \$0.00001. As of December 31, 2020 and 2021, there are 25,223,975 and 27,259,547 shares outstanding, respectively.

During the year-ended December 31, 2020, there were 1,000,000 common shares issued to CEO Vin Singh.

During the year-ended December 31, 2021, there were 400,000 shares issued to CFO Dane Saglio for services rendered to the Company.

In June of 2021 the Company entered into two advisory agreements with entities engaged specifically to assist the Company in becoming a publicly listed NASDAQ company. Under the fee provisions of these agreements the Company issued a total of 1,635,572 shares of common stock to the advisors as well as warrants to purchase additional common shares. In addition, the Company entered into a convertible note with one of the advisors. The proceeds from the note are to be and have been used to cover a percentage of agreed upon pre IPO expenses. In November 2021 the Company issued 400,000 shares of common stock to a consultant who has been engaged to provide financial and accounting services to the Company. Three Percent (3%) of the fully diluted equity of the company as measured by the capital equity table immediately prior to listing on NASDAQ or any other Exchange, with a 'true-up' amount to be delivered within thirty days prior to its expected listing day.

#### Stock Options

During the year ended December 31, 2021, the Company granted a total of 205,000 shares of options to employee of the Company for services rendered. The options have an original life of ten years and vest at different rates over as much as 48 months. During the years ended December 31, 2021, the Company vested 9,167 of these options and recognized \$157 of stock-based compensation related to outstanding stock options.

During the year ended December 31, 2020, no options are granted and vested.

The following tables summarizes the stock options activity for the years ended December 31, 2021 and 2020:

	Options
Granted and outstanding, December 31, 2019	6,193,750
Granted	
Exercised	-
Forfeited	-
Expired	<u></u>
Granted and outstanding, December 31, 2020	6,193,750
Granted during 2021	205,000
Exercised	-
Forfeited	-
Expired during 2021	(3,118,750)
Vested and outstanding, December 31, 2021	3,280,000

F-16

	Options	Intrinsic Value of Vested Options	Weight Averaged exercise Price
Vested and outstanding, December 31, 2019	733,567	12,706	0.48
Granted		-	
Exercised	-	-	-
Forfeited	-	-	
Expired	<del>_</del>	<u> </u>	
Vested and outstanding, December 31, 2020	733,567	12,706	0.48
Granted	9,167	157	0.38
Exercised	-	-	-
Forfeited	-	-	-
Expired	(465,669)	(7,922)	(0.48)
Vested and outstanding, December 31, 2021	277,065	4,941	0.48

As of December 31, 2021 and 2020, 9,167 and 0 options are vested, 465,669 options are expired and the outstanding stock options have a weighted average remining life 7.38 years and 3.33 years, respectively.

As of December 31, 2021 and 2020, the aggregate intrinsic value of options vested and outstanding was \$157 and \$0. The aggregate fair value of the options measured during the years ended December 31, 2021 was calculated using the Black-Scholes option pricing model based on the following assumption:

	Dece	ember 31, 2021
Fair Value of Common Stock on measurement date	\$	0.044
Risk free interest rate		From 1.26% to 1.33%
Volatility		93%
Dividend Yield		0%
Expected Term		10

- (1) The risk-free interest rate was determined by management using the market yield on U.S. Treasury securities with comparable terms as of the measurement date.
- (2) The trading volatility was determined by calculating the volatility of the Company's peer group.
- (3) The Company does not expect to pay a dividend in the foreseeable future.

### Warrants

During the year ended December 31, 2021, the Company granted a total of 3,021,614 warrants. Of this amount 1,400,000 warrants, with an intrinsic value of \$12,462, were granted to advisors related to the Company's IPO objective. The warrants have an original life of five years and vest 30 days before the intended IPO. During the year ended December 31, 2021, 0 shares of these warrants are vested.

F-17

972,500 warrants, with an intrinsic value of \$28,683, are issued for services rendered. The warrants have an original life of ten years and vest at different rates over as much as 36 months. During the year ended December 31, 2021, 220,000 shares of these warrants are vested, with an intrinsic value of \$6,567.

In addition, the Company granted and vested 649,114 warrants, with an intrinsic value of \$12,908, in connection with convertible bridge debt agreements with multiple parties including a related party and the advisors engaged to assist with the IPO. The warrants have an original life of five years and vest at different rates immediately.

During the year ended December 31, 2020, the Company granted a total of 3,170,000 shares of warrants. Of this amount 1,250,000 warrants are granted and vested to settle the \$55,000 common stock payable. The warrants have an original life of ten years and vested immediately. The aggregate intrinsic value of the 1,250,000 warrants was \$37,730. And therefore, the Company recorded a \$17,270 gain on liability settlement as of December 31, 2020.

1,920,000 warrants are issued to consultants of the Company for services rendered. The warrants have an original life of ten years and vest immediately. The Company recognized \$84,344 warrant expense during December 31, 2020 year ended.

During the years ended December 31, 2019 and 2018, the Company granted a total of 300,000 warrants for services rendered. The warrants have an original life of ten years and vest at 36 months. During the years ended December 31, 2021 and 2020, 93,750 shares of warrants with an intrinsic value of \$2,661, and 97,916 shares of warrants with an intrinsic value of \$2,782 are vested and were recognized, respectively.

The following tables summarize the warrants activity for the years ended December 31, 2021 and December 31, 2020:

	Warrants
Granted and outstanding, December 31, 2019	300,000
Granted	3,170,000
Exercised	-
Forfeited	-
Expired	
Granted and outstanding, December 31, 2020	3,470,000
Granted during 2021	3,021,614
Exercised	-
Forfeited	-
Expired during 2021	
Granted and outstanding, December 31, 2021	6,491,614

F-18

	Warrants	Intrinsic Value of Vested Warrants	Weight Averaged exercise Price	
Vested and outstanding, December 31, 2019	91,667	2,624	0.48	
Granted	3,267,916	124,856	0.13	
Exercised	-	-	-	
Forfeited	-	-	-	
Expired	<u>-</u>			
Vested and outstanding, December 31, 2020	3,359,583	127,480	0.14	
Granted and Vested	962,864	22,208	0.45	
Exercised	-	-	-	
Forfeited	-	-	-	
Expired	-	-	-	
Vested and outstanding, December 31, 2021	4,322,447	149,687	0.21	

As of December 31, 2021, 6,491,614 warrants are outstanding, and 4,322,447 warrants are vested, and the vested stock warrants have a weighted average remining life of 7.73 years.

As of December 31, 2021, the aggregate intrinsic value of warrants vested was \$149,687. The aggregate fair value of the warrants measured during the year-ended December 31, 2021 was calculated using the Black-Scholes option pricing model.

As of December 31, 2020, 3,267,917 warrants are vested, and the outstanding stock warrants have a weighted average remining life of 9.19 years.

As of December 31, 2020, the aggregate intrinsic value of warrants vested was \$127,480. The aggregate fair value of the warrants measured during the year-ended December 31, 2020 was calculated using the Black-Scholes option pricing model based on the assumptions below:

	 December 31, 2021	 December 31, 2020
Fair Value of Common Stock on measurement date	\$ 0.044	\$ 0.044
Risk free interest rate	From 0.78% to 1.63%	From 0.68% to 1.59%
Volatility	93%	93%
Dividend Yield	0%	0%
Expected Term	5-10 years	10 years

- (1) The risk-free interest rate was determined by management using the market yield on U.S. Treasury securities with comparable terms as of the measurement date.
- (2) The trading volatility was determined by calculating the volatility of the Company's peer group.
- (3) The Company does not expect to pay a dividend in the foreseeable future.

F-19

### NOTE 11 – INCOME TAXES

As of December 31, 2021, the Company has available for federal income tax purposes a net operating loss carry forward of approximately \$1,614,386, that do not expire, that may be used to offset future taxable income, but could be limited under Section 382. The Company has provided a valuation reserve against the full amount of the net operating loss benefit, since in the opinion of management based upon the earnings history of the Company; it is more likely than not that the benefits will not be realized. Due to possible significant changes in the Company's ownership, the future use of its existing net operating losses may be limited. All or portion of the remaining valuation allowance may be reduced in future years based on an assessment of earnings sufficient to fully utilize these potential tax benefits.

We have adopted the provisions of ASC 740-10-25, which provides recognition criteria and a related measurement model for uncertain tax positions taken or expected to be taken in income tax returns. ASC 740-10-25 requires that a position taken or expected to be taken in a tax return be recognized in the financial statements when it is more likely than not that the position would be sustained upon examination by tax authorities.

Tax position that meets the more likely than not threshold is then measured using a probability weighted approach recognizing the largest amount of tax benefit that is greater

than 50% likely of being realized upon ultimate settlement. The Company had no tax positions relating to open income tax returns that were considered to be uncertain. We file income tax returns in the U.S. and in the state of California and Utah with varying statutes of limitations.

The Company's deferred taxes as of December 31, 2020 and 2021 consist of the following:

		2021	2020		
Non-Current deferred tax asset:	<u>-</u>				
Net operating loss carryforwards	\$	339,000	\$	212,000	
Valuation allowance		(339,000)		(212,000)	
Net non-current deferred tax asset	\$		\$		

#### **NOTE 12 – MATERIAL AGREEMENTS**

JHU-APL Technology License

On February 7, 2018, the Company entered into an exclusive, world-wide, royalty-bearing license from JHU-APL for the technology. The license covers three (3) issued patents, 1 new provisional patent application, non-patent rights to proprietary libraries of algorithms and other trade secrets, the license also includes modifications and improvements. In October of 2021, the Company executed an Amendment to the original license which represents improvements and new advanced analytics capabilities. In consideration of the rights granted to the Company under the License Agreement JHU received a warrant equal to five (5%) percent of the then fully diluted equity base of the Company, which shall be diluted following the closing of this offering. Under the terms of the License Agreement, JHU will be entitled to eight (8%) percent royalty on net sales for the services provided by the Company in which the JHU licensed technology was utilized, as well as fifty (50%) percent of all sublicense revenues received by the Company. In addition, the Company is required to pay JHU an annual maintenance fee of \$1,500. Minimum annual royalty payments are \$20,000 for 2022, \$80,000 for 2023, and \$300,000 for 2024 and beyond, if cumulative annual royalty payments do not reach these levels, the amount due to JHU to reach the annual minimum is due by January 31<sup>st</sup> of the following year. Failure to make annual royalty payments is considered a material breach under the agreement and upon notice from JHU of a material breech, the Company shall have 60 days to cure the material breech.

See Note 10 for details on warrants issued related to this agreement.

F-20

#### NOTE 13 – COMMITMENTS AND CONTINGENCIES

The Company follows ASC 450, Contingencies, which requires the Company to assess the likelihood that a loss will be incurred from the occurrence or non-occurrence of one or more future events. Such assessment inherently involves an exercise of judgment. In assessing possible loss contingencies from legal proceedings or unasserted claims, the Company evaluates the perceived merits of such proceedings or claims, and of the relief sought or expected to be sought.

If the assessment of a contingency indicates that it is probable that a material loss will be incurred and the amount of the liability can be estimated, then the estimated liability would be accrued in the Company's financial statements. If the assessment indicates that a potentially material loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, and an estimate of the range of possible losses, if determinable and material, would be disclosed. Loss contingencies considered remote are generally not disclosed unless they involve guarantees, in which case the guarantees would be disclosed.

While not assured, management does not believe, based upon information available at this time, that a loss contingency will have material adverse effect on the Company's financial position, results of operations or cash flows.

#### **NOTE 14 – SUBSEQUENT EVENTS**

In furthering its business objectives, the Company has entered into two license agreements with world renowned universities for the right to license mid and early-stage drug development programs.

GWU - Beta2-spectrin siRNA License

On January 14, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from George Washington University (GWU) for rights to use siRNA targeting Beta2-spectrin in the treatment of human diseases, including hepatocellular carcinoma (HCC). The license covers methods claimed in three US and worldwide patent applications, and also includes use of this approach for treatment of obesity, non-alcoholic fatty liver disease, and non-alcoholic steatohepatitis. This program is currently in the preclinical stage of development. 'The Company has not yet initiated development activities or IND-enabling studies on this asset; however, the plan is to conduct this work over the next 24 months. All R&D to date on this candidate has been conducted by the licensor of the technology, George Washington University.

In consideration of the rights granted to the Company under the License Agreement GWU received a \$20,000 License Initiation Fee. Under the terms of the License Agreement, GWU will be entitled to a three percent (3%) royalty on net sales subject to quarterly minimums once the first sale has occurred subsequent to regulatory approval, as well sublicense or assignment fees in the event the Company sublicenses or assigns their rights to use the technology. The Company will also reimburse GWU for previously incurred and ongoing patent costs. The Sublicense and Assignment fee amounts decline as the Company advances the clinical development of the licensed technology. The license agreement also contains milestone payments for clinical development steps totaling \$860,000 through the approval of an NDA and a commercial milestone of \$1M once sales reach \$20M in the US. In addition, the Company is required to pay GWU an annual license maintenance fee of \$10,000 beginning in year 3, increasing to \$20,000 in year 4 and remaining at this level for the term of the license. Failure to make payments under the license agreement is considered a material breach under the agreement and upon notice from GWU of a material breach, the Company shall have 45 days to cure it.

JHU - Mebendazole License

On February 22, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from Johns Hopkins University (JHU) for the use of an improved formulation of Mebendazole for the treatment of any human cancer or neoplastic disease. This formulation shows potent activity in animal models of different types of cancer, and has been evaluated in a Phase I clinical trial in patients with high-grade glioma (NCT01729260). The trial, an open-label dose-escalation study, enrolled 24 patients and demonstrated acceptable toxicity of the drug with adjuvant temozolomide in this population.

F-21

The license covers six (6) issued patents and one (1) pending application. In consideration of the rights granted to the Company under the License Agreement JHU will receive an Upfront License Fee of \$250,000. The first \$50,000 of this upfront fee was due within 30 days of the effective date with the remaining amount of \$200,000 due upon the earlier of: (i) completion of an IPO, (ii) the Company raising \$10 million in financing, or (iii) within 9 months of the effective date of the license. The Company will also reimburse JHU for previously incurred and ongoing patent costs. Under the terms of the License Agreement, JHU will be entitled to three- and one-half percent (3.5%) royalty on net sales by the Company. In addition, the Company is required to pay JHU minimum annual royalty payments of \$5,000 for 2023, \$10,000 for 2024, \$20,000 for 2025,

\$30,000 for 2026 and \$50,000 for 2027 and each year after until the first commercial sale after which the annual minimum royalty shall be \$250,000. The license agreement also contains milestone payments for clinical development steps totaling up to \$1.5M through the approval of an NDA, and commercial milestones of \$1M once annual sales reach \$20M in the US, \$2M once sales exceed \$100M, \$10M once sales exceed \$500M, and \$20M once sales exceed \$1B. Failure to make payments under the license agreement is considered a material breach under the agreement and upon notice from JHU of a material breach, the Company shall have 30 days to cure it. In addition, JHU shall have the right to participate up to 1% in any private equity financing conducted by the Company.

On April 11, 2022, the Company entered into an Exclusive placement agent and/or underwriter agreement with WallachBeth Capital LLC in connection with a proposed private and/or public offerings by the Company. As discussed in Footnote 2, a significant component of the Company's plan to secure capital is the intention of the Company to seek to be listed on a national exchange through an initial public offering ("IPO") of its common stock. WallachBeth was engaged in this regard and on April 28, 2022, the Company received net proceeds or approximately \$775,000 from the sale of Convertible Bridge Notes and Warrants to several institutional investors as well as several individual accredited investors. In connection with the April 28th note sale, the Company paid approximately \$92,000 in fees and expenses. In addition to the money received on April 28th, the Company also received \$100,000 from the sale of a Convertible Bridge Note and Warrants to a related party earlier in April. The bridge notes were issued with a 10% original issue discount and are convertible at the IPO at a 20% discount to the IPO price and the purchasers will also have a warrant for each share of common stock issued upon conversion. The warrant exercise price will be 110% of the per share IPO price. The Company plans to file an S-1 Registration Statement in the second quarter and seek to conduct an IPO this summer.

In May 2022, the Company and the two entities engaged in June 2021 to assist the Company in becoming a publicly listed NASDAQ company (see footnote 10) amended the advisory agreements, specifically the fee provisions. Under the amended agreements, the advisors are to receive a total of 850,000 shares of common stock that will not be subject to a reverse split of the common shares in the event this is required to achieve the NASDAQ listing. Also, under the amended agreements, the warrant agreements issued under the original advisory agreements have been cancelled.

Also in May of 2022, the Company, and the holders of two convertible promissory notes sold in August 2021, amended the note term to extend the maturity date. As consideration to the note holders, the Company issued additional warrants to each holder and amended the terms of the previous warrants to reflect that all warrants now have an exercise price of \$2.50 and the number of warrant shares will not be subject to a reverse split of the common shares in the event this is required to achieve the NASDAQ listing. One of the note holders is a related party (see footnote 8) and the holder of the second note is one of the advisors mentioned above. (see footnote 10).

Through May of 2022, the Company issued warrants to consultants and advisors who performed services for the Company. The warrants for a total of 495,412 shares, have exercise prices ranging from \$0.38 to \$1 and vest over periods of zero through 24 months. 301,000 were issued to individuals who have been engaged as Company management and advisors, the remaining 194,412 were issued to unrelated individuals or entities.

F-22

#### BULLFROG AI HOLDINGS, INC.

#### FINANCIAL STATEMENTS

### **SEPTEMBER 30, 2022**

(unaudited)

F-23

Bullfrog AI Holdings, Inc. Consolidated Balance Sheets

	Sep	September 30 2022		December 31 2021		
	J)	Jnaudited)		(Audited)		
ASSETS		,		()		
CURRENT ASSETS:						
Cash	\$	42,216	\$	10,014		
Prepaid expense		15,000		-		
Total Current Assets	\$	57,216	\$	10,014		
NON-CURRENT ASSETS:						
Property and Equipment, net		8,140		_		
Total Non-Current Assets	\$	8,140		-		
TOTAL ASSETS	<u>\$</u>	65,356	\$	10,014		
LIABILITIES AND STOCKHOLDERS' DEFICIT						
CURRENT LIABILITIES:						
Accounts payable	\$	120,540	\$	68,594		
Accrued expenses		452,301		68,557		
Accrued expenses-related party		389,666		285,666		
Deferred revenue		32,000		10,000		
Notes payable-related party		-		49,000		
Convertible notes, net of \$36,531 and \$12,962 debt discount, respectively		1,229,359		284,038		
Convertible notes-related party, net of \$0 and \$1,584 debt discount, respectively		254,850		253,266		
Total Current Liabilities	\$	2,478,716	\$	1,019,121		
TOTAL LIABILITIES	S	2,478,716	\$	1,019,121		

Subscription receivable	-	-
Additional paid-in capital	1,289,895	587,189
Accumulated deficit	(3,703,537)	(1,596,568)
Total BullFrog stockholders' deficit	\$ (2,413,360)	\$ (1,009,107)
TOTAL STOCKHOLDERS' DEFICIT	 (2,413,360)	 (1,009,107)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	\$ 65,356	\$ 10,014

The accompanying notes are an integral part of these financial statements

F-24

# Bullfrog AI Holdings, Inc. Consolidated Statements of Operations

	For The Three Months Ended September 30				For The Nine Months End September 30			
		2022	2021		2022			2021
NET REVENUES:								
Revenues, net	\$	<u> </u>	\$	<u> </u>	\$	<u>-</u>	\$	<u>-</u>
TOTAL NET REVENUES		-		-		-		_
COST OF GOODS SOLD:								
Cost of goods sold		-		-		-		-
TOTAL COST OF GOODS SOLD		-		-		-		-
GROSS PROFIT		-		-		-		-
OPERATING EXPENSES:								
Research and development expenses		39,421		-		448,375		-
General and administrative expenses		406,357		108,961		745,299		184,346
Payroll and salary-related party		143,238		61,476		388,208		155,111
Stock based compensation		51,536		1,306		290,876		74,664
TOTAL OPERATING EXPENSES		640,552		171,743		1,872,758		414,121
(LOSS) FROM OPERATIONS		(640,552)		(171,743)		(1,872,758)		(414,121)
OTHER INCOME (EXPENSE):								
Interest expense		(124,159)		(12,749)		(234,668)		(20,718)
Other (Expense)		18		22		457		10,057
TOTAL OTHER INCOME (EXPENSE)		(124,141)		(12,727)		(234,211)		(10,661)
NET (LOSS)		(764,693)		(184,470)		(2,106,969)		(424,782)
NET (LOSS) PER COMMON SHARE:								
Basic and diluted	\$	(0.03)	\$	(0.01)	\$	(0.08)	\$	(0.02)
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:								
Basic and diluted		28,170,747		25,349,788		27,586,200		25,287,229

The accompanying notes are an integral part of these financial statements

F-25

# Bullfrog AI Holdings, Inc. Consolidated Statements of Stockholders' Deficit

	Commo	Common Stock			Subscription		Accumulated	
	Shares	Amou	nt	Capital	Receivables		Deficit	Total
Balances, December 31, 2020	25,223,975	\$	252	\$ 470,058	\$ (1	00)	\$ (1,010,728)	\$ (540,518)
Cash from subscription receivables	-		-	-	1	00	-	100
Warrants issued with convertible notes	-		-	2,608		-	-	2,608
Imputed Interest	-		_	2,172		-	-	2,172
Equity compensation	1,635,572		16	74,648		-	-	74,664
Net Income/(Loss)	<u>-</u>					_	(424,782)	(424,782)

Balances, September 30, 2021	26,859,547	\$ 268	\$ 549,486		\$ (1,435,510)	\$ (885,756)
Balances, December 31, 2021	27,259,547	\$ 272	\$ 587,189	-	\$ (1,596,568)	\$ (1,009,107)
Imputed Interest	-	-	6,971	-	-	6,971
Equity compensation	-	-	290,876	-	-	290,876
Conversion of convertible notes	1,441,888	15	226,123	-	-	226,138
Reclassification of warrant	-	-	(11,097)	-	-	(11,097)
Shares cancellation	(785,572)	(8)	8	-	-	-
Shares issuance for license	279,159	3	189,825	-	-	189,828
Net Income/(Loss)		-	_		(2,106,969)	(2,106,969)
Balances, September 30, 2022	28,195,022	\$ 282	\$ 1,289,895	\$ -	\$ (3,703,537)	\$ (2,413,360)

The accompanying notes are an integral part of these financial statements

F-26

# Bullfrog AI Holdings, Inc. Consolidated Statements of Cash Flows

	For The Nine Months Ended September			September 30
		2022		2021
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net (loss)	\$	(2,106,969)	\$	(424,782
Adjustment to reconcile change in net (loss) to net cash and cash equivalents used in operating activities		(=,- , , , , , , )		(, , ,
Gain on debt forgiveness		-		(9,917
Depreciation expense		604		(-)-
Shares issuance for license		189,828		
Stock-based compensation		290,876		74,664
Amorization of debt discount		174,998		4,249
Imputed Interest		6,971		2,172
Changes in operating assets and liabilities:				
Prepaid Expense		(15,000)		_
Accounts payable		51,946		(32,035
Accrued expenses		409,502		16,936
Accrued expenses-related party		104,000		74,221
Deferred revenue		22,000		74,221
NET CASH USED IN OPERATING ACTIVITIES		(871,244)		(294,492
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchase of Property and Equipment		(8,744)		-
NET CASH FROM INVESTING ACTIVITIES		(8,744)		-
CASH FLOWS FROM FINANCING ACTIVITIES:				
Proceeds from convetible notes payables		961,190		63,400
Proceeds from convetible notes payables-related party		701,170		225,000
Repayment of note payable and interest-related party		(49,000)		223,000
Proceeds from notes payables - related party		(45,000)		34,000
Proceeds from subscription payable		-		100
NET CASH FROM FINANCING ACTIVITIES		912,190		322,500
NET CASH FROM FRANCENG ACTIVITIES		712,170	_	322,300
Net increase/(decrease) in cash and cash equivalents		32,202		28,008
Cash, beginning of year		10,014		5,019
Code and of a mind				
Cash, end of period	\$	42,216	\$	33,027
SUPPLEMENTAL CASH FLOW INFORMATION:				
Cash paid for interest	\$	4,399	\$	940
Cash paid for taxes	\$	-	\$	-
SUPPLEMENTAL DISCLOSURE of NON-CASH ACTIVITY: Reclassification of warrant	en en	11.007	e e	
	\$	11,097	\$	
Conversion of Converiblte Note payable	\$	226,138	\$	
Cancellation of common stocks	\$	8	\$	
Shares issued for license	\$	3	\$	
Shares issued for services	\$		\$	16
	Ψ		Ψ	10

\$ 2,608

The accompanying notes are an integral part of these financial statements

F-27

### BULLFROG AI HOLDINGS, INC. NOTES TO FINANCIAL STATEMENTS September 30, 2022 (unaudited)

#### NOTE 1 – ORGANIZATION AND NATURE OF BUSINESS

Bullfrog AI Holdings, Inc. was incorporated in the State of Nevada on February 6, 2020. Bullfrog AI Holdings, Inc. is the parent company of Bullfrog AI, Inc. and Bullfrog AI Management, LLC. which were incorporated in Delaware and Maryland, in 2017 and 2021, respectively. All of our operations are currently conducted through BullFrog AI Holdings, Inc., which began operations on February 6, 2020. We are a company focused specifically on advanced AI/ML-driven analysis of complex data sets in medicine and healthcare. Our objective is to utilize our platform for precision medicine approach to drug asset enablement through external partnerships and selective internal development.

Most new therapeutics will fail at some point in preclinical or clinical development. This is the primary driver of the high cost of developing new therapeutics. A major part of the difficulty in developing new therapeutics is efficient integration of complex and highly dimensional data generated at each stage of development to de-risk subsequent stages of the development process. Artificial Intelligence and Machine Learning (AI/ML) has emerged as a digital solution to help address this problem.

We use artificial intelligence and machine learning to advance medicines for both internal and external projects Most current AI/ML platforms still fall short in their ability to synthesize disparate, high-dimensional data for actionable insight. Our platform technology, named, bfLEAP<sup>TM</sup> is an analytical AI/ML platform developed at The Johns Hopkins University Applied Physics Laboratory (JHU-APL) which is able to surmount the challenges of scalability and flexibility currently hindering researchers and clinicians by providing a more precise, multi-dimensional understanding of their data. We are deploying bfLEAP<sup>TM</sup> for use at several critical stages of development for internal programs and through strategic partnerships and collaborations with the intention of streamlining data analytics in therapeutics development, decreasing the overall development costs by decreasing failure rates for new therapeutics, and impacting the lives of countless patients that may otherwise not receive the therapies they need.

The bfLEAP<sup>TM</sup> platform utilizes both supervised and unsupervised machine learning – as such, it is able to reveal real/meaningful connections in the data without the need for an a priori hypothesis. Algorithms used in the bfLEAP<sup>TM</sup> platform are designed to handle highly imbalanced data sets to successfully identify combinations of factors that are associated with outcomes of interest.

Our primary goal is to improve the odds of success at any stage of pre-clinical and clinical therapeutics development, for in house programs, and our strategic partners and collaborators. Our primary business model is enabling the success of ongoing clinical trials or rescue of late stage failed drugs (i.e., Phase 2 or Phase 3 clinical trial failures) for development and divestiture; although, we will also consider collaborations for earlier stage drugs. We hope to accomplish this through strategic acquisitions of current clinical stage and failed drugs for in-house development, or through strategic partnerships with biopharmaceutical industry companies. We are able to pursue our drug asset enhancement business by leveraging a powerful and proven AI/ML platform (trade name: bfLEAP<sup>TM</sup>) initially developed at JHU-APL. We believe the bfLEAP<sup>TM</sup> analytics platform is a potentially disruptive tool for analysis of pre-clinical and/or clinical data sets, such as the robust pre-clinical and clinical trial data sets being generated in translational R&D and clinical trial settings.

F-28

### NOTE 2 – GOING CONCERN AND MANAGEMENT'S LIQUIDITY PLANS

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As shown in the accompanying financial statements, for the nine months ended September 30, 2022 the Company incurred net losses from operations of \$2,106,969 and used cash in operations of \$871,244. These factors among others raise substantial doubt that the Company will be able to continue as a going concern for a reasonable period of time.

The Company's primary source of operating funds for the nine months ended September 30, 2022 and for the year ended December 31, 2021 has been from investors and related parties. The Company has experienced net losses from operations since inception, but expects these conditions to improve in 2023 and beyond, as it continues to develop its direct sales and marketing programs; however, no assurance can be provided that the Company will not continue to experience losses in the future The Company has stockholders' deficiencies at September 30, 2022 and December 31, 2021 and requires additional financing to fund future operations.

A significant component of the Company's plan to secure capital to both establish its operating base and also to execute on its business plan is the intention of the Company to seek to be listed on a national exchange through an initial public offering ("IPO") of its common stock. In this regard, the Company has entered into a number of advisory and consulting agreements with entities and individuals providing services and advice to the Company. The Company has compensated these advisors and consultants using equity instruments issued by Bull Frog AI Holdings, Inc. as will be more thoroughly explained below.

The Company's existence is dependent upon management's ability to develop profitable operations and to obtain additional funding sources, including an IPO. There can be no assurance that the Company's financing efforts will result in profitable operations or the resolution of the Company's liquidity problems. There can be no assurance that the Company will be successful in developing profitable operations or that it will be able to obtain financing on favorable terms, if at all. The accompanying statements do not include any adjustments that might result should the Company be unable to continue as a going concern.

### NOTE 3 –SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Estimates include, but are not limited to, revenue recognition, allowances for doubtful accounts, recoverability of deferred tax assets and certain other of our accrued liabilities. Actual results could differ from those estimates.

### Financial Instruments

The carrying value of short-term instruments, including cash and cash equivalents, accounts payable and accrued expenses approximate fair value due to the relatively short period to maturity for these instruments.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value maximize the use of observable inputs and minimize the use of unobservable inputs. The Company utilizes a three-level valuation hierarchy for disclosures of fair value measurements, defined as follows:

Level 1 - inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 - inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the assets or liability, either directly or indirectly, for substantially the full term of the financial instruments.

Level 3 - inputs to the valuation methodology are unobservable and significant to the fair value.

The Company does not have any assets or liabilities that are required to be measured and recorded at fair value on a recurring basis.

F-29

#### Revenue Recognition

For annual reporting periods after December 15, 2017, the Financial Accounting Standards Board ("FASB") made effective ASU 2014-09 "Revenue from Contracts with Customers," to supersede previous revenue recognition guidance under current U.S. GAAP. Revenue is now recognized in accordance with FASB ASC Topic 606, Revenue Recognition. The objective of the guidance is to establish the principles that an entity shall apply to report useful information to users of financial statements about the nature, amount, timing, and uncertainty of revenue and cash flows arising from a contract with a customer. The core principle is to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Two options were made available for implementation of the standard: the full retrospective approach or modified retrospective approach. The guidance became effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, with early adoption permitted. We have adopted FASB ASC Topic 606 for our reporting period as of the year-ended December 31, 2019. As of September 30, 2022 and December 31, 2021, we have had no revenue. For the nine months ended September 30, 2022 and year-ended December 31, 2021, there were no completed contracts therefore the customer down payment received in late 2021 and early 2022 is reflected on the balance sheet as of September 30, 2022 and December 31, 2021 as unearned revenue in the amount of \$32,000 and \$10,000, respectively. As is more fully discussed below, we are of the opinion that none of our contracts for products contain significant financing components that require revenue adjustment under FASB ASC Topic 606.

Revenue is recognized based on the following five step model:

#### - Identification of the contract with a customer

This step outlines the criteria that must be met when establishing a contract with a customer to supply goods or services

### - Identification of the performance obligations in the contract

This step describes how distinct performance obligations in the contract must be handled

#### - Determination of the transaction price

This step outlines what must be considered when establishing the transaction price, which is the amount the business expects to receive for transferring the goods and services to the customer

### - Allocation of the transaction price to the performance obligations in the contract

This step outlines guidelines for allocating the transaction price across the contract's separate performance obligations, and is what the customer agrees to pay for the goods and services

### - Recognition of revenue when, or as, the Company satisfies a performance obligation

Revenue can be recognized as the business meets each performance obligation. This step specifies how that should happen

#### Contract Services

The Company anticipates that the majority of revenues to be recognized in the near future will result from our fee for service partnership offering, designed for biopharmaceutical companies, as well as other organizations, of all sizes that have challenges analyzing data throughout the drug development process. The Company provides the customer with an analysis of large complex data sets using the Company's proprietary Artificial Intelligence / Machine Learning platform called bfLEAP<sup>TM</sup>. This platform is designed to predict targets of interest, patterns, relationships, and anomalies. The Company believes that there will be additional on-going work requested from partners therefore the service model utilizes a master services agreement with work or task orders issued for discrete analysis performed at the discovery, preclinical, or clinical stages of drug development. The Company receives a cash fee and in some instances the potential for rights to new intellectual property generated from the analysis.

F-30

#### Collaborative Arrangements

The Company also intends to enter collaborative arrangements with pharmaceutical companies who have drugs that have failed late Phase 2 or Phase 3 trials. These arrangements could take several forms including true partnerships where BullFrog contributes data analysis using the bfLEAP<sup>TM</sup> platform with the partner contributing the drug candidate and other resources needed to continue development towards commercialization with BullFrog receiving an equity or royalty right in the commercialized product. In other arrangements the Company may earn cash payments based on achieving certain milestones as determined under each specific arrangement.

### Acquisition of Rights to Certain Drugs

In certain circumstances, we may also acquire rights to drugs that are in early-stage clinical trials, use our technology to sponsor and support a successful later stage precision medicine trial, and divest the asset. The same process may apply to the discovery of new drugs. In these instances, divestiture may be in the form of an outright sale of all rights or possibly a license to develop and commercialize enhanced development candidates. License agreements could include developmental and commercial milestones in addition to royalties.

# Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates include the fair value of the Company's stock, stock-based compensation, fair values relating to derivative liabilities, debt discounts and the valuation

allowance related to deferred tax assets. Actual results may differ from these estimates.

#### Cash

The Company considers cash to consist of cash on hand and temporary investments having an original maturity of 90 days or less that are readily convertible into cash. As of September 30, 2022 and December 31, 2021, cash balances were \$42,216 and \$10,014, respectively.

#### Concentrations of Credit Risk

The Company's financial instruments that are exposed to a concentration of credit risk are cash and accounts receivable. Occasionally, the Company's cash in interest-bearing accounts may exceed FDIC insurance limits. The financial stability of these institutions is periodically reviewed by senior management.

#### Accounts Receivable

Trade receivables are carried at their estimated collectible amounts. Trade credit is generally extended on a short-term basis. Thus, trade receivables do not bear interest. Trade accounts receivable are periodically evaluated for collectability based on past credit history with customers and their current financial condition.

#### Allowance for Doubtful Accounts

Any charges to the allowance for doubtful accounts on accounts receivable are charged to operations in amounts sufficient to maintain the allowance for uncollectible accounts at a level management believes is adequate to cover any probable losses. Management determines the adequacy of the allowance based on historical write-off percentages and the current status of accounts receivable. Accounts receivables are charged off against the allowance when collectability is determined to be permanently impaired. As of September 30, 2022 and December 31, 2021, allowance for doubtful accounts was \$0.

F-31

#### Inventories

The Company does not have inventory and does not plan to have inventory in the near future.

#### Cost of Sales

Cost of sales is comprised of royalties and the cost of outsourced services provided to the Company related to customer service contracts.

#### Property and Equipment

Property and equipment are stated at cost. When retired or otherwise disposed, the related carrying value and accumulated depreciation are removed from the respective accounts and the net difference less any amount realized from disposition, is reflected in earnings. For financial statement purposes, property and equipment are recorded at cost and depreciated using the straight-line method over their estimated useful lives.

#### Advertising

The Company follows the policy of charging the costs of advertising to expense as incurred.

### Income Taxes

Deferred income tax assets and liabilities are determined based on the estimated future tax effects of net operating loss and credit carry forwards and temporary differences between the tax basis of assets and liabilities and their respective financial reporting amounts measured at the current enacted tax rates. The Company records an estimated valuation allowance on its deferred income tax assets if it is not more likely than not that these deferred income tax assets will be realized.

The Company recognizes a tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the condensed consolidated financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. As of September 30, 2022 and December 31, 2021, the Company has not recorded any unrecognized tax benefits.

# Stock-Based Compensation

Employee and non-employee share-based compensation is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the requisite service period.

#### Net Loss per Share

We compute net loss per share in accordance with ASC 260, Earning per Share. We report both basic and diluted loss per share. Loss earnings per share is calculated based on the weighted average number of shares of common stock outstanding and excludes the dilutive effect of warrants, stock options or any other type of convertible securities. Considering that the Common shares of the Company were not publicly traded as of September 30, 2022, the contingently convertible notes and related dilutive shares are not included in the dilutive shares calculation upon the Initial Public Offering (IPO). Diluted loss per share is calculated based on the weighted average number of shares of common stock outstanding and the dilutive effect of stock options, warrants and other types of convertible securities are included in the calculation. Dilutive securities are excluded from the diluted earnings per share calculation because their effect is anti-dilutive. The Company's potentially dilutive shares and equity instruments, which were not included in the calculation of net loss per share, included 6,491,614 and 5,270,617 warrants as of December 31, 2021 and September 30, 2022, respectively. Also included are options for 3,280,000 and 484,525 common shares, respectively.

F-32

#### Recent Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842). This ASU requires lessees to recognize a lease liability, on a discounted basis, and a right-of-use asset for substantially all leases, as well as additional disclosures regarding leasing arrangements. In July 2018, the FASB issued ASU 2018-11, Leases (Topic 842), which provides an optional transition method of applying the new lease standard. Topic 842 can be applied using either a modified retrospective approach at the beginning of the earliest period presented, or as permitted by ASU 2018-11, at the beginning of the period in which it is adopted.

We adopted this standard using a modified retrospective approach since inception of the company. The modified retrospective approach includes a number of optional practical

expedients relating to the identification and classification of leases that commenced as of the inception of the company; initial direct costs for leases that commenced as of inception of the company; and the ability to use hindsight in evaluating lessee options to extend or terminate a lease or to purchase the underlying asset.

The Company elected the package of practical expedients permitted under ASC 842 allowing it to account for its prior operating lease that commenced before the adoption date as an operating lease under the new guidance without reassessing (i) whether the contract contains a lease; (ii) the classification of the lease; or (iii) the accounting for indirect costs as defined in ASC 842.

All staff are working remotely; therefore, the Company does not currently have a lease or rent office space.

Consistent with ASC 842-20-50-4, for the Company's quarterly financial statements for the nine month period ended September 30, 2022 and the year ended December 31, 2021, the Company does not have a monthly rent obligation. The Company had no cash flows arising from a lease, no finance lease cost, short term lease cost, or variable lease costs. The Company does not produce any sublease income or any net gain or loss recognized from sale and leaseback transactions. As a result, the Company did not need to segregate amounts between finance and operating leases for cash paid for amounts included in the measurement of lease liabilities, segregated between operating and financing cash flows; supplemental non-cash information on lease liabilities arising from obtaining right-of-use assets; weighted-average calculations for the remaining lease term; or the weighted-average discount rate.

The adoption of this guidance resulted in no significant impact to the Company's results of operations or cash flows.

In December 2019, the FASB issued ASU No. 2019-12 - Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes ("ASU 2019-12"). ASU 2019-12 is part of the FASB's overall simplification initiative and seeks to simplify the accounting for income taxes by updating certain guidance and removing certain exceptions. The updated guidance is effective for fiscal years beginning after December 15, 2020 and interim periods within those fiscal years. Early adoption is permitted. The adoption of this update did not have a material effect on the Company's financial statements.

In August 2020, the FASB issued ASU 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470- 20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity ("ASU 2020-06"), which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity. This ASU (1) simplifies the accounting for convertible debt instruments and convertible preferred stock by removing the existing guidance in ASC 470-20, Debt: Debt with Conversion and Other Options, that requires entities to account for beneficial conversion features and embedded features that are both indexed to the issuer's own stock and classified in stockholders' equity, by removing certain criteria required for equity classification; and (3) revises the guidance in ASC 260, Earnings Per Share, to require entities to calculate diluted earnings per share (EPS) for convertible instruments by using the if-converted method. In addition, entities must presume share settlement for purposes of calculating diluted EPS when an instrument may be settled in cash or shares. For SEC filers, excluding smaller reporting companies, ASU 2020-06 is effective for fiscal years beginning after December 15, 2021 including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020. For all other entities, ASU 2020-06 is effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Entities should adopt the guidance as of the beginning of the fiscal year of adoption and cannot adopt the guidance in an interim reporting period. The Company elected early adoption, effective January 1, 2021. Considering that the Common shares of the Company were not publicly traded as of September 30, 2022, the convertible options are not considered to be readily convertible to cash. In addition, the beneficial conversion fea

F-33

In October 2020, the FASB issued ASU 2020-10, Codification Improvements, which updates various codification topics by clarifying or improving disclosure requirements to align with the SEC's regulations. The Company adopted ASU 2020-10 as of the reporting period beginning January 1, 2021. The adoption of this update did not have a material effect on the Company's financial statements.

The Company does not believe that any other recently issued effective pronouncements, or pronouncements issued but not yet effective, if adopted, would have a material effect on the accompanying financial statements.

### COVID-19 - Going Concern

In March 2020, the World Health Organization declared the global emergence of the COVID-19 pandemic. The impact of COVID-19 on the Company's business is currently unknown. The Company will continue to monitor guidance and orders issued by federal, state, and local authorities with respect to COVID-19. As a result, the Company may take actions that alter its business operations as may be required by such guidance and orders or take other steps that the Company determines are in the best interest of its employees, customers, partners, suppliers and stockholders.

Any such alterations or modifications could cause substantial interruption to the Company's business and could have a material adverse effect on the Company's business, operating results, financial condition, and the trading price of the Company's common stock, and could include temporary closures of one or more of the Company's facilities; temporary or long-term labor shortages; temporary or long-term adverse impacts on the Company's supply chain and distribution channels; and the potential of increased network vulnerability and risk of data loss resulting from increased use of remote access and removal of data from the Company's facilities. In addition, COVID-19 could negatively impact capital expenditures and overall economic activity in the impacted regions or depending on the severity, globally, which could impact the demand for the Company's products and services.

It is unknown whether and how the Company may be impacted if the COVID-19 pandemic persists for an extended period of time or if there are increases in its breadth or in its severity, including as a result of the waiver of regulatory requirements or the implementation of emergency regulations to which the Company is subject. The COVID-19 pandemic poses a risk that the Company or its employees, contractors, suppliers, and other partners may be prevented from conducting business activities for an indefinite period.

The Company may incur expenses or delays relating to such events outside of its control, which could have a material adverse impact on its business, operating results, financial condition and the trading price of its common stock.

### NOTE 4 – PROPERTY AND EQUIPMENT

Property and equipment consisted of the following:

During the nine months ended September 30, 2022, the Company acquired \$8,744 of equipment and has accumulated depreciation of \$604, for a net of \$8,140.

Depreciation expense totaled \$604, and \$0 in the nine months ended September 30, 2022 and September 30, 2021, respectively.

### NOTE 5 – ACCOUNTS PAYABLE AND ACCRUED EXPENSES

As of September 30, 2022 and December 31, 2021, the Company had accounts payable and accrued expenses totaling \$962,507 and \$422,817, respectively.

#### NOTE 7 -NOTES PAYABLE RELATED PARTY

On June 15, 2021, the company entered into an unsecured short term loan agreement with a related party for an aggregate principal balance of \$34,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest. During the nine months ended September 30, 2022, the full amount of the loan and interest was repaid.

On November 19, 2021, 2021, the company entered into an unsecured short term loan agreement with a related party for an aggregate principal balance of \$5,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest. During the nine months ended September 30, 2022, the full amount of the loan and interest was repaid.

On December 13, 2021, the company entered into an unsecured short term loan agreement with a related party for an aggregate principal balance of \$10,000, with a one-year maturity date, accruing interest at 5% and imputing an additional 1% interest. During the nine months ended September 30, 2022, the full amount of the loan and interest was repaid.

### NOTE 8 – CONVERTIBLE NOTES PAYABLE

On March 27, 2020, the company entered into a convertible loan agreement with the Maryland Technology Development Corporation with a principal balance of \$200,000 at 6% interest. The maturity date of the loan was September 27, 2021. During the nine months ended September 30, 2022, the full amount of the loan and interest totaling \$226,138 was converted into 1,441,888 shares of common stock of the Company, in accordance with the conversion notice submitted by the noteholder. Pursuant to the note agreement, the number of shares that the note converted into was based on the note balance plus accrued interest divided by \$5,000,000 times the fully diluted equity of the company, excluding convertible securities issued for capital raising purposes. There was no gain or loss due to conversion.

On August 9, 2021, the company entered into a convertible loan agreement with an unrelated party to loan up to \$195,000 at 9% interest, with a principal balance of \$72,000, as of December 31, 2021. This loan included an original issuance discount of 5%, and included 195,000 Warrants at an exercise price of \$1, exercisable for 5 years from the issue date on the face of the Warrant. The noteholder has the right to convert the principal and interest into common shares of the Company. The maturity date of the loan was amended to February 9, 2023. During the nine months ended September 30, 2022, another \$65,000 principal with an additional \$3,250 original issuance discount, was loaned to the Company. In May 2022, the Company and the note holder agreed to cancel and void previous warrants and entered into a new agreement for 225,000 warrants with an exercise price of \$2.50. As of September 30, 2022, the loan was outstanding with a principal balance of \$137,000, accrued interest of \$9,025, amortization of debt discount of \$3,506, and unamortized debt discount of \$1,989. The warrants discussed above were initially discounted against the notes, subsequent to year end December 31, 2021, they were deemed voided and new warrants in accordance with the new terms were issued. We assessed the differences in fair value and determined that they were de minimis and expense of \$64,978.

On December 20, 2021, the company entered into a loan agreement with an unrelated party, with a principal balance of \$25,000 at 6% interest. The maturity date of the loan is December 19, 2022. During the nine months ended September 30, 2022, the note principal was increased by \$2,778 representing a 10% original issue discount pursuant to the enhanced terms mentioned below. As of September 30, 2022, the loan remained outstanding had accrued interest of \$1,310. Should the Company complete an IPO prior to the maturity date, the note will automatically convert into the Company's common stock, at a 20% discount to the IPO price. Initially, the loan was estimated to be issued with 355,114 warrants. Subsequent to the entry into the December 20, 2021 the loan agreement, the Company enhanced the terms of the Bridge Note Offering under which the loan was closed and in April 2022 closed on the sale of approximately \$1M in face value of convertible bridge notes, as described in footnote 13. Pursuant to the enhanced terms, the warrants will not be issued until the note converts.

F-35

On April 11, 2022, the Company entered into an Exclusive placement agent and/or underwriter agreement with WallachBeth Capital LLC in connection with a proposed private and/or public offerings by the Company. As discussed in Footnote 2, a significant component of the Company's plan to secure capital is the intention of the Company to seek to be listed on a national exchange through an initial public offering ("IPO") of its common stock. WallachBeth was engaged in this regard and on April 28, 2022, the Company received net proceeds or approximately \$775,000 from the sale of Convertible Bridge Notes and Warrants to several institutional investors as well as several individual accredited investors. In connection with the April 28th note sale, the Company paid approximately \$91,560 in fees and expenses. In addition to the money received on April 28th, the Company also received \$100,000 from the sale of a Convertible Bridge Note and Warrants to a related party earlier in April. In September 2022, the Company sold one additional bridge note to an unrelated party, with a principal balance of \$27,778. The Convertible Bridge Notes were issued with a 10% original issue discount and are convertible at the IPO at a 20% discount to the IPO price. The purchasers will also be issued a warrant for each share of common stock issued upon conversion of the Note at a price equal to 110% of the IPO price or, if the Company fails to complete the IPO before October 22, 2022, 90% of the IPO price. The Convertible Bridge Notes maturity date is October 31, 2022. The Company has filed an S-1 Registration Statement and is seeking to conduct an IPO in the fourth quarter of 2022.

As of September 30, 2022, the table below reflects the balances of the Convertible Bridge Notes sold pursuant April 11, 2022 agreement with Wallach Beth. All notes are mandatorily converted at the IPO at a 20% discount to the IPO price and the purchasers will also be issued a warrant for each share of common stock issued upon conversion. The warrant exercise price will be 90% of the per share IPO price. Due to the IPO price not yet being probable, no current accounting for these warrants has been journalized.

Note Date		chase rice		Principal Balance		Original Issue Discount		Accrued Interest
04/28/22	¢.	250.000	¢.	277.778	¢.	27,778	¢.	7,176
	<b>3</b>	,	3	,	Þ	,	Þ	,
04/28/22	\$	250,000	\$	277,778	\$	27,778	\$	7,176
04/28/22	\$	250,000	\$	277,778	\$	27,778	\$	7,176
04/28/22	\$	25,000	\$	27,778	\$	2,778	\$	718
04/28/22	\$	28,000	\$	31,111	\$	3,111	\$	804
04/28/22	\$	28,000	\$	31,111	\$	3,111	\$	804
04/28/22	\$	35,000	\$	38,889	\$	3,889	\$	1,005
12/20/21 *	\$	25,000	\$	27,778	\$	2,778	\$	1,310
04/13/22 *	\$	100,000	\$	111,111	\$	11,111	\$	3,148
09/09/22	\$	25,000	\$	27,778	\$	2,778	\$	97
Total	\$	1,016,000	\$	1,128,889	\$	112,889	\$	29,413

<sup>\*</sup> Notes sold by Company prior to the April 28, 2022 closing

In August 2020, the FASB issued ASU 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity ("ASU 2020-06"), which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity. The Company specified that an entity should adopt the guidance as of the beginning of its annual fiscal year.

After adoption of ASU 2020-06, if the equity securities underlying the conversion option are not readily convertible to cash, and the conversion option requires gross physical settlement of the underlying shares, the embedded conversion option may not meet the net settlement criterion, and therefore would not meet the definition of a derivative. Considering that the Common shares of the Company were not publicly traded as of September 30, 2022, the convertible options are not considered to be readily convertible to cash. In addition, the beneficial conversion feature was eliminated under ASU 2020-06. Therefore, no derivative liabilities will be triggered from these convertible notes. All conversions are contingent upon an effective IPO, which not yet considered probable.

F-36

### NOTE 9 – CONVERTIBLE NOTES PAYABLE RELATED PARTY

On July 8, 2021, the company entered into a Simple Agreement for Future Equity (SAFE), with a related party, with an amount of \$150,000, with 0% interest. Under the SAFE agreement, if there is an Equity Financing before the termination of this SAFE, on the initial closing of such Equity Financing, this SAFE will automatically convert into the number of shares of SAFE Preferred Stock equal to the Purchase Amount divided by the Conversion Price, which means either: (1) the Safe Price (the price per share equal to the Post-Money Valuation Cap divided by the Company Capitalization) or (2) the Discount Price (the price per share of the Standard Preferred Stock sold in the Equity Financing multiplied by the Discount Rate), whichever calculation results in a greater number of shares of Safe Preferred Stock

If there is a Liquidity Event before the termination of this SAFE, this SAFE will automatically be entitled (subject to the liquidation priority set forth in Section 1(d) below) to receive a portion of Proceeds, due and payable to the Investor immediately prior to, or concurrent with, the consummation of such Liquidity Event, equal to the greater of (i) the Purchase Amount (the "Cash-Out Amount") or (ii) the amount payable on the number of shares of Common Stock equal to the Purchase Amount divided by the Liquidity Price (the "Conversion Amount"). If any of the Company's securityholders are given a choice as to the form and amount of Proceeds to be received in a Liquidity Event, the Investor will be given the same choice, provided that the Investor may not choose to receive a form of consideration that the Investor would be ineligible to receive as a result of the Investor's failure to satisfy any requirement or limitation generally applicable to the Company's securityholders, or under any applicable laws.

This SAFE will automatically terminate (without relieving the Company of any obligations arising from a prior breach of or non-compliance with thisSAFE) immediately following the earliest to occur of: (i) the issuance of Capital Stock to the Investor pursuant to the automatic conversion of this SAFE under agreement; or (ii) the payment, or setting aside for payment, of amounts due the Investor pursuant to the agreement.

As of December 31, 2021, the \$150,000 received from SAFE was recorded at6% imputed interest. The maturity date of the loan is defined by the SAFE agreement as discussed above.

On August 19, 2021, the company entered into a convertible loan agreement with a related party, with a principal balance of \$99,900 at 9% interest. The noteholder has the right to convert the principal and interest into common shares of the Company. This loan included an original issuance discount of 5% and included 99,900 Warrants at an exercise price of \$1, exercisable for 5 years from the issue date on the face of the Warrant. The maturity date of the loan was February 19, 2022. In May 2022, the Company and the note holder agreed to cancel and void previous warrants and entered into a new agreement for 115,185 warrants with an exercise price of \$2.50. As of September 30, 2022, the \$99,900 principal and the \$4,950 overpayment of the note remained outstanding and had accrued interest of \$10,165. The warrants discussed above were initially discounted against the notes, subsequent to year end December 31, 2021, they were deemed voided and new warrants in accordance with the new terms were issued. We assessed the differences in fair value and determined that they were de minimis and expensed the full value of the new warrants.

The Company specified that an entity should adopt ASU 2020-06 as of the beginning of its annual fiscal year. After adoption of ASU 2020-06, no derivative liabilities will be triggered from these convertible notes. See Note 8 for details.

F-37

### NOTE 10 -RELATED PARTY

During the year-ended December 31, 2021, there were 400,000 common shares issued to CFO Dane Saglio, for services rendered.

As of September 30, 2022 and December 31, 2021, the accrued salary for related parties was \$329,666 and \$285,666, respectively. The increase reflects salaries accrued for employees but not paid in the period ending September 30, 2022.

As of September 30, 2022, the Company accrued consulting fees to related parties of \$60,000 for services provided to the Company.

During the year ended December 31, 2021, the Company issued options totaling 205,000 shares to related party for services renderedThe options have an original life of ten years and vest at different rates over as much as 24 months. During the nine months ended September 30, 2022, the Company did not issue any options and recognized \$1,352 of stock-based compensation related to outstanding stock options.

# NOTE 11- SHAREHOLDER'S EQUITY

### Preferred Stock

The Company has 10,000,000 shares of preferred stock authorized at a par value of \$0.00001. As of September 30, 2022 and December 31, 2021, there were no preferred shares issued.

### Common Stock

In June of 2020, BullFrog AI Holdings, Inc. acquired BullFrog AI, Inc. via a 1:1 share exchange. Immediately prior to the share exchange, each authorized common share of BullFrog AI, Inc. was split into 25 shares of common stock. Share amounts in our financial statements for 2021 and September 30, 2022 have been adjusted to reflect this forward share split and shares exchange. All of our operations are currently conducted through BullFrog AI Holdings, Inc. BullFrog AI, Inc., is a wholly owned subsidiary, has the sole purpose of housing and protecting all of the organization's intellectual property. BullFrog AI Management, LLC is a wholly owned subsidiary that handles all HR and payroll activities.

The Company has 100,000,000 shares of common stock authorized at a par value of \$0.00001. During the nine months ended September 30, 2022, 1,441,888 common shares were issued for conversion of principal and interest by a noteholder, 785,572 commons shares were canceled as the change in number of shares issued as part of the cancellation of the prior agreements and new agreements with advisors, and 279,159 common shares were issued under a license agreement, see Note 12 for further discussion. As of September 30, 2022 and December 31, 2021, there are 28,195,022 and 27,259,547, shares outstanding, respectively.

After the Company signed two licenses for two drug programs from universities in the first half of 2022 it engaged an independent valuation firm to perform an Enterprise-Equity valuation. The results of this engagement resulted in an increase in the value per share of common stock used in the Black Scholes option pricing model employed to value the Company's equity grants and warrant issuances.

### Stock Options

During the first quarter of 2022, 2,795,475 shares of options were forfeited due to the termination of employment.

During the year ended December 31, 2021, the Company granted a total of 205,000 shares of options to employee of the Company for services rendered. The options have an original life of ten years and vest at different rates over as much as 48 months. During the years ended December 31, 2021, the Company vested 9,167 of these options and recognized \$157 of stock-based compensation related to outstanding stock options. During the nine months ended September 30, 2022, 90,377 shares of these options was vested and \$1,559 stock-based compensation was recognized.

F-38

The following tables summarizes the stock options activity for the nine months ended September 30, 2022 and for the year ended December 31, 2021:

	Options
Granted and outstanding, December 31, 2020	6,193,750
Granted during 2021	205,000
Exercised	-
Forfeited	-
Expired during 2021	(3,118,750)
Granted and outstanding, December 31, 2021	3,280,000
Granted during Q1 2022	
Exercised	-
Forfeited	(2,795,475)
Expired during Q1 2022	
Granted and outstanding, March 31, 2022	484,525
Granted during Q2 2022	
Exercised	-
Forfeited	-
Expired during Q2 2022	
Granted and outstanding, June 30, 2022	484,525
Granted during Q3 2022	
Exercised	-
Forfeited	-
Expired during Q3 2022	
Granted and outstanding, September 30, 2022	484,525

	Options	Intrinsic Value of Vested Options	Weight Averaged exercise Price
Vested and outstanding, December 31, 2020	733,567	12,706	0.48
Granted and vested during 2021	9,167	157	0.38
Exercised	-	-	-
Forfeited	-	-	-
Expired	(465,669)	(7,922)	(0.48)
Vested and outstanding, December 31, 2021	277,065	4,941	0.48
Granted and vested during Q1 2022	37,877	658	0.41
Exercised	-	-	-
Forfeited	-	-	-
Expired	<u> </u>	<u>-</u>	
Vested and outstanding, March 31, 2022	314,942	5,599	0.47
Granted and vested during Q2 2022	26,250	450	0.46
Exercised	-	-	-
Forfeited	-	-	-
Expired	<u> </u>		
Vested and outstanding, June 30, 2022	341,192	6,049	0.46
Granted and vested during Q3 2022	26,250	451	0.38
Exercised	-	-	-
Forfeited	-	-	-
Expired	<u> </u>	<u> </u>	
Vested and outstanding, September 30, 2022	367,442	6,500	0.46
	F-39		

As of September 30, 2022 and December 31, 2021, 90,377 and 9,167 options vested, respectively, 0 and 465,669 options expired and the outstanding stock options have a weighted average remining life 7.19 and 7.38 years, respectively.

As of December 31, 2021 and 2020, the fair value of options vested and outstanding was \$4,941 and \$12,706, respectively. The aggregate fair value of the options measured during the nine months ended September 30, 2022 and the year ended December 31, 2021 was calculated using the Black-Scholes option pricing model based on the following assumption:

	September 30, 2022	<b>December 31, 2021</b>
Fair Value of Common Stock on measurement date	\$ 0.68	\$ 0.044
Risk free interest rate	From 1.86% to 3.01%	From 1.26% to 1.33%
Volatility	89%	93%
Dividend Yield	0%	0%
Expected Term	4-10	10

- (2) The trading volatility was determined by calculating the volatility of the Company's peer group.
- (3) The Company does not expect to pay a dividend in the foreseeable future.

#### Warrants

During the nine months ended September 30, 2022, the Company granted a total of 865,617 warrants. The warrants have an original life of four to ten years and vest immediately and over 12 months. During the nine months ended nine 30, 2022, 1,095,410 shares of warrants were vested and amended with an intrinsic value of \$288,683, 363,589 shares of warrants were reclassified with an intrinsic value of \$11,097, and 294,900 shares of warrants with an intrinsic value of \$1,883 were forfeited.

During the year ended December 31, 2021, the Company granted a total of 3,021,614 warrants. Of this amount 1,400,000 warrants, with a fair value of \$12,462, were granted to advisors related to the Company's IPO objective. The warrants have an original life of five years and vest 30 days before the intended IPO. During the year ended December 31, 2021, 0 shares of these warrants were vested. As of June 30 30, 2022, the warrants for 1,400,000 shares were cancelled and voided per agreement of the warrant holder and the Company. There was no gain or loss due to cancellation. In 2021, 972,500 warrants, with a fair value of \$28,683, were issued for services rendered. The warrants have an original life of ten years and vest at different rates over as much as 36 months. During the year ended December 31, 2021, 220,000 shares of these warrants are vested, with a fair value of \$6,567. As of September 30, 2022, 419,357 shares of these warrants were vested with a fair value of \$12,427 and 37,500 warrants were forfeited.

F-40

During the year ended December 31, 2021, the Company issued 650,014 warrants with a fair value of \$12,980, in connection with convertible bridge debt agreements with multiple parties including a related party. The warrants had an original life of five years. During the period ending June 30, 2022, the Company determined that 355,144 warrants, with a fair value of \$11,097, should not have been issued as further described in footnote 8. The fair value was reclassified to Additional Paid in Capital. As discussed in Note 8 in May 2022, the Company and the note holders agreed to cancel and void the previous 99,000 warrants and entered into a new agreement for 115,185 and the exercise price increased to \$2.50 from \$1, with a fair value of \$15,412. As discussed in Note 8 in May 2022, the Company and the note holders agreed to cancel and void the previous 195,000 warrants and entered into a new agreement for 225,000 warrants with an exercise price of \$2.50, with a fair value of \$64,978.

The 650,014 warrants discussed above were initially discounted against the notes, subsequent to year end December 31, 2021, they were deemed voided and these individuals were or will be issued new warrants in accordance with the new terms as stated above. We assessed the differences in fair values and determined the values were de minimis and expensed the full value of the new warrants.

The following tables summarize the warrant activity for the nine months ended September 30, 2022 and for the year ended December 31, 2021,

	Warrants
Granted and outstanding, December 31, 2020	3,470,000
Granted during 2021	3,021,614
Exercised	-
Forfeited	-
Expired during 2021	
Granted and outstanding, December 31, 2021	6,491,614
Granted during Q1 2022	286,000
Exercised	-
Forfeited	
Reclassification	(391,714)
Expired during Q1 2022	
Granted and outstanding, March 31, 2022	6,385,900
Granted during Q2 2022	549,617
Exercised	-
Forfeited	
Reclassification	(1,694,900)
Expired during Q2 2022	
Granted and outstanding, June 30, 2022	5,240,617
Granted during Q3 2022	30,000
Exercised	-
Forfeited	-
Expired during Q3 2022	
Granted and outstanding, September 30, 2022	5,270,617

F-41

	Warrants	Intrinsic Value of Warrants	Weight Averaged exercise Price
Vested and outstanding, December 31, 2020	3,359,583	127,480	0.14
Granted and Vested	962,864	22,208	0.45
Exercised	<del>-</del>	<del>-</del>	-
Forfeited	-	-	-
Expired		<u>-</u>	
Vested and outstanding, December 31, 2021	4,322,447	149,688	0.40
Granted and Vested during Q1 2022	199,625	29,359	0.38
Exercised	-	-	-
Forfeited	-	-	-
Reclassification	(363,589)	(11,097)	0.04
Expired		<u>-</u>	<del>_</del> _
Vested and outstanding, March 31, 2022	4,158,483	167,950	0.43
Granted and Vested during Q2 2022	742,251	208,238	0.68
Amend			
Exercised	-	-	-
Forfeited	(294,900)	(1,883)	1.00
Reclassification	-		-
Expired	<del></del>	<u>-</u>	

Vested and outstanding, June 30, 2022	4,605,834	374,940	0.27
Granted and Vested during Q3 2022	218,450	51,536	0.44
Exercised	-	-	-
Forfeited	-	-	-
Expired	-	-	-
Vested and outstanding, September 30, 2022	4,824,284	426,476	0.28

As of September 30, 2022, 5,270,617 warrants are outstanding, and 4,824,284 warrants vested, and the vested stock warrants have a weighted average remining life of 7.34 years.

For the nine months ended September 30, 2022, the aggregate fair value of warrants vested was \$289,768. The aggregate fair value of the warrants measured during the nine months ended September 30, 2022 was calculated using the Black-Scholes option pricing model and recorded as stock-based compensation.

For the year ended December 31, 2021, 6,492,614 warrants are outstanding, 4,322,447 warrants are vested with an intrinsic value of @22,208, and the vested stock warrants have a weighted average remining life of 7.73 years.

As of December 31, 2021, the aggregate fair value of warrants vested was \$149,688. The aggregate fair value of the warrants measured during the year-ended December 31, 2021 was calculated using the Black-Scholes option pricing model.

F-42

The number of warrants related to the Convertible Bridge Notes discussed Note 8 is not yet determinable, given some of the terms discussed in Note 8 have not been completed. Therefore, the warrants to be issued are not accounted for in our warrants outstanding. Due to the IPO price not yet being probable, no current accounting for these warrants has been journalized.

	Sept	ember 30, 2022	 December 31, 2021
Fair Value of Common Stock on measurement date	\$	0.68	\$ 0.044
Risk free interest rate		From 1.86% to 1.97%	From 0.78% to 1.63%
Volatility		89%	93%
Dividend Yield		0%	0%
Expected Term		10 years	5-10 years

- (1) The risk-free interest rate was determined by management using the market yield on U.S. Treasury securities with comparable terms as of the measurement date.
- (2) The trading volatility was determined by calculating the volatility of the Company's peer group.
- (3) The Company does not expect to pay a dividend in the foreseeable future.
- (4) After the Company signed two licenses for two drug programs from universities in the first half of 2022 it engaged an independent valuation firm to perform an Enterprise-Equity valuation. The results of this engagement resulted in an increase in the value per share of common stock used in the Black Scholes option pricing model employed to value the Company's equity grants and warrant issuances for all 2022 grant date stock prices.

### NOTE 12 – MATERIAL AGREEMENTS

JHU-APL Technology License

On February 7, 2018, the Company entered into an exclusive, world-wide, royalty-bearing license from JHU-APL for the technology. The license covers three (3) issued patents, 1 new provisional patent application, non-patent rights to proprietary libraries of algorithms and other trade secrets, the license also includes modifications and improvements. In October of 2021, the Company executed an Amendment to the original license which represents improvements and new advanced analytics capabilities. In consideration of the rights granted to the Company under the License Agreement JHU received a warrant equal to five (5%) percent of the then fully diluted equity base of the Company, which shall be diluted following the closing of this offering. Under the terms of the License Agreement, JHU will be entitled to eight (8%) percent royalty on net sales for the services provided by the Company in which the JHU licensed technology was utilized, as well as fifty (50%) percent of all sublicense revenues received by the Company. In addition, the Company is required to pay JHU an annual maintenance fee of \$1,500. Minimum annual royalty payments are \$20,000 for 2022, \$80,000 for 2023, and \$300,000 for 2024 and beyond, if cumulative annual royalty payments do not reach these levels, the amount due to JHU to reach the annual minimum is due by January 31st of the following year. Failure to make annual royalty payments is considered a material breach under the agreement and upon notice from JHU of a material breech, the Company shall have 60 days to cure the material breech. On July 8, 2022, the company entered into an exclusive, world-wide, royalty-bearing license from JHU-APL for the additional technology developed to enhance the bfLEAPIM platform. This license provides the Company with new intellectual property and also encompasses most of the intellectual property from the initial February 2018 license. In consideration of the new license, the Company issued 279,159 shares of common stock. (see note 11) Under the terms of the new License Agreement, JHU will be entitled to eight (8%) percent of net sales for the services provided by the Company to other parties and 3% for internally development drug projects in which the JHU license was utilized. The new license also contains tiered sub licensing fees that start at 50% and reduce to 25% based on revenues. In addition, under the new license agreement, the minimum annual royalty payments are \$30,000 for 2022, \$80,000 for 2023, and \$300,000 for 2024 and beyond. As of September 30, 2022, we have accrued, \$22,500 of the 2022 minimum annual royalty payments. See Note 11 for details on warrants issued related to this agreement.

George Washington University - Beta2-spectrin siRNA License

On January 14, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from George Washington University (GWU) for rights to use siRNA targeting Beta2-spectrin in the treatment of human diseases, including hepatocellular carcinoma (HCC). The license covers methods claimed in three US and worldwide patent applications, and also includes use of this approach for treatment of obesity, non-alcoholic fatty liver disease, and non-alcoholic steatohepatitis.

F-43

In consideration of the rights granted to the Company under the License Agreement GWU received a \$20,000 License Initiation Fee. Under the terms of the License Agreement, GWU will be entitled to a three percent (3%) royalty on net sales subject to quarterly minimums once the first sale has occurred subsequent to regulatory approval, as well sublicense or assignment fees in the event the Company sublicenses or assigns their rights to use the technology. The Company will also reimburse GWU for previously incurred and ongoing patent costs. The Sublicense and Assignment fee amounts decline as the Company advances the clinical development of the licensed technology. The license agreement also contains milestone payments for clinical development through the approval of an NDA and commercialization. As of September 30, 2022, there has been no accrual for royalties, since we have not begun revenue. The Company assessed whether the license should be capitalized and determined that the licensed program is early stage and therefore the Company expensed the license fee and will expense development costs until commercial viability is likely.

Johns Hopkins University - Mebendazole License

On February 22, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from Johns Hopkins University (JHU) for the use of an improved

formulation of Mebendazole for the treatment of any human cancer or neoplastic disease. This formulation shows potent activity in animal models of different types of cancer, and has been evaluated in a Phase I clinical trial in patients with high-grade glioma (NCT01729260). The trial, an open-label dose-escalation study, assessed the safety and efficacy of the improved formulation with adjuvant temozolomide in 24 patients with newly diagnosed gliomas. Investigators observed no dose-limiting toxicity in patients receiving all but the highest tested dose (200mg/kg/day). Four of the 15 patients receiving the maximum tested dose of 200mg/kg/day experienced dose-limiting toxicity, all of which were reversed by decreasing or eliminating the dose given. There were no serious adverse events attributed to mebendazole at any dose during the trial. 41.7% of patients who received mebendazole were alive at two years after enrollment, and 25% were alive at four years (Gallia et al., 2021).

The license covers six (6) issued patents and one (1) pending application. In consideration of the rights granted to the Company under the License Agreement JHU will receive a staggered Upfront License Fee of \$250,000. The Company will also reimburse JHU for previously incurred and ongoing patent costs. Under the terms of the License Agreement, JHU will be entitled to three- and one-half percent (3.5%) royalty on net sales by the Company. In addition, the Company is required to pay JHU minimum annual royalty payments of \$5,000 for 2023, \$10,000 for 2024, \$20,000 for 2025, \$30,000 for 2026 and \$50,000 for 2027 and each year after until the first commercial sale after which the annual minimum royalty shall be \$250,000. The license agreement also contains milestone payments for clinical development steps through the approval of an NDA and commercialization. The license covers six (6) issued patents and one (1) pending application. In consideration of the rights granted to the Company under the License Agreement JHU will receive a staggered Upfront License Fee of \$250,000. The initial payment for \$50,000 was paid and the remaining balance is deferred until the earlier of; we complete the IPO, raise \$10 million in financing or until 9 months from the effective date of the license. As of September 30, 2022, the balance of accrued expense related to this license agreement was \$253,921. The Company assessed whether the license should be capitalized and determined that the licensed program is early stage and therefore the Company expensed the license fee and will expense development costs until commercial viability is likely.

F-44

#### NOTE 13 - COMMITMENTS AND CONTINGENCIES

The Company follows ASC 450, Contingencies, which requires the Company to assess the likelihood that a loss will be incurred from the occurrence or non-occurrence of one or more future events. Such assessment inherently involves an exercise of judgment. In assessing possible loss contingencies from legal proceedings or unasserted claims, the Company evaluates the perceived merits of such proceedings or claims, and of the relief sought or expected to be sought.

If the assessment of a contingency indicates that it is probable that a material loss will be incurred and the amount of the liability can be estimated, then the estimated liability would be accrued in the Company's financial statements. If the assessment indicates that a potentially material loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, and an estimate of the range of possible losses, if determinable and material, would be disclosed. Loss contingencies considered remote are generally not disclosed unless they involve guarantees, in which case the guarantees would be disclosed.

While not assured, management does not believe, based upon information available at this time, that a loss contingency will have material adverse effect on the Company's financial position, results of operations or cash flows.

### NOTE 14 – SUBSEQUENT EVENTS

On October 5, 2022, the Company entered into an exchange agreement with the Investor whereby all of his common stock, 5,141,450 shares, were exchanged into shares of Series A Convertible Preferred Stock. The Series A Preferred Stock is the economic equivalent of the common stock but has no voting rights and is subject to a blocker which prohibits the conversion into common stock if it would result in the Investor owning more than 4.99% of the Company's outstanding common stock at such time. For a description of the rights and preferences of the Series A Preferred Stock.

On October 13, 2022, the Company entered into an exclusive, world-wide, royalty-bearing license from Johns Hopkins University (JHU) and the Institute of Organic Chemistry and Biochemistry (IOCB) of the Czech Academy of Sciences for rights to commercialize N-substituted prodrugs of mebendazole that demonstrate improved solubility and bioavailability. The license covers prodrug compositions and use for treating disease as claimed in multiple US and worldwide patent applications. In consideration for the rights granted to the Company under the License Agreement JHU and IOCB will receive a staggered upfront license fee of \$100,000. The Company will also reimburse JHU and IOCB for previously incurred patent costs.

F-45

Units
Each Unit Consisting of
One Share of Common Stock and
One Warrant to Purchase One share of Common Stock

**PROSPECTUS** 

WALLACHBETH CAPITAL LLC

VIEWTRADE SECURITIES, INC.

, 2022

Through and including , 2022 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION DATED NOVEMBER 28, 2022

#### Common Stock

#### BULLFROG AI HOLDINGS, Inc.

This prospectus relates to 1,985,493 shares of common stock Bullfrog AI Holdings, Inc. (the "Company", "we", "us", "our") that may be sold from time to time by the selling stockholders named in this prospectus, which includes:

- 1,207,469 shares of common stock held by selling stockholders;
- 276,512 shares of common stock upon the conversion of convertible notes (the "Convertible Bridge Notes") held by selling stockholders (the "Noteholders') at
  a conversion price that reflects a 20% discount from the initial public offering price; and
- 276,512 shares of common stock upon exercise of currently outstanding warrants held by the Noteholders at an exercise price of 90% of the initial public offering prices of our initial public offering (the "Noteholder Warrants") and 225,000 shares of common stock upon exercise of commons stock purchase warrants.

The selling stockholders must sell their shares at a fixed price per share of \$ , which is the per share price of the shares being offered in our initial public offering, until such time as our shares are listed on a national securities exchange. Thereafter, the shares offered by this prospectus may be sold by the selling stockholders from time to time in the open market, through privately negotiated transactions or a combination of these methods, at market prices prevailing at the time of sale or at negotiated prices. By separate prospectus (the "IPO Prospectus"), we have registered an aggregate of 1,317,647 Units which we are offering for sale to the public through our underwriters, excluding any shares issuable upon the underwriters' over-allotment option.

The 1,985,493 shares of common stock offered by the selling stockholders is defined herein as the "Resale Shares." For a more detailed description of the Convertible Bridge Notes and the Noteholder Warrants, see "Description of Capital Stock—Convertible Notes and Warrants."

We intend to apply to list our shares of common stock for trading on the Nasdaq Capital Market, subject to official notice of issuance, under the symbol "BFRG." No assurance can be given that our application will be approved. The consummation of this offering is conditioned on obtaining Nasdaq approval.

We are an emerging growth company under the Jumpstart our Business Startups Act of 2012, or JOBS Act, and, as such, may elect to comply with certain reduced public company reporting requirements for future filings. Investing in our common stock involves a high degree of risk.

The distribution of securities offered hereby may be effected in one or more transactions that may take place on The Nasdaq Capital Market, including ordinary brokers' transactions, privately negotiated transactions or through sales to one or more dealers for resale of such securities as principals, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. Usual and customary or specifically negotiated brokerage fees or commissions may be paid by the selling stockholders. No sales of the shares covered by this prospectus shall occur until the shares of common stock sold in our initial public offering begin trading on The Nasdaq Capital Market. Currently, there is no public market for our common stock.

Investing in our securities is highly speculative and involves a significant degree of risk. See "Risk Factors" beginning on page 8 of this prospectus for a discussion of information that should be considered before making a decision to purchase our securities.

Sales of the shares of our common stock registered in this prospectus and the IPO Prospectus will result in two offerings taking place concurrently which might affect price, demand, and liquidity of our common stock.

You should rely only on the information contained in this prospectus and any prospectus supplement or amendment. We have not authorized anyone to provide you with different information. This prospectus may only be used where it is legal to sell these securities. The information in this prospectus is only accurate on the date of this prospectus, regardless of the time of any sale of securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2022.

[Alternate Page for Resale Prospectus]

### THE OFFERING

#### EXPLANATORY NOTE

Concurrent with this offering, the Company is registering shares of common stock in connection with an initial public offering of \( \mathbb{J} 17,647 \) Units through the underwriters. Sales by stockholders that purchased shares in our common stock as a part of the Units from the initial public offering may reduce the price of our common stock, demand for our shares and, as a result, the liquidity of your investment.

Alt-1

# [Alternate Page for Resale Prospectus]

#### USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the Resale Shares. However, upon any exercise of the Noteholder Warrants, we will receive cash proceeds per share equal to the exercise price of such warrants. The Noteholder Warrants have a per share exercise price equal to 90% of the initial public offering price per share. If all of the Noteholder Warrants are exercised, the aggregate gross proceeds from the warrant exercise prices would be approximately \$ . We cannot predict the number of warrants that will be exercised by the Noteholders.

We have no specific plan for such proceeds except to generate funds for working capital and general corporate purposes. We will have broad discretion in the way that we use these proceeds.

The selling stockholders will pay any underwriting discounts and commissions and expenses incurred by them for brokerage, accounting, tax or legal services or any other expenses incurred by them in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees and expenses of our counsel and our accountants.

#### [Alternate Page for Resale Prospectus]

#### SELLING STOCKHOLDERS

This prospectus covers the possible resale by the selling stockholders identified in the table below of up to 1,985,493 shares of our common stock (the "Resale Shares"). The Resale Shares offered by the selling stockholders includes the following: (i) 1,207,469 shares of common stock held by selling stockholders; (ii) 276,512 shares of common stock upon the conversion of Convertible Bridge Notes held by Noteholders at a conversion price that reflects a \$25 million dollar pre IPO value; and (iv) 276,512 shares of common stock upon exercise of currently outstanding Noteholder Warrants at an exercise price of 90% of the initial public offering prices of our initial public offering and 225,000 shares of common stock upon exercise of common stock upon exercise of common stock purchase warrants at an exercise price of \$2.50 per share. The transactions by which the selling stockholders acquired their securities from us were exempt under the registration provisions of the Securities Act.

The selling stockholders may sell some, all, or none of the Resale Shares. We do not know whether any selling stockholder will exercise the Noteholder Warrants, and upon such exercise, how long such selling stockholders will hold the Resale Shares before selling them, and we currently have no agreements, arrangements, or understandings with the selling stockholders regarding the sale of any of the Resale Shares. Unless otherwise indicated in the footnotes to the table below, no selling stockholder has had any material relationship with us or any of our affiliates within the past three years other than as a security holder.

We have prepared the following table based on written representations and information furnished to us by or on behalf of the selling stockholders. Since the date on which the selling stockholders provided this information, the selling stockholders may have sold, transferred, or otherwise disposed of all or a portion of the Convertible Bridge Notes or the Noteholder Warrants in a transaction exempt from the registration requirements of the Securities Act. Unless otherwise indicated in the footnotes to the table below, we believe that (i) none of the selling stockholders are broker-dealers or affiliates of broker-dealers, and (ii) no selling stockholder has direct or indirect agreements or understandings with any person to distribute their Resale Shares. To the extent any selling stockholder identified below is, or is affiliated with, a broker-dealer, it could be deemed, individually, but not severally, to be an "underwriter" within the meaning of the Securities Act. Information about the selling stockholders may change over time.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of Resale Shares as of November 28, 2022, assuming the conversion of Convertible Bridge Notes and the exercise of the Noteholder Warrants held by the selling stockholders on that date, without regard to any limitations on conversions and exercises.

The third column lists the shares of common stock being offered by this prospectus by the selling stockholders.

This prospectus generally covers the resale of the sum of the maximum number of shares of common stock issuable upon the conversion Convertible Bridge Notes and the exercise of all Noteholder Warrants held by the selling stockholders, each as of the trading day immediately preceding the date of this prospectus and all subject to adjustment, without regard to any limitations on the conversion or exercise of these securities. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

Under the terms of the, Convertible Bridge Notes and the Noteholder Warrants, a selling stockholder may not convert the Convertible Bridge Notes or exercise the Noteholder Warrants to the extent such conversion or exercise would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of common stock which would exceed 4.99% of our then outstanding common stock following such conversion or exercise. This limitation may be waived (up to a maximum of 9.99%) by the selling stockholder and in its sole discretion, upon not less than sixty-one (61) days' prior notice to us. The number of shares in the table below do not reflect this limitation. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

Selling Stockholder	Number of Shares Beneficially Owned Before Offering	Number of Shares Being Offered	Number of Shares Beneficially Owned After Offering	Percentage of Shares Beneficially Owned After Offering (%) <sup>(1)</sup>
Abhishake Chhibber	4,464	*		
Bigger Capital Fund, LP (2)	136,052	3.38%		
Brittani Phillips (3)	13,882	*		
Cavalry Investment Fund LP (4)	136,052	3.38%		
Christopher Virtue Trust (5)	15,236	*		
Dawn Cicone	107,142	2.66%		
Dr Barry Ginsberg(6)	18,846	*		
Gerald Newman	500,000	12.43%		
GreenTree Financial Group Inc. (7)	575,000	14.30%		
Indira Virtue Trust (8)	15,236	*		
Johns Hopkins University Applied Physics Laboratory, LLC (9)	39,879	*		
Shary Moxley (10)	54,570	1.36%		
Steve Simon(11)	13,604	*		
Walleye Opportunities Master Fund Ltd. (12)	136,052	3.38%		
Charles Stevenson (13)	13,314	*		
TEDCO(14)	205,984	5.12%		

<sup>\*</sup>Represents beneficial ownership of less than one percent.

- (1) Applicable percentage ownership after to this offering is based on 4,021,935 shares of common stock deemed to be outstanding as of November 28, 2022. As noted above, for purposes of computing percentage ownership after this offering, we have assumed that all Convertible Bridge Notes and the Noteholder Warrants held by the selling stockholders will be converted to common stock and sold in this offering.
- (2) Consists of (i) 68,026 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 68,026 shares of common stock upon exercise of Noteholder Warrants. Michael Bigger, principal of Bigger Capital Fund, LP, has the power to vote or dispose of the shares held of record by Bigger Capital Fund, LP and may be deemed to beneficially own those shares.
- (3) Consists of (i) 6,941 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 6,491 shares of common stock upon exercise of Noteholder Warrants.
- (4) Consists of (i) 68,026 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 68,026 shares of common stock upon exercise of Noteholder Warrants. Thomas Walsh, principal of the Cavalry Investment Fund LP, has the power to vote or dispose of the shares held of record by Cavalry Investment Fund LP and may be deemed to beneficially own those shares.

- (5) Consists of (i) 7,618 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 7,618 shares of common stock upon exercise of Noteholder Warrants. Christopher Virtue, principal of the Christopher Virtue Trust, has the power to vote or dispose of the shares held of record by Christopher Virtue Trust and may be deemed to beneficially own those shares.
- (6) Consists of (i) 9,523 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 9,523 shares of common stock upon exercise of Noteholder Warrants.
- (7) Consists of (i) 350,000 shares of common stock and (ii) shares of common stock upon exercise of common stock purchase warrants at an exercise price of \$2.50 per share. The selling stockholder may not exercise the warrants to the extent such conversion or exercise would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of common stock which would exceed 9.99% of our then outstanding common stock following such conversion or exercise. Chris Cottone, principal of the GreenTree Financial Group Inc., has the power to vote or dispose of the shares held of record by GreenTree Financial Group Inc. and may be deemed to beneficially own those shares.
- (8) Consists of (i) 7,618 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 7,618 shares of common stock upon exercise of Noteholder Warrants. Indira Virtue, principal of the Indira Virtue Trust, has the power to vote or dispose of the shares held of record by Indira Virtue Trust and may be deemed to beneficially own those shares.
- (9) [\*], principal of the Johns Hopkins University Applied Physics Laboratory, LLC, has the power to vote or dispose of the shares held of record by Johns Hopkins University Applied Physics Laboratory, LLC and may be deemed to beneficially own those shares.
- (10) Consists of (i) 27,275 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 27,275 shares of common stock upon exercise of Noteholder Warrants.
- (11) Consists of (i) 6,802 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 6,802 shares of common stock upon exercise of Noteholder Warrants.
- (12) Consists of (i) 68,026 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 68,026 shares of common stock upon exercise of Noteholder Warrants Pura Vida Investments, LLC ("PVI") serves as the sub-adviser to Walleye Opportunities Master Fund Ltd. ("WOF"). Efrem Kamen serves as the managing member of PVI. By virtue of these relationships, PVI and Efrem Kamen may be deemed to have shared voting and dispositive power principal of the shares held of record by Walleye Opportunities Master Fund Ltd and may be deemed to beneficially own those shares.
- (13) Consists of (i) 6,657 shares of common stock upon the conversion of Convertible Bridge Notes and (ii) 6,657 shares of common stock upon exercise of Noteholder Warrants.
- (14) Jack Minor, principal of TEDCO, has the power to vote or dispose of the shares held of record by TEDCO and may be deemed to beneficially own those shares.

Alt-3

### [Alternate Page for Resale Prospectus]

### PLAN OF DISTRIBUTION

We are registering the Resale Shares to permit the resale of the Reseal Shares by the selling stockholders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale of the Resale Shares. However, upon any exercise of the Noteholder Warrants held by the selling stockholders, we will receive cash proceeds per share equal to the exercise price of such warrants. We will pay all expenses (other than discounts, commissions, and transfer taxes, if any) relating to the registration of the Resale Shares in the registration statement of which this prospectus forms a part.

The selling stockholders may sell all or a portion of the Resale Shares beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers, or agents. If the Resale Shares are sold through underwriters or broker-dealers, the selling stockholders will be responsible for any underwriter discounts or commissions and any applicable transfer taxes. The Resale Shares may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions,

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales:
- in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law

The selling stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus. The selling stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

In connection with the sale of the securities or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

Alt-4

### [Alternate Page for Resale Prospectus]

#### LEGAL MATTERS

The validity of the common stock covered by this prospectus will be passed upon by Sichenzia Ross Ference LLP.

Alt-5

#### PART II — INFORMATION NOT REQUIRED IN PROSPECTUS

### Item 13. Other Expenses of Issuance and Distribution

The following table sets forth an itemization of the various expenses, all of which we will pay, in connection with the issuance and distribution of the securities being registered. All of the amounts shown are estimated except the SEC Registration Fee and the FINRA filing fee.

SEC registration fee	\$ 2,000
FINRA filing fee	\$ 5.000
NASDAQ listing fee	\$ 50,000
Legal fees and expenses	\$ 160,000
Accounting fees and expenses	\$ 34,000
Transfer agent and registrar fees	\$ 5,000
Miscellaneous fees and expenses	\$ 4,000
Total	\$ 260,000

All amounts are estimated, except the U.S. Securities and Exchange Commission registration fee, the NASDAQ listing fee and the FINRA filing fee.

\*\* To be completed by amendment.

### Item 14. Indemnification of Directors and Officers

Nevada law provides that a Nevada corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of the corporation (i.e., a "non-derivative proceeding"), by reason of the fact that he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with the action, suit or proceeding if he or she:

- Is not liable under Section 78.138 of the Nevada Revised Statutes for breach of his or her fiduciary duties to the corporation; or
- Acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any
  criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

In addition, a Nevada corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor (i.e., a "derivative proceeding"), by reason of the fact that he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses, including amounts paid in settlement and attorneys' fees actually and reasonably incurred by him or her in connection with the defense or settlement of the action or suit if he:

- Is not liable under Section 78.138 of the Nevada Revised Statute for breach of his or her fiduciary duties to the corporation; or
- Acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation.

II-

Under Nevada law, indemnification may not be made for any claim, issue or matter as to which such a person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

NRS Section 78.747 provides that except as otherwise provided by specific statute, no director or officer of a corporation is individually liable for a debt or liability of the corporation, unless the director or officer acts as the alter ego of the corporation. The court as a matter of law must determine the question of whether a director or officer acts as the alter ego of a corporation.

To the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any non-derivative proceeding or any derivative proceeding, or in defense of any claim, issue or matter therein, the corporation is obligated to indemnify him or her against expenses, including attorneys' fees, actually and reasonably incurred in connection with the defense.

Further, Nevada law permits a Nevada corporation to purchase and maintain insurance or to make other financial arrangements on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise for any liability asserted against him or her and liability and expenses incurred by him or her in his or her capacity as a director, officer, employee or agent, or arising out of his or her status as such, whether or not the corporation has the authority to indemnify him or her against such liability and expenses.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

The Company plans to enter into an underwriting agreement in connection with this offering that provides that the underwriter is obligated, under some circumstances, to indemnify the Company's directors, officers and controlling persons against specified liabilities, including liabilities under the Securities Act.

### Item 15. Recent Issuances of Unregistered Securities

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act. The information provided below does not give effect to the proposed reverse stock split described in the accompanying prospectus.

In 2019, Bullfrog AI, Inc. sold a total of 7,917 shares of common stock to Tivoli Trust, an affiliate, for \$12 per share and raised a total of \$95,000. The sales occurred monthly throughout the year.

In March of 2020, BullFrog AI, Inc. received an investment from TEDCO - the Technology Development Corporation of Maryland, a State of Maryland Investment Fund – pursuant to the issuance of a \$200,000 convertible note with an 18-month term, 6% annual interest rate, and a 20% discount.

In June 2020 BullFrog Holdings AI, Holdings, Inc. acquired BullFrog AI, Inc. via a 1:1 share exchange. Prior to completing the share exchange, BullFrog AI, Inc. shares of common stock were forward split at a 25:1 ratio. Approximately 23 million shares of BullFrog AI Holdings, Inc. common stock were issued in the 1:1 share exchange. In addition, 1,000,000 shares were purchased by Vin Singh, the CEO, for \$100 and 1,250,000 warrants exercisable for \$0.30 were issued to JHU-APL pursuant to the 2018 licensing agreement for the bfLEAP<sup>TM</sup> technology. (do we need to say anything about the 960,000 penny warrants issued each to Haber and Themis?)

11-2

On June 23, 2021, the Company signed two consulting/advisor agreements with entities engaged to facilitate the Company's objective of seeking a public listing of its securities. Under these agreements, each advisor was to receive: (i) three (3%) percent of the fully diluted equity of the Company as measured by the equity table immediately prior to listing on NASDAQ or any other national securities exchange, with a true-up amount to be delivered within thirty (30) days prior to its expected listing day; and (ii) warrants with a term of five years to purchase 1,000,000 (in one case) and 400,000 shares of the Company's Common Stock at \$1.00 per share, which warrants will vest thirty (30) days prior to an expected going public transaction. Pursuant to these agreements, 817,786 shares of common stock were issued to each consultant as well as the above-mentioned warrants. In May 2022, these agreements were each amended so that one consultant (Newman) received 500,000 shares and the other advisor received 350,000 shares of common stock. All warrants were cancelled.,

In July 2021, the Company entered into a SAFE note agreement \$150,000 with a related party. In August the Company entered into two bridge note agreements, one, in the amount of \$99,900 with the same related party as the SAFE and the second with an unrelated party for \$195,000. The notes were issued with a 5% original issuance discount and the purchasers received 115,185 and 225,000 warrant, respectively.

In November 2021, 400,000 shares of common stock were issued under a consulting agreement with Dane Saglio, for services consistent with the responsibilities of a Chief Financial Officer. In addition, a total of 972,500 warrants with exercises prices of \$0.30-\$0.38 were issued to consultants who have been engaged as Company management and advisors. These warrant agreements have vesting terms that range for 12 to 36 months. In addition, the Company issued 205,000 options to employees with an exercise price of \$0.38 with vesting terms that range from 12 -24 months.

In December 2021, the Company initiated a placement of Bridge Notes seeking \$1.5M in operating capital to ensure the Company had operating capital while it finished the audit of its financial statements and prepared the S-1 registration statement related to the IPO. In December, the Company sold a convertible promissory note to an unrelated party for \$25,000. On April 11, 2022, the Company entered into an Exclusive placement agent and/or underwriter agreement with WallachBeth Capital LLC in connection with a proposed private and/or public offerings by the Company. As discussed in Footnote 2, a significant component of the Company's plan to secure capital is the intention of the Company to seek to be listed on a national exchange through an initial public offering ("IPO") of its common stock. WallachBeth was engaged in this regard and on April 28, 2022 the Company received net proceeds or approximately \$775,000 from the sale of Convertible Bridge Notes and Warrants to several institutional investors as well as several individual accredited investors. In addition to the money received on April 28th, the Company also received \$100,000 from the sale of a Convertible Bridge Note and Warrants to a related party in early April. The Company also received net proceeds of \$20,000 from the sale of one additional Convertible Bridge Note in September 2022. The bridge notes are convertible at the IPO at a 20% discount to the IPO price and the purchasers will also a warrant for each share of common stock issued upon conversion. The warrant exercise price will be 90% of the per share IPO price.

### Item 16. Exhibits and Financial Statement Schedules

Form of Underwriting Agreement

Description

Exhibit No.

1.1

The following exhibits to this registration statement included in the Index to Exhibits are incorporated by reference.

3.1	Amended and Restated Articles of Incorporation of Bullfrog AI Holdings, Inc
3.2	Bylaws of Bullfrog AI Holdings Inc.
4.1	Form of Registrant's Common Stock certificate
4.2	Form of Underwriter's Warrant**
4.3	Form of Common Stock Purchase Warrant to be issued to Holders of the Registrant's Convertible Promissory Notes.
4.4	Form of Warrant Agent Agreement for the Warrants to be issued as part of the Units to be sold in the Offering.
4.5	Form of Common Stock Purchase Warrant to be issued as part of the Units to be sold in the Offering pursuant to the Warrant Agent Agreement (contained in form
	of underwriting agreement filed as Exhibit 4.4).
4.6	Form of Securities Purchase Agreement
4.7	Form of Convertible Promissory Note
5.1	Opinion of Sichenzia Ross Ference LLP

- 10.1 Acquisition Agreement with Bullfrog AI, Inc. Advisor Agreement between the Company and Greentree Financial Group, Inc. 10.2 10.3 Consulting Agreement between the Company and Garrett Newman 10.4 Employment Agreement 10.5 Exclusive License Agreement between the Company and Johns Hopkins University, dated February 7, 2018 10.6 Patent License Agreement between the Company and George Washington University, dated January 14, 2022 10.7 Exclusive License Agreement between the Company and Johns Hopkins University, dated February 22, 2022 10.8 License Agreement between the Company and Johns Hopkins Applied Physics Laboratory LLC, dated July 8, 2022 10.9 Exclusive License Agreement between the Company and Johns Hopkins University, dated October 13, 2022 14.1 Code of Ethics 21.1 List of significant subsidiaries of Bullfrog AI Holdings, Inc. 23.1 Consent of M&K CPAS PLLC, an independent registered public accounting firm 23.2 Consent of Sichenzia Ross Ference LLP (contained in its form of opinion filed as Exhibit 5.1 hereto) 99 1 Charter of Audit Committee 99.2 Charter of Compensation Committee 99.3\* Consent of Don Elsey 99.4\* Consent of William Enright 99.5\* Consent of Jason Hanson Registration Fee Table 107\*
- \* Previously Filed.
- \*\* To be filed by amendment.

**XRBL** 

II-3

#### Item 17. Undertakings

- (a) The undersigned registrant hereby undertakes:
  - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
    - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
    - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
    - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;
  - (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
  - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
  - (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
  - (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
    - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
    - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
    - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
    - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
  - (b) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

#### **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York on the 8th day of December 2022.

#### **BULLFROG AI HOLDINGS, INC.**

(Registrant)

By: /S/ Vininder Singh

Name: Vininder Singh

Title: Chief Executive Officer (Principal Executive Officer)

Pursuant to the requirements of the Securities Act of 1933, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
/S/ Vininder Singh	Chief Executive Officer (Principal Executive Officer) and Director	December 8, 2022
/s/ Dane Saglio	Chief Financial Officer (Principal Financial Officer)	December 8, 2022
	II-5	

#### LICENSE AGREEMENT

This License Agreement ("Agreement") is between The Johns Hopkins University Applied Physics Laboratory LLC, a Maryland limited liability company, with its principal office at 11100 Johns Hopkins Road, Laurel, MD 20723-6099 (hereinafter "JHU/APL") and Bullfrog Al Inc. (hereinafter "Company"), having an address at PO Box 336, Boyds, MD 20841.

This Agreement consists of an attached Appendix A (Payment Options), Appendix B (Schedule of JHU/APL Patent Rights) and Appendix C (Schedule of JHU/APL Non-Patent Rights).

#### RECITALS

JHU/APL, by virtue of its role as a nonprofit, University Affiliated Research Center (UARC), carries out scientific and applied research and development through its staff and is committed to licensing JHU/APL INTELLECTIJAL PROPERTY (hereinafter defined) in a manner that wi.ll benefit the public by bringing the results of that research and development into widespread use through the distribution of useful products and services, but is without capacity to commercially develop, manufacture, and distribute any such product or service itself.

During the course of JHU/APL funded research and development, and/or United States Government sponsored research and development, JHU/APL has developed certain valuable inventions, copyrighted matter., proprietary technical information, know-how, show-bow and/or trade secrets comprising the JHU/APL INTELLECTUAL PROPERTY.

The Johns Hopkins University through IBU/APL has acquired or is entitled to acquire through assignment or otherwise all right, title and interest, with the exception of certain retained rights by the United States Government, in said valuable inventions, copyrighted matter, proprietary technical information, know-how, show-how and/or trade secrets.

COMPANY desires to enter into a license agreement in order to commercially develop, manufacture, use and distribute services embodying the JHU/APL INTELLECTUAL PROPERTY throughout the world.

NOW, THEREFORE, in consideration of the foregoing premises and the following mutual covenants, and other good and valuable consideration, the receipt of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

#### ARTICLE 1 - DEFINITIONS

- 1.1 "AFFILIATED COMPANY" or "AFFILIATED COMPANIES" shall mean any person or legal entity which controls, is controlled by or is under common control with COMPANY. For purposes of this section I. I, control shall mean the direct or indirect ownership of at least fifty percent (50%) of the voting stock or other similar voting rights
- 1.2 "COMMERCIALLY REASONABLE EFFORTS" shall mean with respect to the commercialization of a product or service, efforts that are consistent with those utilized by companies of size and type similar to COMPANY for products with similar commercial potential at a similar stage, taking intoconsideration their safety and efficacy, their cost to develop, the competitiveness of alternative products, the nature and extent of their market exclusivity, the likelihood of regulatory approval, their profitability, and all other relevant factors.
- 1.3 "COMPANYIMPROVEMENT(S)" shall mean any inventions, copyrighted matter, technical information, know-how, show-how or trade secrets made by a COMPANY employee relating to the JHU/APL II\1TELLECTUAL PROPERTY.
  - 1.4 "EFFECTIVE DATE" of this License Agreement shall mean the date the last Party hereto has executed this Agreement.

1.5 "EXCLUSIVE LICENSE" shall mean a grant by JHU/APL to COMPANY and any AFFILIATED COMPANTES of its entire right and interest in the LICENSED SERVICE(S) (hereinafter defined) in the LICENSED FIELD (hereinafter defined), subject to the rights retained by the United States Government, and subject to the rights retained by JHU/APL to make, have made, provide, use, copy, modify, distribute and practice JHU/APL INTELLECTUAL PROPERTY for its non-profit purposes in connection with its research, education and public service missions including the provision of research and development services for federal, state and local governments, and further subject to the rights retained by JHU/APL to grant to the United States Government a nonexclusive, nontransferable, irrevocable, paid-up license to make, have made, provide, use, copy, modify, distribute and practice or have practiced for or on behalf of the United States Government the JHU/APL TNTELLECTUAL PROPERTY throughout the world.

- 1.6 "JHU/APL IMPROVEMENT(S)" shall mean improvements in the JHU/APL INTELLECTUAL PROPERTY comprising any inventions, copyrighted matter, including but not limited to software, and derivative works thereof, technical information, know-how, show- how and/or trade secrets made either solely by a JHU/APL employee or jointly by a JHU/APL employee and a COMPANY employee or third party employee.
- 1.7 "JHU/APL INTELLECTUAL PROPERTY" shall mean, individually and collectively, JHU/APL PATENT RIGHTS, JHU/APL UNPATENTED INTELLECTUAL PROPERTY, and JHU/APLIMPROVEMENT(S) funded by the COMPANY under R&D AGREEMENTS (hereinafter defined).
- 1.8 "JHU/APL PATENT RIGHTS" shall mean Patents and patent application(s) listed in Appendix B, any U.S. patent application(s) relating to invention disclosures listed in Appendix C filed after the EXECUTION DATE, and all continuations, divisionals, reexaminations, reissues, renewals, extensions and substitutes based thereon, and any corresponding foreign patent applications, and any patents, patents of addition, or other equivalent foreign patent rights issuing, granted or registered thereon.

3

1.9 "IliII/APL UNPATENTED INTELLECTUAL PROPERTY" shall mean and include JHU/APL's copyrighted matter, trademarks, proprietary technical information, know- how, show-how, trade secrets associated with the invention disclosures listed in Appendix C, including, but not limited to, all schematics, drawings, test and operating software (including source, object, and firmware), engineering analyses, reliability analyses, special manufacturing proce.\_%es, and quality as\$urance plans and procedures, and any other required technical information or documentation. The above includes, but is not limited to, what is existing as of the EFFECTIVE DATE and delivered to COMPANY either prior to the EFFECTIVE DATE or under this Agreement.

- 1.10 "LICENSED FIELD" shall mean analytical services for applications in biological and chemical derived pharmaceutical therapeutics,
- 1.11 Reserved.
- 1.12 "LICENSED SERVICE(S)" shall mean any service, process or method, including but not limited to development, maintenance or support services related to software or hardware, performed for or on behalf of a third party or used in the manufacture or use of a product:
  - a. the practice, use, import, offer for sale, or sale of which would constitute, but for the license granted to COMPANY pursuant to this Agreement, an infringement of a claim of JHU/APL PATENT RIGHTS (infringement shall include, but is not limited to, direct, contributory, or inducement to infringe); or
  - b. the practice of which uses, is derived substantially from or is based substantially on the JHU/APL UNPATENTED INTELLECTUAL PROPERTY.
- 1.13 "NET SALES", subject to section 6.8 below, shall mean gross revenues of any nature including, but not limited to, sales and licensing fees, maintenance and service fees, access payments and other amounts received by COMPANY and AFFILIATED COMPANfES from thesale, license to end-user customers who are not fwther sublicensing, or the practice or performance of LICENSED SERVICE(S) less:
  - a. credits (including credit card charge-backs) or allowances, refunds or discounts, if any, actually granted on account of p,ice adjustments, recalls, rejection or return ofitems previously sold, leased or otherwise disposed of; and

4

- b. excises, sales taxes, value added taxes, consumption taxes, duties, or other taxes imposed upon and paid with respect to such sales (excluding income or franchise taxes of any kind).
- 1.14 "R&D AGREEMENTS" shall mean agreements relating to sponsored research, facility use and/or technical assistance negotiated or to be negotiated between JHU/APL and COMPANY pertaining to research and development directed to the JHU/APL INTELLECTUAL PROPERTY, whether funded by IliU/APL, COMPANY or a third party including the United States Government
- 1.15 "SUBLICENSE REVENUES" shall mean consideration of any kind for sublicensee sales of LICENSED SERVJCE(S) including but not limited to cash, equity, and other consideration, whether in the form of up-front fees or milestone fees, and including any premium paid by the sublicensee over Fair Market Value for stock of COMPANY, received by COMPANY from a sublicensee in consideration for a sublicense to JHU/APL INTELLECTUAL PROPERTY granted by COMPANY; however, not included in SUBLICENSE REVENUES are amounts paid to COMPANY by the sublicensee for product development and research work performed by COMPANY, or third panies on its behalf, or for end-user customers of COMPANY who are not further sublicensing. The term "Fair Market Value" as used in this section shall mean the average price at which the stock in question is publicly trading for sixty (60) days prior to the announcement of its purchase by the sublicensee or if the stock is not publicly traded, the value of such stock as determined by the most recent private financing of COMPANY or if no private financing bas occurred, then as reasonably determined by COMPANY'S accountants.
  - 1.16 "TERRITORY" shall mean the world

5

#### ARTICLE 2 - GRANTS

- 2.1 Subject to the terms and conditions of this Agreement, JHU/APL hereby grants to COMPANY and AFFILIATED COMPANIES an EXCLUSIVE LICENSE to lliU/APL fNTELLECTUAL PROPERTY in the LICENSED FIELD and in the TERRITORY.
- 2.2 COMPANY understands that Ilill/APL has a technical direction agent relationship with the United States Government which requires that JHU/APL avoid any relationship that wou.ld jeopardize its or its employees' ability to act for the United States Government as an impartial or neutral evaluator. Therefore, any sublicense agreement and amendment to an existing sublicense agreement must be submitted to JHU/APL for review and approval prior to its execution. COMPANY shall provide at least twenty (20) business days to JHU/APL for review. Subject to JHU/APL's prior written approval, such approval not to be unreasonably withheld, and further subject to JHU/APL's rights under section 4.2, COMPANY may sublicense to others under this Agreement and amend existing sublicenses provided that the terms of such sublicenses shall be no less favorable to COMPANY than this Agreement is to JHU/APL and no broader in scope and no less restrictive on the sublicense than this Agreement is on COMPANY and are otherwise consistent with the terms of this Agreement and include provisions for the payment of JHU/APL's royalties, indemnification of JHU/APL and the flow down of the limited warranties contained herein, and further provided that COMPANY provides a copy of each such sublicense agreement and amendment to an existing sublicense agreement to JHU/APL within five(5) business days after it execution, except for end-user customers who are not further sublicensing.
- 2.3 JHU/APL IMPROVEMENT(S) funded by COMPANY under an R&D AGREEMENT and created by one or more employees of JHU/APL and one or more en1ployees of the COMPANY shall be jointly owned by the Parties.
- 2.4 For JHU/APL IMPROVEMENT(S) funded by the COMPANY under R&D AGREEMENTS, JHU/APL grantsto COMPANY an EXCLUSIVE LICENSE to COMPANY funded Ilill/APL IMPROVEMENTS in the LICENSED FIELD and in the TERRITORY.

6

- 2.5 For Rill/APL IMPROVEMENT(S) not funded by the COMPANY under R&D AGREEMENTS, but disclosed while COMPANY is under R&D AGREEMENTS, JHU/APL hereby provides COMPANY an option to license service, process or methods in such improvements in LICENSED FJELD. Such options to run for a two (2) month period beginning with the disclosure of such improvements by JHU/APL to COMPANY.
- 2.6 COMPANY hereby grants to JHU/APL a nonexclusive, paid up, nontransferable, worldwide license to make, have made, use, copy, modify, distribute and practice products, services and processes under all COMPANY owned intellectual property in COMPANY IMPROVEMENT(S), such license only for JHU/APL's non-profit purposes in connection with its research, education and public service missions including the provision of research and development services for federal, state and local governments.

#### ARTICLE 3 - SELECTION DELIVERABLES and USE

- 3.1 Specific deliverables will be defined in subsequent R&D AGREEMENTS.
- 3.2 Subject to United States export laws and regulations and third party contracts, JHO/APL shall deliver to COMPANY those deliverables named in the subsequent R&D AGREEMENTS.
  - 3.3 Prior to the first sale of each new LICENSED SERVICE, COMPANY shall provide written identification to JHU/APL detailing the specific JHU/APL

#### ARTICLE 4- RELATED CONTRACTS

4.1 JHU/APL and COMPANY intend to negotiate R&D AGREEMENTS in the form of JHU/APL's standard task order contract but neither Party should beunder any obligation to do so.

7

4.2 COMPANY understands and agrees that JHU/APL has a technical direction agent relationship with the United States Government which requires that JHU/APL avoid any work under any contract or agreement that would jeopardize its or its employees' ability to act for the United States Government as an impartial or neutral evaluator. Therefore, JHU/APL shall at all times under this Agreement retain theright to refuse to accept any subcontract or other agreement to perform any work under any such subcontract or other agreement between JHU/APL and COMPANY which in JHU/APL's sole discretion would createan actual or perceived organizational or individual conflict of interest.

#### ARTICLE 5-PATENTINFRINGEMENT AND PATENT CHALLENGE

- 5.1 Each Party will notify theother promptly in writing when any actual, alleged or threatened infringement by another is uncovered or suspected.
- 5.2 COMPANY shall have thefirst right (but not the obligation) to enforce any patent or copyright within JHU/APL INTELLECTUAL PROPERTY against any infringement or alleged infringement thereof, and shall at all times keep JHU/APL informed as to the status thereof. COMPANY may, in its sole judgment and at its own expense, institute suit against any such infringer or alleged infringer and control, settle, and defend such suit in a manner consistent with the terms and provisions hereof and recover, for its account, any damages, awards or settlements resulting therefrom, subject to section 5.4. This right to sue for infringement shall not be used in an arbitrary or capricious manner. JHU/APL shall reasonably cooperate in any such litigation at COMPANY'S expense.
- 5.3 If COMPANY elects not to enforce any patent within the JHU/APL INTELLECTUAL PROPERTY, then it shall so notify JHU/APL in writing within six (6) months of knowledge of potential infringement, and JHU/APL may, in its sole judgment and at its own expense, take steps to enforce any patent or copyright and control, settle, and defend such suit in a manner consistent with the terms and provisions hereof, and recover, for its own account, any damages, awards or settlements resulting therefrom.

0

- 5.4 Any recovery by COMPANY under section 5.2 shall be deemed to reflect lossof commercial sales, and COMPANY shall pay to .!HU/APL out of such recovery the royalties it would have otherwise received in light of the infringing sales, all reasonable costs and expenses associated with each suit or settlement to be deducted from the recove,y.
- 5.5 Should COMPANY, its AFFILIATED COMPANIES or its sublicensee(s) bring an action in federal courtor a request for reexamination or review at the United States Patent and Trademark Office seeking to invalidate (hereinafter, "challenge") JHU/APL PATENT RIGHTS, COMPANY, its AFFILIATED COMPANTES or its sublicensee(s) will give notice to JHU/APL before bringing a challenge, and pay royalties to JHU/APL at the rate of two (2) times the rates provided for in sections 6.4 and 6.5 during the pendency of the challenge Moreover, should the outcome of such challenge determine that any claim, as of the EFFECTIVE DATE or as amended, of JHU/APL PATENT RIGHTS is both valid and infringed, COMPANY, its AFFILIATED COMPANIES or its sublicensee(s) will thereafter pay royalties to JHU/APL at the rate of three (3) times the rate provided for in sections 6.4. and 6.5. COMPANY, its AFFILIATED COMPANJES or its sublicensee(s)shall pay JHU/APL directly all royalties due under this section 5.5 instead of paying such royalties into an escrow or any other account. In the event that the challenge brought by COMPANY, its AFFILJATED COMPANIES or its sublicensee(s) will not have the right to recover or recoup any royalties paid before or during the pendency of the challenge. Whether the challenge brought by the COMPANY, its AFFILIATED COMPANIES or its sublicensee(s) will be required to pay for all reasonable costs and attorney fees incurred as a result of the challenge. COMPANY, its AFFILIATED COMPANIES or its sublicensee(s) agree to bring any judicial action in the State of Maryland.

#### ARTICLE 6 - FEES ROYALTIES AND RESEARCH AND DEVELOPMENT SUPPORT

6.1 Reimbursement of patent costs and expenses: COMPANY shall be required to reimburse JHU/APL for a share of the costs to prepare, file, prosecute and maintain JHU/APL PATENT RIGHTS as set forth in Section 7.1 of this Agreement. CO:MPANY'S share for future costs shall be calculated using the formula 1/(x+y+1), where x equals one (for COMPANY), y equals thenumber of other parties to which JHU/APL has commercial licenses to the JHU/APL INTELLECTUAL PROPERTY, and 1 equals JHU/APL. Annually, on January 1 of each year, this formula shall be recalculated. COMPANY'S share for costs incurred as of the date of the execution of this Agreement shall be 50%.

- 6.2 COMPANY shall pay to JHU/APL a License Execution Fee that shall not be refundable in any part and shall not becredited against royalties or otherfees, payable as follows:
  - a. In cash: Zero dollars (\$0) is due.
  - b. In equity: As soon as practicable after the EFFECTIVE DATE, but no later than ninety (90) days from the EFFECTIVE DATE, COMPANY will issue to JHU/APL a five percent (5%) equity share in the COMPANY which shall be frozen at that level until immediately prior to the closing of COMPANY's first priced investment round (which may include notes convertible into stock as well as stock) after which time the 5% equity share in the COMPANY allocated to JHU/APL shall be unfrozen and diluted in the usual and customary accounting fashion in accordance with the level of actual capitalization.
- 6.3 COMPANY shall pay to JHU/APL a one thousand and five hundred dollar (\$1,500) Annual Maintenance Fee due within thirty (30) days of each anniversary of the EFFECTIVE DATE of this Ai'Teement. Such fees are nonrefundable and shall not becredited against royalties or otherfees.
- 6.4 For the term of this Agreement and subject to the provisions of section 8.1, COJ\r1PANY shall pay to JHU/APL a running royalty for each of the practice or performance of LICENSED SERVICE(S) by COMPANY and AFFILIATED COM.PANIES as follows:
  - a. Eight percent (8%) of NET SALES of theLICENSED SERVICE(S)
  - b. Sales of LICENSED SERVICE(S) to the United States Government by COMPANY or an AFFILIATED COMPANY shall be subject to the royalty stated in this section 6.4; however, COMPANY agrees that it shall not bill, invoice or charge the United States Government for any such royalty paid to JHU/APL, iftodosowould violate United States laws or regulations.

- c. COMPANY shall pay to JHU/APL fifty percent (50%) of all SUBLICENSE REVENUES received by COMPANY. If COMPANY sublicenses the JHU/APL INTELLECTUAL PROPERTY to an AFFILIATED COMPANY, terms shall be no less favorable to JHU/APL than as contained in this Agreement including but not limited to JHU/APL equity position in COMPANY and otherwise in accordance with Section 2.2 above. In noevent shall License Execution Fees for agreements with sublicensees or the royalty on Net Sales of the product and derivative products made by the sublicensee or COMPANY paid to JHU/APL be less than the same fees and rate as those between JHU/APL and COMPANY.
- 6.5 COMPANY shall beobligated to make minimum annual payments totaling the amounts indicated below; such payments to be fully (,Teditable against royalties due for the subsequent twelve month period as follows:
  - a. If in calendar year 2020, Running Royalties paid by COMPANY to JHU/APL do not total twenty thousand (\$20,000), COMPANY will make up the difference by January 3 l'' of the following year
  - b If in calendar year 2021, Running Royalties paid by COMPANY to JHU/APL do not total eighty thousand (\$80,000), COMPANY will make up the difference by January 31st of the following year
  - c. If in calendar year 2022, and each year thereafter, Running Royalties paid by COMPANY to JHU/APL do not total three hundred thousand (\$300,000), COMPANY will make up the difference by January 31st• of the following year.

11

- 6.6 COMPANY shall provide to nill/APL within sixty (60) days of the end of each March, June, September and December after theEFFECTIVE DATE of this Agreement, a written report to JHU/APL of the amount of LICENSED SERVICE(S) practiced or performed, the total NET SALES of such LICENSED SERVICE(S), and the running royalties due to JHU/APL as a result of NET SALES by COMPANY, AF.FILIATED COMPANIES, and sublicensees thereof. Payment of any such royalties due shall accompany such report. Until COMPANY or an AFFILIATED COMPANY or a sublicensee has achieved a first commercial sale of a LICENSED SERVICE(S), a report shall be submitted at the end of every June and December after the EFFECTIVE DATE of this Agreement and will include a full written report describing COMPANY's or AFFILIATED COMPANIES' or sublicensees' technical efforts towards meeting the milestones set forth in Article 8.
- 6.7 COMPANY shall make and retain, for a period of five(5) years following the period of each report required by section 6.6, true and accurate records, files and books of account containing all the data reasonably required for the full computation and verification of sales and other information required in section 6.6. Such books and records shall be in accordance with generally accepted accounting principles consistently applied. COMPANY shall permit theinspection and copying of such records, files and books of account by JHU/APL or its agents during regular business hours upon ten (10) business days' written notice to COMPANY. Such inspection shall not be made more than once each calendar year. All costs of such inspection and copying shall be paid by JHU/APL, provided that if any such inspection shall reveal that an error has been made in the amount equal to five percent (5%) or more of such payment, such costs shall be borne by COMPANY. COMPANY shall include in any agreement with its AFFILIATED COMPANIES or its sublicensees which pennits such party to make, use or sell the LICENSED SERVICE), a provision requiring such party to retain records of sales, practice or performance of LICENSED SERVICE(S) and other information as required in section 6.6 and permit JHU/APL to inspe<,-t such records as required by this section 6.7.
- 6.8 In order to insure JHU/APL the full royalty payments contemplated hereunder, COMPANY agrees that in the event any LICENSED SERVfCE(S) shall be sold to an AFFILIATED COMPANY or sublicensee or to a corporation, firm or association with which COMPANY shall have any agreement, understanding or arrangement with respect to consideration (such as, among other things, an option to purchase stock or actual stock ownership, or an arrangement involving division of profits or special rebates or allowances) the royalties to be paid hereunder for such LICENSED SERVICE(S) shall be based upon the greater of: I) the net selling price at which the purchaser of LICENSED SERVICE resells such service to theend user, 2) the net service revenue received from using the LICENSED SERVICE(S) in providing a service, 3) thefair market value of the LICENSED SERVICE(S) or 4) the net selling price of LICENSED SERVICE(S) paid by the purchaser.

12

- 6.9 In theevent that COMPANY or an AFFILIATED COMPANY or a sublicensee sells or licenses LICENSED SERVTCE(S) in combination with other components or devices which are not LICENSED SERVICE(S)("Other Items") as part of a system ("System"), the NET SALES or SUBLICENSE REVENUES for purposes of royalty payments on the Sysiem shall be calculated as follows:
  - a. If all LICENSED SERVICES(S) and Other Items contained in the System are available separately, the NET SALES or SUBLICENSE REVENUES for purposes of royalty payments will be calculated by multiplying the NET SALES or SUBLICENSE REVENUES of the combination by the fraction A/A+B, where A is the separately available price of all LICENSED SERVICE(\$) in the combination, and Bis the separately available price for all Other Items in the combination;
  - b. Otherwise, the NET SALES or SUBLICENSE REVENUES for purposes of royalty payments will be calculated by multiplying the NET SALES or SUBLICENSE REVENUES of the System by C/C+D, where C is the total direct materials and direct labor costs for the LICENSED SERVICES(\$) and Dis the total direct materials and direct labor costs for all Other Items in the System (all such costs shall be determined in accordance with GAAP consistently applied).
  - c. In those cases that are not amenable to the use of either section 6.9a or 6.9b above for the calculation of NET SALES or SUBLICENSE REVENUES for purposes of royalty payments, the Parties agree to negotiate in good faith a percentage of NET SALES or SUBLICENSE REVENUES for purposes of royalty or sublicense payments.

13

- d. Notwithstanding the foregoing sections 6.9a, b, and c, in no event shall NET SALES of the System for purposes of royalty payments be calculated to be Jess than four percent (4%) of the NET SALES.
- 6.10 All payments under this Agreement shall be made in U.S. Dollars.

#### ARTICLE 7 - PATENT RIGHTS AND CONFIDENTIAL INFORMATION

7.1 JHU/APL shall file, prosecute and maintain all patents and patent applications specified under JHU/APLATENT RIGHTS. Upon EFFECTIVE DATE, COMPANY shall elect, and so inform JHU/APL in writing, in which countries, other than the United States, where JHU/APL has patent applications pending, specified under the JHU/A.PL PA TENT RIGHTS as set forthin Appendix B, COMPANY desires that JHU/APL continue to pursue patent protection. Thereafter, COMPANY shall reimburse JHU/APL for a share of expenses associated with JHU/APL's reasonable costs of preparing, filing, prosecuting and maintaining the elected and U.S. JHU/APL PATENT RIGHTS in addition to past costs associated with preparing, filing, prosecuting and maintaining all patent applications and patents, based on the formula in section 6. I. Title to all such patents and patent applications shall reside in The Johns Hopkins University. JHU/APL shall havefull and complete control over all patent matters in connection therewith underthe JHU/APL PATENT RIGHTS. In any country where the COMPANY elects not to have a patent application filed or to pay expenses associated with filing, prosecuting, or maintaining a patent application or patent at its own expense and for its own

exclusive benefit and the COMPANY thereafter shall not be licensed under such patent or patent application. JHU/APL reserves the right to require pre-payment by COMPANY for expenses associated with filing, prosecuting, or maintaining a patent application or patent.

7.2 )HU/APL will provide COMPANY with draft copies of any nonprovisional patent applications claiming inventions(s) included in the materials listed in APPENDIX B or APPENDIX C, at least seven (7) days in advance of filing. COMPANY shall provide any feedback to JHU/APL within five(5)days. If nofeedback is received, or if filing deadlines require, JHU/APL will proceed with the filing in order to meet such deadlines. In accordance with the terms of section 7.1, JHU/APL will be under noobligation to incorporate feedback provided by COMPANY into the patent applications prior to filing.

14

- 7.3 If necessary, the Parties will exchange information which they consider to be confidential. Therecipient of such information agrees to accept the disclosure of said information which is marked as confidential or proprietary at the time it is sent to therecipient, and to employ all reasonable efforts to maintain the information secret and confidential, such efforts to be no less than the degree of care employed by therecipient to preserve and safeguard its own confidential information. The information shall not be disclosed or revealed to anyone except employees of the recipient who have a need to know the information and who have agreed in writing to maintain confidential the proprietary information of the recipient and such employees shall be advised by the recipient of the confidential nature of the information and that the information shall be treated accordingly. The recipient's obligations under this section 7.3 shall not extend to any part of the information:
  - a. that can be demonstrated to have been in the public domain or publicly known and readily available to the trade orthe public prior to thedate of the disclosure: or
  - b. that can be demonstrated, from written records to have been in the recipient's possession or readily available to the recipient from another source not under obligation of secrecy to the disclosing party prior to **the** disclosure; or
  - c. that becomes part of the public domain or publicly known by publication or otherwise, not due to any unauthorized act by therecipient; or
  - d. that is demonstrated from written records to have been developed by or for the receiving party without reference to confidential information disclosed by the disclosing party.

Theobligations of this section 7.3 shall also apply to AFFILIATED COMPANIES provided such information by COMPANY. JHU/APL's, COMPANY's and AFFILIATED COMPANIES' obligations under this section 7.3 shall extend until five(5) years after the termination of this Agreement

15

Upon receipt of written permission by JI-TIJ/APL for such disclosure, COMPANY shall have third parties sign nondisclosure agreements for any JHU/APL confidential information including drawings, procedures, photographs, sketches, hand-drawn art, technical documentation, reports, micro-fiche material, video tapes and CD-ROMs. Any previous nondisclosure/confidentiality agreements between JI-TIJ/APL and COMPANY are hereby terminated and superseded by this section 7.3.

#### ARTICLE 8 - TERM MH.ESTONES AND TERMINATION

- 8.1 TERM: COMPANY'S obligation to pay royalties under section 6 in consideration for JHU/APL PATENT RIGHTS, shall expire in each country onthedate of expiration of the last to expire patent included within JHU/APL PATENT RIGHTS in that country orif no patents issue ten (I 0) years from the EFFECTIVE DATE.
- 8.2 MJLESTONES COMPANY shall exercise COMMERCIALLY REASONABLE EFFORTS to develop and commercialize the LICENSED SERVICE(S) using good scientific judgment. To this end, COMPANY shall exercise COMMERCIALLY REASONABLE EFFORTS to meet the following milestones and minimum NET SALES milestones in the years noted:

Due Date

Milestone	(Calendar Fiscal Year)
Receive working prototype from JHU/APL	3Q' 18
Prototype demonstration to potential customers	3Q'18
Raise \$500,000 or confirm company value >\$2M	IQ' 19
First customer service contract	4Q'18
Company reaches \$50,000 net sales	4Q'19
Company reaches \$300,000 net sales	4Q'20
Company reaches \$1,000,000 net sales	4Q'21

#### 16

#### 8.3 TERMINATION:

- a. In the event that Licensee is in material breach of this License Agreement, IBU/APL may give written notice of such material breach. In theevent that such breach is curable, such written notice shall reasonably describe such material breach. In the event that such breach is curable and in such event only, Licensee shall have sixty (60) days after receipt of the foregoing written notice to remedy such material breach. Ifthe material breach is notcurable, or if not cured within such period, JHU/APL may terminate this Agreement effective immediately. Failure to make the payments or to meet any of the milestones set forth in section 8.2 shall beconsidered a material breach; however, in lieu of IBU/APL terminating th.is Agreement for COMPANY'S failure to make any of the payments under section 6or to meet the milestones set forth in section 8.2, JHU/APL, in its sole discretion and without providing the written notice and 60-day cure period set forth above, may convert the license granted herein to a nonexclusive license.
- b. COMPANY may terminate this Agreement and the license granted herein, for any reason, upon giving JHU/APL sixty (60) days written notice.
- c. Termination shall not affect JHU/APL's right to recover accrued and unpaid royalties or fees as provided in section 6.4 or to recover the unpaid balance of theLicense Execution Fee payments as provided in section 6.2 or reimbursement for patent expenses incurred pursuant to section 7.1 prior to termination. Upon termination, all rights in and to the licensed JHU/APL INTELLECTUAL PROPERTY shall revett to JHU/APL at no cost to JHU/APL.
- d. Notwithstanding the foregoing, (a) no such termination of this Agreement shall be construed as a termination of any valid sublicense of any sublicensee hereunder, and thereafter each such sublicensee shall beconsidered a direct licensee of JHU/APL, provided that (i) such sublicensee is then in full compliance with all terms and conditions of its sublicense, (ii) all accrued payments obligations to JHU/APL have been paid, and

(iii) such sublicensee agrees in writing to assume all applicable obligations of COMPANY under this Agreement.

#### **ARTICLE 9 - MISCELLANEOUS**

#### 9.1 NOTICES AND CORRESPONDENCE:

- a. All notices required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been sufficiently given for all purposes thereof when mailed by certified mail to the party to be notified or sent by overnight courier service. All notices shall bedeemed to havebeen given when mailed as evidenced by the postmark at the point of mailing or by other package pickup receipt.
- b. All notices and any correspondence, including written progress reports, respecting this Agreement shall beaddressed as follows:

ToJHU/APL: Technology Transfer Supervisor

The Johns Hopkins University Applied Physics Laboratory 11100 Johns Hopkins Road Laurel, MD 20723-6099

Royalty and other payments to JHU/APL shall beaddressed as follows:

The Johns Hopkins University Applied Physics Laboratory

Attention: Accounting & Finance Group

Development Fund Accountant

MS: MPl-S186

6 JOO Johns Hopkins Road Laurel, MD 20723-6099

18

To COMPANY: Bullfrog AT Inc.

P.O. Box 336, Boyds, MD 20841

Vin Singh

Phone: 301-367-2055 Email: vin@bullfrogai.com Website: www.bullfrogai.com

- c. Either Party may change its address for the purpose of this Agreement by notice in writing to theother Party. Checks are to be made payable to "The Johns Hopkins University Applied Physics Laboratory".
- 9.2 NONASSIGNABILJTY: This Agreement is binding upon and shall inure to the benefit of JHU/APL, its successors and assignees and shall not beassignable to another party without the written consent of JHU/APL which consent shall not be unreasonably withheld.
- 9.3 PROVISIONS HELD INVALID, ILLEGAL OR UNENFORCEABLE: In the event that any one or more of the provisions of this Agreement should for any reason be held by any court or authority having jurisdiction over this Agreement, or over any of the Parties hereto to be invalid, illegal or unenforceable, such provision or provisions shall be reformed to approximate as nearly as possible the intent of the Parties, and if unreformable, shall be divisible and deleted in such jurisdictions; elsewhere, this Agreement shall not be affected.
- 9.4 APPLICABLE LAW The construction, performance, and execution of this Agreement shall be governed by the laws of the State of Maryland excluding Maryland law concerning conflict of Jaws.
- 9.5 NON-USE OF UNIVERSITY'S NAME: COMPANY shall not use the name of THE JOHNS HOPKINS UNIVERSITY or any of its constituent parts, such as JHU/APL, or any contraction thereof in any advertising, promotional, sales literature or fundraising documents without prior written approval from JHU/APL. COMPANY shall allow at least ten (IO) business days' notice of any proposed use of JHU/APL'S or THE JOHNS HOPKINS UNIVERSITY'S name for JHU/APL'S review and comment or to provide written approval. JHU/APL shall consider pre-approving standard language which, once approved, may beused by COMPANY thereafter without the need for further approval from JHU/APL. This section shall notapply to references to press releases that have been approved by JHU/APL or other information in the public domain

19

9.6 WARRANTY: JHU/APL warrants that:

a. To the best of its knowledge, information and belief, it has the right to grant the licenses granted herein;

JHU/APL does not warrant the validity of any JHU/APL INTELLECTUAL PROPERTY or that practice under such JHU/APL INTELLECTUAL PROPERTY shall be free of infringement of any third party proprietary rights. EXCEPT AS EXPRESSLY SET FORTH IN THIS SECTION 9.6, COMPANY AND AFFILIATED COMPANIES AGREE THAT THE HIII/APL INTELLECTUAL PROPERTY IS PROVIDED "AS IS", AND THAT TI—IU/APL MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PERFORMANCE OF LICENSED SERVICE(S) INCLUDING THEIR SAFETY, EFFECTIVENESS, OR COMMERCIAL VIABILITY, JHIJ/APL DISCLAIMS ALL OTHER \VARRANTIES WITH REGARD TO SERVICE(S) LICENSED UNDER THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, ALL WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABJLITY AND FITNESS FOR ANY PARTICULAR PURPOSE. FURTHERMORE, JHU/APL MAKES NO REPRESENTATION OR WARRANTY THAT THE USE OF LICENSED SERVICE(S) WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT OF A THIRD PARTY. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, EXCEPT AS EXPRESSLY SET FORTH IN THIS SECTION 9.6, JHU/APL ADDITIONALLY DISCLAIMS ALL OBLIGATIONS AND LIABILITIES ON THE PART OF JHU/APL AND INVENTORS, FOR DAMAGES, INCLUDING, BUTNOTLIMITED TO, DIRECT, INDIRECT, SPECIAL, AND CONSEQUENTIAL DAMAGES, ATTORNEYS' AND EXPERTS' FEES, AND COURT COSTS (EVEN IF JHU/APL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, FEES ORCOSTS), ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, USE, SALE OR PRACTICE OF THE SERVICE(S) LICENSED UNDER THIS AGREEMENT. COMPANY AND AFFILIATED COMPANIES ASSUME ALL RESPONSIBILITY AND LLIBILITY-FOR LOSS OR DAMAGE CAUSED BY APRODUCT MANUFACTURED, USED, OR SOLD, OR A SERVICE PRACTICED, BY COMPANY AND ITS AFFILIATED COMPANIES WHICH IS A LICENSED SERVICE(S) AS DEFINED IN THIS AGREEIV1ENT.

have control over the manner in which COMPANY or its AFFILJATED COMPANIES or those operating for its account or third parties who practice LICENSED SERVICE(S) from any of the foregoing entities, or sublicensees practice the inventions. copyrighted matter, proprietary technical information, know-how, show-how or trade secrets of LICENSED SERVICE(S). COMPANY shall defend, indemnify and hold harmless JHU/A.P.L, The Johns Hopkins University, their present and former regents, trustees, officers, inventors/creators/developers of JHU/APL PATENT RIGHTS and JHU/APL UNPATENTED INTELLECTUAL PROPERTY, agents, faculty, employees and students (each an "TNDEMNITEE") as against any and all judgments, fees, expenses, losses or other costs arising from or incidental to any product liability or other lawsuit, claim, demand or other action brought as a consequence of the practice of said inventions, copyrighted matter, proprietary technical information, know-how, show-how or trade secrets, whether or not JHU/APL or said inventors/creators/developers, either jointly or severally, is narned as a party defendant in any such lawsuit provided, however, such judgments, fees. expenses, losses or other costs, do not arise out of (i) the willful misconduct of an INDEMNITEE or (ii) any material breach of this Agreement by JHU/APL, and provided further that JHU/APL notifies COMPANY promptly of any such lawsuit, claim, demand or other action. Practice of the inventions, copyrighted matter, proprietary technical information, know-how or trade secrets covered by LICENSED SERVICE(S), by an AFFILIATED COMPANY or an agent or a third party on behalf of or for the account of COMPANY or bya third party who practices LICENSED SERVICE(S), shall be considered COMPANY'S practice of said inventions, copyrighted matter, proprietary technical information, know-how, show-how or trade secrets for purposes of this section 9.7. The obligation of COl\fPANY to defend and indemnify as set out in this section 9.7 shall survive the termination of this Agreement.

20

- 9.8 INSURANCE: Prior to first commercial practice of any LICENSE SERVICE(S) in any particular country, COMPANY shall establish and maintain, in each country in which COMPANY or an AF.FILIATED COMPANY shall practice LICENSED SERVICE(S), product liability or other appropriate insurance coverageappropriate to the risks involved in marketing and practicing LICENSED SERVICE(S), and will annually present evidence to JHU/APL that such coverage is being maintained Upon Jrill/APL's request, COMPANY will furnish JHU/AJ>L with a Certificate of Insurance of each product liability or other insurance policy obtained and agrees to increase or change the kind of insurance pertaining to the LICENSED SERVICE(S) at the request of JHU/APL. JHU/APL shall be listed as an additional insured in COMPANY's said insurance policies. Once such insurance coverage is established, COMPANY shall effect changes to such insurance coverage only if reasonable and customary.
- 9.9 MANUFACTURE fN U.S.: COMPANY agrees that any products embodying JHU/APL INTELLECTUAL PROPERTY in which the United States Government either has an ownership interest or a license pursuant P.L. 96-517, as amended by P.L. 98-620, shall be manufactured sub 1:antially in the United States.
- 9.10 PUBLICATION: JHU/APL may publish manuscripts, abstracts or the like describing the JHU/APL INTELLECTUAL PROPERTY and inventions and copyrighted matter, but not trade secrets, contained therein provided confidential information of COMPANY as defined in section 7.3, is not included or without first obtaining approval from COMPANY to include such confidential information JHU/APL shall provide thirty (30) days written notice to COMPANY of each proposed publication for COMPANY's review and comments. Thereafter, JHU/APL shall be free to publish manuscripts and abstracts or the like directed to the work done at JHU/APL related to the JHU/APL TNTELLECTUAL PROPERTY without prior approval.
- 9.11 INTEGRATION: This Agreement constitutes the entire understanding between the Parties with respect to the obligations of the Parties with respect to the subject matter hereof, and supersedes and replaces all prior agreements, understandings, writings, and discussions between the Parties relating to said subject matter. Neither of the Parties shall be bound by any warranties, understandings or representations with respect to such subject matter other than as expressly provided herein or in writing signed with or subsequent to execution hereof by an authorized official of the Party to be bound thereby.

21

- 9.12 AMENDMENT/WAIVER: This Agreement may be amended and any of its terms or conditions may be waived only by a written instrument executed by the authorized officials of the Parties or, in the case of a waiver, by the Party waiving compliance. The failure of either Party at any time or times to require performance of any p(Ovision hereof shall in no manner affect its right at a later time to enforce the same. No waiver by either Party of any condition or term in any one or more instances shall be construed as a further or continuing waiver of such condition or term or of any other condition or term.
- 9.13 PARTIES BOUND/BENEFITED: This Agreement shall be binding upon and inureto the benefit of and be enforceable by the Parties hereto and their respective successors and permitted assigns.

#### 9.14 MEDIATION:

- a. Except for the rightof either Party to apply to a court of competent jurisdiction for a temporary restraining order, a preliminary injunction, or other equitable relief to preserve the status quo or prevent iITeparable harm, any and all disputes arising under or out of this Agreement which the Parties themselves are unable to resolve within six.ty (60) daysafter such dispute arises shall\_, at the option of either Party, be mediated in good faith.
- b. The Party seeking mediation of such dispute shall promptly advise the other Party of such dispute in a writing which describes in reasonable detail the nature of such dispute and which shall state that Party's desire to initiate mediation thereof. By not later than ten (10) business daysafter the recipient has received such written notice of dispute, each Party shall have selected for itself a representative who shall participate in such mediation, and shall additionally have advised the other Party in writing of thename of such representative. By not later than fifteen (15) business days after the written notice of dispute has been received, such representatives shall schedule a date for a mediation hearing with a mutually agreeable mediator. The Parties shall enter into good faith mediation and shall share the costs equally.

- c. If the representatives of the Parties have not been able to schedule a date for a mediation bearing with a mutually agreeable mediator within fifteen days after receipt of a written notice off:he dispute, or if the representatives of the Parties have not been able to resolve the dispute within fifteen(!5) business days after such mediation hearing, the Parties shall have the right to pursue any other remedies legally available to resolve such dispute in a court of competent jurisdiction. This provision shall not beconstrued to waive any rights or timely perfonance of any obligations existing under this Agreement.
- d. The option to mediate provided for in this mediation clause shall terminate upon the expiration or tennination of this Agreement.
- 9.15 EXPORT CONTROL: The export regulations of the United States Government may prohibit, except under a special validated license, the exportation from the United States of certain commodities and/or related technical data. In order to facilitate theexchange of technical information under this Agreement, COMPANY therefore hereby gives it assurance to JHU/APL that COMPANY will not knowingly, unless prior authorization is obtained from theappropriate United States Government agency or agencies, export any apparatus or technical data received from JHU/APL under this Agreement or LICENSED SERVICE(S) to any restricted country specified in such regulations. JHU/APL neither represents that a license is not required nor that, if required, it will be issued by the United States Government.
  - 9.16 Upon tennination of this Agreement for any reason, sections 7.3, 8.3c, 9.5, 9.6, 9.7 and 9.8 shall survive termination of this Agreement.

9.17 FORCE MAJEURE: In the event that either Party is prevented from performing or is unable to perform any of its obligations under this Agreement (other than the payment of money) due to any act of God; fire; casualty; tlood; war; strike; lockout; failure of public utilities; injunction or any act, exercise, assertion or requirement of governmental authority, including any governmental law, order of regulation permanently or temporarily prohibiting or reducing the manufacture, use or sale of LICENSED SERVICE(S); epidemic including pandemic flu even if planned for by the Parties in advance; destruction of production facilities; riots; insurrection; inability to procure or use materials, labor, equipment, transportation or energy sufficient to meet development or manufacturing needs; or any other cause beyond the reasonable control of the Party invoking this section 9.17 if such Party shall have used its best efforts to avoid such occurrence, such Party shall give notice to the other Party in writing promptly, and thereupon the affected Party's performance shall be excused and the time for performance shall be extended for the period of delay or inability to perform due to such occurrence.

9.18 Severability-If any term or condition of this Agreement shall be determined by any court of competent jurisdiction to be invalid or unenforceable to any extent, the remainder of this Agreement shall not be affected thereby, and each remaining term or condition hereof shall be valid and enforced to the fullest extent permitted by law. In the event such determination prevents the accomplishment of the purpose of this Agreement, the invalid provision shall be restated to conform with the applicable law and to reflect as nearly as possible the original intention of the Parties.

9.19 NON-SOLICIT. COMPANY shall not solicit employees of JHU/APL for employment.

24

IN WITNESS WHEREOF the Parties hereto have executed this Agreement by their duly authorized officers on the date appearing below their signatures.

BullFrog, Inc.

THE JOHNS HOPKINS UIVERSITY APPLIED PHYSICS LABORATORY LLC

By

Vin Singh
Founder and CEO

Supervisor, Office of Technology Transfer

Date

25

#### APPENDIX A: Fees and Payment Options

#### Automated Clearing House (ACH) for payments through U.S. banks only

The JHU/APL encourages its licensees to submit electronic funds transfer payments through the Automated Clearing House (ACH).

#### **Electronic Funds \Vire Transfers**

The following account information is provided for wire payments. In order to process paymentvia Electronic Funds Wire Transfer sender MUST supply the following information within the transmission:

Account Number: 5300445194

Account Title: The Johns Hopkins University Applied Physics Laboratory LLC

Routing Number: 054000030
Wire Transfer Transit: 031000053
Swift Code: PNCCUS33
Bank: PNC Bank
Bank Address: One East Pratt Street

Baltimore, MD 21201

BankPOC: Marcella (Marcy) Kraus (410)237-5736

#### Checks

All checks should be made payable to "JHU/APL" and sent by US Postal Service to the following address:

Johns Hopkins University Applied Physics Laboratory LLC 11100 Johns Hopkins Road Laurel, MD 20723-6099

Attn: Accounting/Finance Group, DevFund Acct MS: MPJ-S'186

26

#### APPENDIX B: Schedule of JHU/APL PATENT RIGHTS

JHU/APL Docket No. 3591, U.S. Patent Application No. 14/797,553, filed July 13,2015, entitled "Socrates; Scalable Graph Analytics."

JHU/APL Docket No. 3592, U.S. Patent Application No. 14/923,860, filed, entitled "Activity Pattern Exploration -APEX"

JHU/APLDocketNo. 4097, U.S. Patent Application No. 15/725,335, filed on October 5, 2017, entitled "Clique Tree."

JHU/APL Docket No. 4601, U.S. Patent Application No. 62/489,486, filed on April 25, 2017, entitled "Generalized Low Entropy Mixture Model (GALILEO)."

JHU/APL Docket No. 4463, U.S. Patent Application, not yet filed, entitled "Scalable Correlation Engine."

#### APPENDIX C: Schedule of JHU/APL NON-PATENT RIGHTS

JHU/APL Docket No. 3591 entitled "Socrates; Scalable Graph Analytics", Software and Documentation (Socrates Core: 0.2.2).

JHU/APL Docket No. 3592 entitled "Activity Pattern Exploration -Al'EX" Software and Documentation (Socrates Algorithms: 0.1.2).

 $JHU/APL\ Docket\ No.\ 4097\ entitled\ ``Clique\ Tree", Software\ and\ Documentation\ (Socrates\ Algorithms:\ 0.1.2).$ 

JHU/APL Docket No. 4601 entitled "Generalized Low Entropy Mixture Model (GALILEO)", Software and Documentation (Socrates Algorithms: 0.1.2).

JHU/APL Docket No. 4463 entitled "Scalable Correlation Engine" Software and Documentation (Socrates Algorithms: 0.1.2).

#### CONFIDENTIAL

#### THE GEORGE WASHINGTON UNIVERSITY

#### Patent License Agreement

This Patent License Agreement (this "Agreement") is between the George Washington University, a congressionally chartered not-for-profit corporation ("University") located in the District of Columbia, and BullFrog AI Holdings, Inc., a Nevada corporation, having a principal place of business at 325 Ellington Blvd., #317, Gaithersburg, MD 20878 ("Company"). This Agreement will become effective as of January 14h, 2022 (the "Effective Date"). University and Company are collectively or individually, the "Parties" or "Party".

#### BACKGROUND

University owns certain intellectual property developed by Dr. Lopa Mishra of the University's School of Medicine and Health Sciences and her colleagues (identified in Exhibit A), relating to GW Tech ID# 020-030-Mishra – "Inhibition of SPTBN1 to treat Obesity/NASH and Obesity/NASH-driven cancer". University also owns certain letters patent and/or applications for letters patent relating to the intellectual property. Company desires to obtain an exclusive license under the patent rights to exploit the intellectual property. University has determined that the exploitation of the intellectual property by Company is in the best interest of University and is consistent with its educational and research missions and goals.

In consideration of the mutual obligations contained in this Agreement, and intending to be legally bound, the parties agree as follows:

#### 1. LICENSE

- 1.1. <u>License Grant.</u> University grants to Company a license (the "*License*") according to the exclusivity and territory terms described in Appendix A to make, have made, use, import, offer for sale and sell Licensed Products in the Field of Use during the Term (as such terms may be defined in Sections 1.2, 6.1, Appendix A). The License includes the right to sublicense as permitted by this Agreement. No other rights or licenses are granted by University.
- 1.2. Related Definitions. The term "Licensed Products" means products and services that are made, made for, used, imported, offered for sale or sold by Company or its Affiliates or Sublicensees and that would (i) in the absence of the License, infringe (or, in the case of pending patent applications, upon issuance, would infringe) at least one claim of the Patent Rights or (ii) use a process or machine covered by a claim of Patent Rights, whether the claim is issued or pending. The term "Sublicense Agreement" means an arms-length transaction pursuant to which Company grants an unrelated third party (a "Sublicensee") access to Patent Rights and/or Technology. Any delivery of Licensed Products to an End User via an Application Program Interface (API) shall be considered a Sale of Licensed Product. Under the License Agreement, University will agree that End User License Agreements will not be treated as Sublicense Agreements. The term "Patent Rights" means all of University's patent rights represented by or issuing from: (a) the United States patents and patent applications listed in Exhibit A; (b) any continuation, divisional and re-issue applications of (a); and (c) any foreign counterparts and extensions of (a) or (b). The term "Affiliate" means a legal entity that is controlling, controlled by or under common control with Company and that has executed either this Agreement or a written Joinder Agreement agreeing to be bound by all of the terms and conditions of this Agreement. For purposes of this Section 1.2, the word "control" means (x) the direct or indirect ownership of more than fifty percent (50%) of the outstanding voting securities of a legal entity, (y) the right to receive fifty percent (50%) or more of the profits or earnings of a legal entity, or (z) the right to determine the policy decisions of a legal entity. The term "Field of Use" means the definition agreed to in Appendix A.

#### Page 1 of 24

- 1.3. <u>Reservation of Rights by University.</u> University reserves the right to use, and to permit other non-commercial entities to use, the Patent Rights for educational and research purposes.
- 1.4. <u>U.S. Government Rights.</u> The parties acknowledge that the United States government retains rights in intellectual property funded under any grant or similar contract with a Federal agency. The License is expressly subject to all applicable United States government rights, including, but not limited to, any applicable requirement that products, which result from such intellectual property and are sold in the United States, must be substantially manufactured in the United States.
  - 1.5. Sublicense Agreement Conditions, The Company's right to sublicense granted by University under the License is subject to each of the following conditions:
- (a) In each Sublicense Agreement, Company will prohibit the Sublicensee from further sublicensing and require the Sublicensee to comply with the terms and conditions of this Agreement.
- (b) Within thirty (30) days after Company enters into a Sublicense Agreement, Company shall deliver to University a complete and accurate copy of the entire Sublicense Agreement written in the English language. University's receipt of the Sublicense Agreement, however, will constitute neither an approval of the Sublicense Agreement nor a waiver of any right of University or obligation of Company under this Agreement.
- (c) In the event that Company causes or experiences a Trigger Event (as defined in Section 6.4), all payments due to Company from its Affiliates or Sublicensees under the Sublicense Agreement will, upon notice from University to such Affiliate or Sublicensee, become payable directly to University for the account of Company. Upon receipt of any such funds, University will remit to Company the amount by which such payments exceed the amounts owed by Company to University.
- (d) Company's execution of a Sublicense Agreement will not relieve Company of any of its obligations under this Agreement, including its obligation to use Commercially Reasonable Efforts to develop, commercialize, market and sell Licensed Products and to do so in a manner consistent with the Development Plan. Company is primarily liable to University for any act or omission of an Affiliate or Sublicensee of Company that would be a breach of this Agreement if performed or omitted by Company, and Company will be deemed to be in breach of this Agreement as a result of such act or omission.
- 1.6 <u>Required Sublicensing</u>. If Company is unable or unwilling to serve or develop a potential market or market territory for which there is another entity willing to be a Sublicensee, Company will, at University's request, negotiate in good faith a Sublicense Agreement with any such entity. University would like Company or Sublicensees to address unmet needs, such as those of neglected patient populations or geographic areas, giving particular attention to improved therapeutics, diagnostics and agricultural technologies for the developing world.

#### Page 2 of 24

1.7 No License by Implication. Nothing in this Agreement confers by estoppel implication or otherwise, any license or rights under any University patent other than the Patent Rights, regardless whether such patents are dominant or subordinate to the Patent Rights.

#### 2. DILIGENCE

- 2.1 <u>Development Plan.</u> Company will deliver to University, prior to the Effective Date, a copy of an initial development plan for the Patent Rights (the *Development Plan*"). The purpose of the Development Plan is (a) to demonstrate Company's capability to bring the Patent Rights to commercialization, (b) to project the timeline for completing the necessary tasks, and (c) to measure Company's progress against the projections. Thereafter, Company will deliver to University an annual updated Development Plan no later than December 1 of each year during the Term. The Development Plan will include all principal activities necessary for Commercially Reasonable Efforts to commercialize, market and sell Licensed Products. The Development Plan will also include, at a minimum, the information listed in Exhibit B. Company will use Commercially Reasonable Efforts to develop, commercialize, market and sell Licensed Products and will do so in a manner consistent with the written Development Plan.
- 2.2 "Commercially Reasonable Efforts" shall mean, with respect to development of the Patent Rights under this Agreement, the use of efforts and resources that are consistent with the exercise of prudent scientific and business judgment, as applied by companies with similar resources to those of the applicable party to other products and services of similar commercial potential, potential market size and facing a similar potential competitive environment all as measured by the facts and circumstances at the time such efforts are made, which facts and circumstances may include, but are not limited to, reasonable application of the following: safety and efficacy; proposed product label and indication; patent protection, including scope, strength of claims, and term; anticipated pricing and reimbursement terms; manufacturing costs and other costs of goods sold; addressable patient population; addressable market; and potential competition from third parties.
- 2.3 <u>Diligence Events</u>. The Company will use Commercially Reasonable Efforts to achieve each of the diligence events by the applicable completion date listed in Appendix A. In addition to usual and reasonable terms for termination, the University reserves the right to terminate the Agreement if Company fails to achieve one or more diligence events on or before their respective achievement date.
- 2.4 <u>Diligence Resources</u>. Until the first commercial sale of the first Licensed Product, Company will expend resources in the development and commercialization of the Licensed Products of amounts not less than the diligence minimums specified in Appendix A in each 12-month period following the Effective Date. If Company's total expenditures for development and commercialization of Licensed Products in any 12-month period do not meet or exceed the applicable diligence minimum, then Company will pay to University the amount of the shortfall. Company will make any payments of the shortfall to University together with the next Development Plan due to University under Article 2.
- 2.5 A failure of Company to create and deliver a Development Plan or otherwise satisfy its obligations under this Article 2 will be deemed a material breach of this Agreement.

#### 3.1 FEES AND ROYALTIES

3.1 <u>License Initiation Fee.</u> In partial consideration of the License, Company will pay to University no later than 30 days from the Effective Date a non-refundable, non-creditable license initiation fee as specified in Appendix A.

#### Page 3 of 24

- 3.2 Equity Issuance. Intentionally omitted.
- 3.3 <u>Dilution Protection</u>. Intentionally omitted.
- 3.4 Follow-On Investments. Intentionally omitted.
- 3.5 <u>License Maintenance Fees.</u> In partial consideration of the License, Company will pay to University, on each anniversary of the Effective Date until the first Sale (as defined in Section 3.8) of the first Licensed Product, the applicable license maintenance fee listed in Appendix A.
- 3.6 Milestone Payments. In partial consideration of the License, Company will pay to University the applicable milestone payment listed in Appendix A after achievement of each milestone event for each Licensed Product. Company will provide University with written notice within thirty (30) days after achieving each milestone.

For clarity, each time a milestone is achieved with respect to a Licensed Product, then any other milestone payments with respect to earlier milestones that have not yet been paid will be due and payable together with the milestone payment for the milestone that is actually achieved. For additional clarity, milestones are due and payable on Licensed Products and on products that, upon FDA approval, would become Licensed Products.

- 3.7 Earned Royalties. In partial consideration of the License, Company will pay to University a royalty as specified in Appendix A.
- 3.8 Related Definitions. The term "Sale" means any bona fide transaction for which consideration is received by Company or its Affiliate or Sublicensee for the sale, use, lease, transfer or other disposition of a Licensed Product to a third party. A Sale is deemed completed at the time that Company or its Affiliate or Sublicensee receives payment for a Licensed Product. The term "Quarter" means each three-month period beginning on January 1, April 1, July 1 and October 1. The term "Net Sales" means the consideration received or the fair market value attributable to, each Sale, less Qualifying Costs that are directly attributable to a Sale, specifically identified on an invoice or other documentation and actually borne by Company or its Affiliates or Sublicensees. For purposes of determining Net Sales, the words "fair market value" means the cash consideration that Company or its Affiliates or Sublicensees would realize from an unrelated buyer in an arm's length sale of an identical item sold in the same quantity and at the time and place of the transaction. The term "Qualifying Costs" means: (a) customary discounts in the trade for quantity purchased or for wholesalers and distributors; (b) credits or refunds for claims or returns that do not exceed the original invoice amount; (c) prepaid outbound transportation expenses and transportation insurance premiums; and (d) sales and use taxes and other fees imposed by and indefeasibly paid to a governmental agency.
- 3.9 <u>Minimum Royalties.</u> In partial consideration of the License, Company will pay on a Quarterly basis to University the applicable minimum royalty listed in Appendix A, if Company's actual earned royalties under Section 3.7 for each Quarter after the first Sale following the first New Drug Applications ("NDA") or Biologics License Application ("BLA") approval of a Licensed Product does not exceed this amount.
- 3.10 <u>Sublicense Fees.</u> In partial consideration of the License, Company will pay to University a sublicense fee specified in Appendix A of the sum of all payments plus the fair market value of all other consideration of any kind, received by Company from Sublicensees during the Quarter, excluding: (a) royalties paid to Company by a Sublicensee based upon Sales or Net Sales by the Sublicensee; (b) equity investments in Company by a Sublicensee up to the amount of the fair market value of the equity purchased on the date of the investment; (c) loan proceeds paid to Company by a Sublicensee in an arm's length, full recourse debt financing to the extent that such loan is not forgiven; and (d) sponsored research funding paid to Company by a Sublicensee in a bona fide transaction for future research to be performed by Company.

#### Page 4 of 24

3.11 <u>Assignment Fee.</u> In partial consideration of the License, Company will pay an assignment fee equal to the amount specified in Appendix A within 30 days of each assignment of this Agreement, following procedures for assignment as specified in Section 14.5 herein.

#### 4. REPORTS AND PAYMENTS

4.1 Royalty Reports. Within forty-five (45) days after the end of each calendar year following the first Sale of a Licensed Product and until the first NDA or BLA approval

of a Licensed Product, Company will deliver to University a report (the "Royalty Report"), certified by the chief financial officer of Company, detailing the calculation of all royalties, fees and other payments due to University for such annual period. The Royalty Report will include, at a minimum, the following information for the period, each listed by product, by country: (a) the number of units of Licensed Products constituting Sales; (b) the gross consideration received for Sales; (c) Qualifying Costs, listed by category of cost; (d) Net Sales; (e) the gross amount of any payments and other consideration received by Company from Sublicensees and the amounts of any deductions permitted by Section 3.8; (f) the royalties, fees and other payments owed to University, listed by category; and (g) the computations for any applicable currency conversions. Each Royalty Report will be substantially in the form of the sample report attached as Exhibit C. In addition to the pre-approval Royalty Reports described above, following the first Sale after the first NDA or BLA approval of a Licensed Product, Company will commence delivery of the Royalty Reports to University within forty-five (45) days after the end of each Quarter.

- 4.2 <u>Payments.</u> Company will pay all royalties, fees and other payments due to University under Sections 3.6, 3.7, 3.8, 3.10 within forty-five (45) days after the end of the relevant annual or Quarter period in which the royalties, fees or other payments accrued.
- 4.3 <u>Records.</u> Company will maintain, and will cause its Affiliates and Sublicensees to maintain, complete and accurate books, records and related background information to verify Sales, Net Sales, and all of the royalties, fees, and other payments due or paid under this Agreement, as well as the various computations reported under Section 4.1. The records for each annual or Quarter period will be maintained for at least five (5) years after submission of the applicable report required under Section 4.1.
- 4.4 <u>Audit Rights.</u> Upon reasonable prior written notice to Company, Company and its Affiliates and Sublicensees will provide University and its accountants with access to all of the books, records and related background information required by Section 4.3 to conduct a review or audit of Sales, Net Sales, and all of the royalties, fees, and other payments payable under this Agreement. Access will be made available: (a) during normal business hours; (b) in a manner reasonably designed to facilitate University's review or audit without unreasonable disruption to Company's business; and (c) no more than once each calendar year during the Term (as defined below) and for a period of five (5) years thereafter. Within forty-five (45) days of completion of the audit, Company will pay to University the amount of any underpayment determined by the Auditor, plus accrued interest as defined in Section 4.8. If the review or audit determines that Company has underpaid any payment by five percent (5%) or more, then Company within 45 days will also pay the costs and expenses of University and its accountants in connection with the review or audit.

#### Page 5 of 24

- 4.5 <u>Information Rights.</u> Until the closing of the Company's initial public offering, Company will provide to University, at least as frequently as the following reports are distributed to the Board of Directors or management of Company, copies of all Board and managerial reports that relate to the Patent Rights or the Licensed Products.
- 4.6 <u>Currency.</u> All dollar amounts referred to in this Agreement are expressed in United States dollars. All payments will be made in United States dollars. If Company receives payment from a third party in a currency other than United States dollars for which a royalty or fee is owed under this Agreement, then (a) the payment will be converted into United States dollars at the conversion rate for the foreign currency as published in the eastern edition of the Wall Street Journal as of the last business day of the annual or Quarter period in which the payment was received by Company, and (b) the conversion computation will be documented by Company in the applicable report delivered to University under Section 4.1.
  - 4.7 Place of Payment. All payments by Company are payable to "The George Washington University" and will be made to the following addresses:

#### By Check:

Send notice of check to: patent@gwu.edu

Mail Check to: The George Washington University Technology Commercialization Office ATTN: TCO Program Manager 1922 F ST NW, 4<sup>TH</sup> FL Washington, DC 20052

#### **By Electronic Transfer:**

For Patent Cost Reimbursements please include:

"Funds should be credited to Alias 111406, Account 47571"

For License Fees and Royalties please include:

"Funds should be credited to Alias 100035, Account 47514."

Beneficiary Account Number: 5303 55 3334
Beneficiary Account Type (for ACH): Checking

Beneficiary Account Name: The George Washington University

Beneficiary Address: 1918 F ST NW

Washington, DC 20052

DVCD 1 VA

Bank's Name:
PNC Bank, N.A.
Bank's Address:
800 17<sup>th</sup> ST, NW
Washington, DC 20006

ABA # (for ACH): 054 000 030
ABA # (for Wires): 0310 000 53
SWIFT: PNCCUS33

Page 6 of 24

4.8 <u>Interest.</u> All amounts that are not paid by Company when due will accrue interest from the date due until paid at a rate equal to one and one-half percent (1.5%) per month (or the maximum allowed by law, if less). The payment of such interest shall not foreclose University from exercising any other rights it may have as a consequence of the lateness of any payment.

#### 5. CONFIDENTIALITY AND USE OF UNIVERSITY'S NAME

5.1 Confidentiality. Except as specifically permitted hereunder, Parties hereby agree to hold in confidence and not use on behalf of itself or others all technology, data, samples, technical and economic information (including economic terms hereof), commercialization, clinical and research strategies, know-how and trade secrets provided by the other party (the "Disclosing Party") (collectively the "Confidential Information"), except that the term "Confidential Information" shall not include:

- (a) information that is or becomes part of the public domain through no fault of the non-Disclosing Party;
- (b) information that is obtained after the Effective Date by the non-Disclosing Party or one of its Affiliates from any third party which is lawfully in possession of such Confidential Information and not in violation of any contractual or legal obligation to the Disclosing Party with respect to such Confidential Information;
- (c) information that is known to the non-Disclosing Party or one or more of its Affiliates prior to the disclosure by the Disclosing Party, as evidenced by the non-Disclosing Party's written records; and
- (d) information which has been independently developed by the non-Disclosing Party without the aid or use of Confidential information as shown by competent written evidence.

Notwithstanding the foregoing, (i) the party receiving the Confidential Information may disclose the Disclosing Party's Confidential Information to the extent required to comply with, a court or administrative subpoena or a lawful court order provided that the receiving party first uses its best efforts to obtain an order preserving the confidentiality of the information of the Disclosing Party and provided the receiving party gives the Disclosing Party timely notice of the contemplated disclosure to give the Disclosing Party an opportunity to intervene to preserve the confidentiality of the information, (ii) the receiving party may disclose the Disclosing Party's Confidential Information to third parties engaged as legal advisors, (iii) University may disclose Confidential Information to a third party with whom University has monetized or with whom it is seeking to monetize its rights to receive all or a portion of payments under this Agreement and to placement agents or structuring agents engaged for monetization, provided that any such third party is bound by written agreement to respect the Confidential Information in a manner substantially similar as set forth in this Agreement.

Upon prior review of the University, Company may disclose in a patent application or the prosecution thereof, any Confidential Information necessary to obtain or secure patent protection of the commercialized products or processes.

#### Page 7 of 24

Each Party intends that to the extent that any confidential information is disclosed under this Agreement, such Confidential Information does not contain export control-listed technology or technical data identified on any US export control list, including the Commerce Control List (CCL) set forth in the Export Administration Regulations at 15 CFR Part 774 and the US Munitions List (USML) set forth in the International Traffic in Arms Regulations at 22 CFR Part 121. Prior to one Party providing the other Party with export control-listed information, the disclosing Party will provide advance written notice to the receiving Party regarding the export classification of such information, and the receiving Party must issue written approval to the disclosing Party prior to the transmission of such information to the receiving Party. Notwithstanding any other provision of this Agreement, the receiving Party is under no obligation to accept export control-listed information from the disclosing Party.

5.2 <u>Use of University's Name.</u> Company and its Affiliates, Sublicensees, employees, and agents may not use the name, logo, seal, trademark, or service mark (including any adaptation of them) of University or any University school, organization, employee, student or representative, without the prior written consent of University.

#### 6. TERM AND TERMINATION

- 6.1 <u>Term.</u> This Agreement will commence on Effective Date and terminate upon the later of: (a) the expiration or abandonment of the last patent to expire or become abandoned of the Patent Rights; or (b) ten (10) years after the first Sale of the first Licensed Product if no patent has issued from the Patent Rights (as the case may be, the "*Term*").
- 6.2 <u>Early Termination by Company.</u> Company may terminate this Agreement at any time effective upon completion of each of the following conditions: (a) providing at least sixty (60) days prior written notice to University of such intention to terminate; (b) ceasing to make, have made, use, import, offer for sale and sell all Licensed Products; (c) terminating all Sublicense Agreements and causing all Affiliates and Sublicensees to cease making, having made, using, importing, offering for sale and selling all Licensed Products; and (d) paying all amounts owed to University under this Agreement between University and Company related to the Patent Rights, through the effective date of termination.
- 6.3 <u>Early Termination by University.</u> University may terminate this Agreement if: (a) Company is more than thirty (30) days late in paying to University any amounts owed under this Agreement and does not immediately pay University in full, including accrued interest, upon demand (a "Payment Default"); (b) other than a Payment Default, Company or its Affiliate or Sublicensee breaches this Agreement and does not cure the breach within forty-five (45) days after written notice of the breach; or (c) Company or its Affiliate or Sublicensee experiences a Trigger Event.
- 6.4 <u>Trigger Event.</u> The term "*Trigger Event*" means any of the following: (a) a material default by Company under any Agreement between Company and University related to the Patent Rights (whether entered prior to, contemporaneous with, or subsequent to the Effective Date) that is not cured during any specified cure periods; (b) if Company or its Affiliate or Sublicensee (i) becomes insolvent, bankrupt or generally fails to pay its debts as such debts become due, (ii) is adjudicated insolvent or bankrupt, (iii) admits in writing its inability to pay its debts, (iv) suffers the appointment of a custodian, receiver or trustee for it or its property and, if appointed without its consent, not discharged within thirty (30) days, (v) makes an assignment for the benefit of creditors, or (vi) suffers proceedings being instituted against it under any law related to bankruptcy, insolvency, liquidation or the reorganization, readjustment or release of debtors and, if contested by it, not dismissed or stayed within ten (10) days; (c) the institution or commencement by Company or its Affiliate or Sublicensee of any proceeding under any law related to bankruptcy, insolvency, liquidation or the reorganization, readjustment or release of debtors; (d) the entering of any order for relief relating to any of the proceedings described in Section 6.4(b) or (c) above; (e) the calling by Company or its Affiliate or Sublicensee of a meeting of its creditors with a view to arranging a composition or adjustment of its debts; (f) the act or failure to act by Company or its Affiliate or Sublicensee indicating its consent to, approval of or acquiescence in any of the proceedings described in Section 6.4(b) (e) above; (g) failure by Company to pay patent counsel pursuant to the terms of a Client and Billing Agreement, if any; or (h) the commencement by Company of any action against University, including an action for declaratory judgment, to declare or render invalid or unenforceable the Patent Rights, or any claim thereof.

#### Page 8 of 24

- 6.5 Effect of Termination. Upon the termination of this Agreement for any reason: (a) the License terminates; (b) Company and all its Affiliates and Sublicensees will cease all making, having made, using, importing, offering for sale and selling all Licensed Products, except to extent permitted by Section 6.6; (c) Company will pay to University all amounts, including accrued interest, owed to University under this Agreement and any Sponsored Research Agreement related to the Patent Rights, through the date of termination, including royalties on Licensed Products invoiced or shipped through the date of termination and any sell off period permitted by Section 6.6, whether or not payment is received prior to termination or expiration of the sell-off period permitted by Section 6.6; (d) Company will, at University's request, return or destroy all confidential information of University and provide to University one complete copy of all data with respect to Licensed Products generated by Company during the Term that will facilitate the further development of the technology licensed under this Agreement; and (e) in the case of termination under Section 6.3, all duties of University and all rights (but not duties) of Company under this Agreement immediately terminate without further action required by either University or Company.
- 6.6 Inventory & Sell Off. Upon the termination of this Agreement for any reason, Company will cause physical inventories to be taken immediately of: (a) all completed Licensed Products on hand under the control of Company or its Affiliates or Sublicensees; and (b) such Licensed Products as are in the process of manufacture and any component parts on the date of termination of this Agreement. Company will deliver promptly to University a copy of the written inventory, certified by an officer of the Company. Upon termination of this Agreement for any reason, Company will promptly remove, efface or destroy all references to University from any advertising, labels, web sites or other materials used in the promotion of the business of Company or its Affiliates or Sublicensees, and Company and its Affiliates and Sublicensees will not represent in any manner that it has rights in or to the Patent Rights or the Licensed Products. Upon the termination of this Agreement for any reason other than pursuant to Section 6.3(a) or

(c), Company may sell off its inventory of Licensed Products existing on the date of termination for a period of six (6) months and pay University royalties on Sales of such inventory within thirty (30) days following the expiration of such six (6) month period.

6.7 <u>Survival.</u> Company's obligation to pay all amounts, including accrued interest, owed to University under this Agreement will survive the termination of this Agreement for any reason. Sections 3.4, 14.10, and 14.11 and Articles 4, 5, 6, 9, 10, and 11 will survive the termination of this Agreement for any reason in accordance with their respective terms.

Page 9 of 24

#### 7. PATENT PROSECUTION AND MAINTENANCE

- 7.1 <u>Patent Control.</u> University controls the preparation, prosecution, and maintenance of the Patent Rights and the selection of patent counsel, with input from Company. For purposes of this Article 7, the word "maintenance" includes any interferences, claims, or other proceedings, in any forum (including litigation in a lower or appellate court), brought by University, Company, a third party, or the United States Patent and Trademark Office involving the Patent Rights, any reexamination, review (such as inter partes reviews or post grant reviews), or validity challenge of the Patent Rights, and any requests by University or Company that the United States Patent and Trademark Office reexamine or reissue any patent in the Patent Rights.
- 7.2 Payment and Reimbursement. Company agrees that the University has incurred historically accrued attorney fees, expenses, official fees and all other charges accumulated and invoiced to the University incident to the preparation, filing, prosecution and maintenance of the Patent Rights (the "Past Patent Expenses") as specified in Appendix A. By the Past Patent Expenses Reimbursement Date identified in Appendix A, Company will reimburse University for Past Patent Expenses. For patent expenses not included in Appendix A, including, but not limited to those incurred during the Term, Company will reimburse University for all documented attorneys' fees, expenses, official fees and all other charges accumulated or invoiced to the University incident to the preparation, filing, prosecution, and maintenance of the Patent Rights, within thirty (30) days after Company's receipt of invoices for such fees, expenses and charges. University reserves the right to require the Company to provide a deposit in advance of incurring out of pocket patent expenses estimated by counsel to exceed \$2,500. If Company fails to reimburse patent expenses under Paragraph 7.2, or provide a requested deposit with respect to a Patent Right, then University will be free at its discretion and expense to either abandon such applications or patents related to such Patent Right or to continue such preparation, prosecution and/or maintenance activities and to the extent University has pursued protection of any patent rights associated with such patent action will remain subject to the license granted under this Agreement, at University's sole discretion. Any abandonment of patents or applications or applications for such the Patent Rights.
- 7.3 <u>Patent Marking.</u> Company shall include appropriate marking on all Licensed Products made, sold or otherwise disposed of by Company, which patent marking will be in accordance with appropriate patent marking laws of the United States and any other country in which such the Licensed Products are made, sold or otherwise disposed of. Company will cause its Affiliates and/or Sublicensees to similarly mark any Licensed Products made, sold or otherwise disposed of by such Affiliates or Sublicensees. The patent marking obligations required by this Section 7.3 shall apply to issued patents and to pending claims, and in either case covering Licensed Products.

#### 8. INFRINGEMENT

- 8.1 Notice. Company and University will notify each other promptly, but in no event later than five (5) days after any apparent infringement of the Patent Rights that comes to their attention. Company and University will consult each other in a timely manner concerning any appropriate response to the apparent infringement.
- 8.2 <u>Prosecution of Infringement.</u> Company may prosecute any infringement of the Patent Rights at Company's expense, including defending against any counterclaims or cross claims brought by any party against Company or University regarding the Patent Rights and defending against any claim that the Patent or Patent Rights are invalid in the course of any infringement action or in a declaratory judgment action. University reserves the right to intervene voluntarily and join Company in any such infringement litigation. If University chooses not to intervene voluntarily, but University is a necessary party to the action brought by Company, then Company may join University in the infringement litigation. If Company decides not to prosecute any infringement of the Patent Rights, then University may elect to prosecute such infringement independently of Company in University's sole discretion.

#### Page 10 of 24

- 8.3 <u>Cooperation.</u> In any litigation under this Article 8, either party, at the request and sole expense of the other party, will cooperate to the fullest extent reasonably possible. This Section 8.3 will not be construed to require either party to undertake any activities, including legal discovery, at the request of any third party, except as may be required by lawful process of a court of competent jurisdiction. If, however, either party is required to undertake any activity, including legal discovery, as a right of lawful process of a court of competent jurisdiction, then Company will pay all expenses incurred by Company and by University.
- 8.4 Control of Litigation. Company controls any litigation or potential litigation involving the prosecution of infringement claims regarding the Patent Rights in which University is not a party, including the selection of counsel, all with input from University. If such litigation involves a challenge to the validity or enforceability of any claim within United States Patent Rights, University will have the absolute right, in its sole discretion, to be involved in such challenge with counsel of its choice and at its own expense. Company must not settle or compromise any such litigation in a manner that imposes any obligations or restrictions on University (including, without limitation, injunctive or non-monetary relief affecting University or an admission of invalidity of unenforceability of any United States Patent Right) or grants any rights to the Patent Rights, other than any permitted Sublicense Agreements, without University's prior written permission. University controls any litigation or potential litigation involving the prosecution of infringement claims regarding the Patent Rights in which University has elected to prosecute the infringement independently of Company or has voluntarily or involuntarily joined Company in the infringement litigation, including the selection of counsel, all with input from Company. In all instances in which University is a party, University reserves the right to select its own counsel. If University is involuntarily joined as a party, University retains the right to select its own counsel, but Company will be responsible for all litigation expenditures as set forth in Section 8.5.
- 8.5 Recoveries from Litigation. If Company prosecutes any claims of actual or alleged infringement of the Patent Rights either without University as a party or with University involuntarily joined as a party, then Company will reimburse University for University's litigation expenditures, including any attorneys' fees, expert fees, expenses, official fees and other charges incurred by University, even if there are no financial recoveries from the infringement action. Company will reimburse University within thirty (30) days after receiving each invoice from University. After reimbursing University for its expenditures, Company will next use the financial recoveries from such claims, if any, (a) first, to reimburse Company for its litigation expenditures; and (b) second, to retain any remainder but to treat the remainder as either (i) Net Sales for the purpose of determining the royalties due to University under Section 3.7 or (ii) Sublicense Agreement consideration for the purpose of determining the sublicense fees due to University under Section 3.10, whichever would result in a larger payment to University. If Company prosecutes any claims of actual or alleged infringement of the Patent Rights with University joined as a voluntary party, then any financial recoveries from such claims will be (x) first, shared between Company and University as to any remainder after Company and University have fully recovered their aggregate litigation expenditures. If University prosecutes any claims of actual or alleged infringement of the Patent Rights independent of Company, then University will prosecute such infringement at University's expense and will retain any financial recoveries in their entirety.

#### 9. DISCLAIMER OF WARRANTIES

9.1 <u>Disclaimer.</u> THE PATENT RIGHTS, LICENSED PRODUCTS AND ANY OTHER TECHNOLOGY LICENSED UNDER THIS AGREEMENT ARE PROVIDED ON AN "AS IS" BASIS. UNIVERSITY MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF ACCURACY, COMPLETENESS, PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COMMERCIAL UTILITY, NON-INFRINGEMENT, ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE, OR TITLE. Specifically, and not in limitation of the foregoing, University makes no representation or warranty (i) regarding the validity or scope of the Patent Rights, and (ii) that the exploitation of the Patents or Patent Rights or Licensed Products will not infringe on any patents or other intellectual property of any third party.

#### 10. LIMITATION OF LIABILITY

10.1 <u>Limitation of Liability.</u> UNIVERSITY WILL NOT BE LIABLE TO COMPANY, ITS AFFILIATES, SUBLICENSEES, SUCCESSORS OR ASSIGNS, OR ANY THIRD PARTY WITH RESPECT TO ANY CLAIM: ARISING FROM COMPANY'S USE OF THE PATENT RIGHTS, LICENSED PRODUCTS OR ANY OTHER TECHNOLOGY LICENSED UNDER THIS AGREEMENT; OR ARISING FROM THE DEVELOPMENT, TESTING, MANUFACTURE, USE OR SALE OF LICENSED PRODUCTS. UNIVERSITY WILL NOT BE LIABLE TO COMPANY, ITS AFFILIATES, SUBLICENSEES, SUCCESSORS OR ASSIGNS, OR ANY THIRD PARTY FOR LOST PROFITS, BUSINESS INTERRUPTION, OR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.

#### 11. INDEMNIFICATION

11.1 <u>Indemnification.</u> Company will defend, indemnify, and hold harmless each Indemnified Party from and against any and all Liabilities with respect to an Indemnification Event.

The term "Indemnified Party" means each of University and its trustees, officers, faculty, students, employees, contractors, and agents.

The term "Liabilities" means all damages, awards, deficiencies, settlement amounts, defaults, assessments, fines, dues, penalties, costs, fees, liabilities, obligations, taxes, liens, losses, lost profits and expenses (including, but not limited to, court costs, interest and reasonable fees of attorneys, accountants and other experts) that are incurred by an Indemnified Party or awarded or otherwise required to be paid to third parties by an Indemnified Party.

The term "Indemnification Event" means any Claim against one or more Indemnified Parties arising out of or resulting from:

- (a) the development, testing, use, manufacture, promotion, sale or other disposition of any Patent Rights or Licensed Products by Company, its Affiliates, Sublicensees, assignees or vendors or third parties, including, but not limited to,
  - (i) any product liability or other Claim of any kind related to use by a third party of a Licensed Product,

#### Page 12 of 24

- (ii) any Claim by a third party that the practice of any of the Patent Rights or the design, composition, manufacture, use, sale or other disposition of any Licensed Product infringes or violates any patent, copyright, trade secret, trademark or other intellectual property right of such third party, and
  - (iii) any Claim by a third party relating to clinical trials or studies for Licensed Products;
- (b) any material breach of this Agreement by Company or its Affiliates or Sublicensees;
- (c) any Claim arising from, relating to or in connection with Company's capital or debt raising activities, including but not limited to its private placement memorandum, stock purchase agreements, convertible purchase arrangements and/or debt instruments, and/or Company's written or oral statements and/or representations made about University in all such capital or debt raising activities; and
  - (d) the enforcement of this Article 11 by any Indemnified Party.

The term "Claim" means any charges, complaints, actions, suits, proceedings, hearings, investigations, claims or demands.

- 11.2 <u>Reimbursement of Costs</u>. Company will pay directly all Liabilities incurred for defense or negotiation of any Claim or will reimburse University for all documented Liabilities incident to the defense or negotiation of any Claim within thirty (30) days after Company's receipt of invoices for such fees, expenses and charges.
- 11.3 <u>Control of Litigation</u>. Company controls any litigation or potential litigation involving the defense of any Claim, including the selection of counsel, with input from University. University reserves the right to protect its interest in defending against any Claim by selecting its own counsel, with any attorneys' fees and litigation expenses paid for by Company, pursuant to Sections 11.1 and 11.2.
- 11.4 Other Provisions. Company will not settle or compromise any Claim giving rise to Liabilities in any manner that imposes any restrictions or obligations on University (including, without limitation, injunctive or non-monetary relief affecting University or an admission of invalidity of unenforceability of any United States Patent Right) or grants any rights to the Patent Rights or the Licensed Products without University's prior written consent. If Company fails or declines to assume the defense of any Claim within thirty (30) days after notice of the Claim, or fails to reimburse an Indemnified Party for any Liabilities pursuant to Sections 11.1 and 11.2 within the thirty (30) day time period set forth in Section 11.2, then University may assume the defense of such Claim for the account and at the risk and expense of Company, and any Liabilities related to such Claim will be conclusively deemed a liability of Company and Company shall reimburse University for all Liabilities in accordance with Section 11.1. The indemnification rights of the Indemnified Parties under this Article 11 are in addition to all other rights that an Indemnified Party may have at law, in equity or otherwise.

### Page 13 of 24

#### 12. INSURANCE

12.1 Coverages. Company will procure and maintain insurance policies for the following coverages with respect to personal injury, bodily injury and property damage arising out of Company's performance under this Agreement: (a) during the Term, comprehensive general liability, including broad form and contractual liability, in a minimum amount of \$2,000,000 combined single limit per occurrence and in the aggregate; (b) prior to the commencement of clinical trials involving Licensed Products, clinical trials coverage in a minimum amount of \$3,000,000 combined single limit per occurrence and in the aggregate; and (c) prior to the Sale of the first Licensed Product, product liability coverage, in a minimum amount of \$2,000,000 combined single limit per occurrence and in the aggregate. University may review periodically the adequacy of the minimum amounts of insurance for each coverage required by this Section 12.1, and University reserves the right to require Company to adjust the limits accordingly. The required minimum amounts of insurance do not constitute a limitation on Company's liability or indemnification obligations to University under this Agreement.

12.2 Other Requirements. The policies of insurance required by Section 12.1 will be issued by an insurance carrier with an A.M. Best rating of "A" or better and will name University as an additional insured with respect to Company's performance under this Agreement. Company will provide University with insurance certificates

evidencing the required coverage within thirty (30) days after the Effective Date and the commencement of each policy period and any renewal periods. Each certificate will provide that the insurance carrier will notify University in writing at least thirty (30) days prior to the cancellation or material change in coverage.

#### 13. COMPANY'S REPRESENTATIONS AND WARRANTIES

- 13.1 <u>Organization, Good Standing and Qualification.</u> Company is a corporation, duly organized, validly existing and in good standing under the laws of the State of Nevada and has all requisite corporate power and authority to conduct on its business, to execute and deliver this Agreement, and to consummate the transactions contemplated by this Agreement.
- 13.2 <u>Authorization.</u> All corporate action on the part of Company, its officers, directors and members or stockholders necessary for the authorization, execution and delivery of this Agreement, the performance of all obligations of Company hereunder and this Agreement, when executed and delivered by Company, will constitute valid and legally binding obligations of Company, enforceable against Company in accordance with its terms, except as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, and other laws of general application affecting enforcement of creditors' rights generally, and as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies.

#### 14. ADDITIONAL PROVISIONS

- 14.1 <u>Independent Contractors</u>. The parties are independent contractors. Nothing contained in this Agreement is intended to create an agency, partnership or joint venture between the parties. At no time will either party make commitments or incur any charges or expenses for or on behalf of the other party.
- 14.2 No Discrimination. Neither University nor Company will discriminate against any employee or applicant for employment because of race, color, sex, sexual or affectional preference, age, religion, national or ethnic origin, handicap, or veteran status.
- 14.3 Compliance with Laws. Company must comply with all prevailing laws, rules and regulations that apply to its activities or obligations under this Agreement. For example, Company will comply with applicable United States export laws and regulations, including, but not limited to, the export laws and regulations of the United States, and will not sell, transfer, export or re-export any such Licensed Products or information to any persons or any third parties with regard to which there exist grounds to suspect or believe that they are violating such laws, and will comply with applicable laws governing the marketing and promotion of pharmaceutical products. The transfer of certain technical data and commodities may require a license from the applicable agency of the United States government and/or written assurances by Company that Company will not export data or commodities to certain foreign countries without prior approval of the agency. University does not represent that no license is required, or that, if required, the license will issue.

#### Page 14 of 24

- 14.4 Modification, Waiver & Remedies. This Agreement may only be modified by a written amendment that is executed by an authorized representative of each party. Any waiver must be express and in writing. No waiver by either party of a breach by the other party will constitute a waiver of any different or succeeding breach. Unless otherwise specified, all remedies are cumulative.
- 14.5 <u>Assignment & Hypothecation.</u> Company may not assign this Agreement or any part of it, either directly or by merger or operation of law, without the prior written consent of University. University will not unreasonably withhold or delay its consent, provided that: (a) at least thirty (30) days before the proposed transaction, Company gives University written notice and such background information as may be reasonably necessary to enable University to give an informed consent; (b) the assignee agrees in writing to be legally bound by the terms of this Agreement; (c) the assignee agrees to deliver to University an updated Development Plan within sixty (60) days after the closing of the proposed transaction; (d) Company provides University with a copy of the assignment agreement between Company and the assignee; and (f) University receives from Company the assignment fee per Section 3.11. Any permitted assignment will not relieve Company of responsibility for performance of any obligation of Company that has accrued at the time of the assignment. Company will not grant a security interest in the License or this Agreement during the Term. Any prohibited assignment or security interest will be null and void. Any assignment made where the foregoing conditions (b) through (f) of this Section are not met shall be deemed null and void.
- 14.6 <u>Notices.</u> Any notice or other required communication (each, a "Notice") must be in writing, addressed to the party's respective Notice Address listed on the signature page, and delivered: (a) personally; (b) by certified mail, postage prepaid, return receipt requested; (c) by recognized overnight courier service, charges prepaid; or (d) by facsimile. A Notice will be deemed received: if delivered personally, on the date of delivery; if mailed, five (5) days after deposit in the United States mail; if sent via courier, one (1) business day after deposit with the courier service; or if sent via facsimile, upon receipt of confirmation of transmission provided that a confirming copy of such Notice is sent by certified mail, postage prepaid, return receipt requested.
- 14.7 <u>Severability & Reformation.</u> If any provision of this Agreement is held to be invalid or unenforceable by a court of competent jurisdiction, then the remaining provisions of this Agreement will remain in full force and effect. Such invalid or unenforceable provision will be automatically revised to be a valid or enforceable provision that comes as close as permitted by law to the parties' original intent.
- 14.8 <u>Headings & Counterparts</u>. The headings of the articles and sections included in this Agreement are inserted for convenience only and are not intended to affect the meaning or interpretation of this Agreement. This Agreement may be executed in several counterparts, all of which taken together will constitute the same instrument.
- 14.9 Governing Law. This Agreement and all amendments, exhibits, modifications, alterations, or supplements hereto, and the rights of the parties hereunder, shall be construed under and governed by the laws of the District of Columbia, without regard to principles of conflict of laws thereof which may require the application of the law of another jurisdiction.

#### Page 15 of 24

- 14.10 <u>Dispute Resolution</u>. If a dispute arises between the parties concerning any right or duty under this Agreement, then the parties will confer, as soon as practicable, in an attempt to resolve the dispute. If the parties are unable to resolve the dispute amicably, then the parties will submit to the exclusive jurisdiction of, and venue in, the state and Federal courts located in the Washington, DC with respect to all disputes arising under this Agreement.
- 14.11 <u>Integration</u>. This Agreement with its Appendix and Exhibits and the Confidentiality Agreement, contain the entire agreement between the parties with respect to the Patent Rights and the License and supersede all other oral or written representations, statements, or agreements with respect to such subject matter, including but not limited to the Term Sheet.
- 14.12 <u>Signatures</u>. The parties acknowledge and agree that this Agreement may be executed or accepted using electronic or facsimile signatures, and that such a signature shall be legally binding to the same extent as a written signature by a party's authorized representative. Each party waives any legal requirement that this Agreement be embodied, stored or reproduced in tangible media, and agrees that an electronic reproduction shall be given the same legal force and effect as a signed writing.

Each party has caused this Agreement to be executed by its duly authorized representative.

#### THE GEORGE WASHINGTON UNIVERSITY

#### **BULLFROG AI HOLDINGS, INC.**

Name: MarkDia

Title: **Executive Vice President and CFO** Date: 1/12/2022

Addresses:

**Technology Commercialization Office** The George Washington University 1922 F ST NW, 4TH Floor Washington DC. 20052

**Attention: TCO Operations Coordinator** 

Required copy to: The George Washington University Office of the Genera\ Counsel 2000 Pennsylvania Avenue NW Suite 305 Washington, DC 20006 **Attention: General Counsel** 202-994-6503 gwlegal@gwu.edu

Name: Vin Singh Title: Founder and CEO

Date: 116122

**Bullfrog Al Holdings, Inc.** 325 Ellington Blvd., #317 Gaithersburg, MD 20878 Attention: Alan Alfano Phone: 301-752-4432 Email: alan.a@bullfrogai.com

Page 17 of 24

APPENDIX A - Key License Terms

#### 1. License Grant.

- Technology: GW Tech ID# 020-030-Mishra entitled, "Inhibition of SPTBN1 to treat Obesity/NASH and Obesity/NASH-driven cancer", protected by the patents and patent applications listed in Exhibit A, including data and know-how.
- b. Exclusivity: exclusive
- Territory: worldwide
- Field of Use: USE OF THE TECHNOLOGY FOR TREATMENT OF HUMAN DISEASES (INCLUDING IN CLINICAL TRIALS), including but not limited to: cancers, obesity, non-alcoholic steatohepatitis (NASH), non-alcoholic fatty liver disease (NAFLD).

#### 2. Diligence.

- Diligence Minimums: First year: \$150,000. Second year: \$300,000. Third year and thereafter:
- Diligence Events: listed in the table below

DILIGENCE EVENT	COMPLETION DATE
Receipt of IND approval for a Licensed Product	July 1, 2023
Completion of first-in-human clinical trial (e.g., Phase 0 or Phase 1 CT for hepatocellular carcinoma or obesity)	July 1, 2024
Completion of Phase 2 clinical trial for lead indication	January 1, 2026
Completion of Phase 3 or registrational clinical trial for lead indication	July 1, 2029
Submission of application for NDA/BLA approval for lead indication	January 1, 2030
First twenty (20) million dollars (USD \$20,000,000) net sales of a Licensed Product in the United States	July 1, 2032
Completion of a first clinical trial either for additional indications after the lead indication, or from a non-US regulatory agency	January 1, 2027
Completion of a registrational clinical trial either for additional indications after the lead indication, or from a non-US regulatory agency	January 1, 2032
Filing of an application for approval to sell a Licensed Product either for non-cancer use, or from the EMA	July 1, 2032
First Sale of a Licensed Product outside of the United States	January 1, 2034

#### 3. Fees and Royalties.

License Initiation Fee: \$20,000

#### Page 18 of 24

- License Maintenance Fees: First year: none. Second year: none. Third year: \$10,000. Fourth year and thereafter: \$20,000.
- Milestone Payments: Per table below.

MILESTONE	PAYMENT	
Completion of first-in-human clinical trial (e.g., Phase 0 or Phase 1 CT for hepatocellular carcinoma or obesity)	\$	110,000
Completion of Phase 2 clinical trial for lead indication	\$	250,000
Receipt of NDA/BLA approval for lead indication	\$	500,000
First twenty (20) million dollars (USD \$20,000,000) net sales of a Licensed Product in the United States	\$	1,000,000
Filing of an application for approval to sell a Licensed Product either for non-cancer use, or from the EMA	\$	200,000

- d. Earned Royalties: 3% of Net Sales.
- e. Minimum Royalties: Minimum royalties come into effect after the first Sale following NDA or BLA approval of a Licensed Product First 4 Quarters = \$10,000 per quarter. Next 4 Quarters = \$25,000 per quarter. All Quarters thereafter = \$50,000 per quarter.
- f. Sublicense Fee: per the table below.

PERIODSUBLICENSE FEEUntil first IND acceptance25%Until first patient treated in a Phase 2 clinical trial for lead indication.12%Until completion of Phase 2 clinical trial for lead indication9%Thereafter5%

g. Assignment Fee: The higher of either: (i) 5% of all consideration received by Company in conjunction with the assignment; or (ii) \$75,000 in the event that the assignment is made after Company has paid a Sublicense Fee of at least \$300,000 to University to comply with Section 3.10 of the Agreement.

#### 4. Patent Costs.

- a. Past Patent Expenses: Past Patent Expenses billed to University through September 22, 2021 that have not yet been reimbursed amount to \$6,550.00 (see invoice in Exhibit D). Past Patent Expenses may also include work incurred by University prior to Effective Date, but that has not been billed to University by Effective Date.
- b. By thirty (30) days after the Effective Date (the "Past Patent Expenses Reimbursement Date") Company will reimburse University for all patent and legal expenses with respect to the Patent Rights incurred by University prior to Effective Date.
- c. Ongoing patent costs to be reimbursed by Company according to Section 7.2 of the Agreement.

#### Page 19 of 24

#### EXHIBIT INDEX

Exhibit A	Patents and Patent Applications in Patent Rights
Exhibit B	Minimum Contents of Development Plan
Exhibit C	Format of Royalty Report
Exhibit D	Invoice of Past Patent Costs

#### Page 20 of 24

#### Exhibit A

#### **Patents and Patent Applications in Patent Rights**

Law firm Reference	GW Reference	Status	Country	Application Number	Application Date	Patent Number	Title	Inventors
SKGF 3973.0180000	020-030- Mishra-P	Converted to PCT	US	63/113,745	11/13/2020		Inhibition of SPTBN1 to treat Obesity/NASH and Obesity/NASH-driven cancer	Wilma Jogunoori, Bibhuti Mishra, Lopa Mishra, Kazufumi Ohshiro, Shuyun Rao, Sobla Ziadi
SKGF 3973.0180001	020-030- Mishra-P2	Converted to PCT	US	63/147,141	2/8/2021		Inhibition of SPTBN1 to treat Obesity/NASH and Obesity/NASH-driven cancer	Wilma Jogunoori, Bibhuti Mishra, Lopa Mishra, Kazufumi Ohshiro, Shuyun Rao, Sobla Ziadi
SKGF 3973.018PC02	020-030- Mishra- PCT	Filed	WO	PCT/US2021/ 059245	11/12/2021		Inhibition of SPTBN1 to treat Obesity/NASH and Obesity/NASH-driven cancer	Wilma Jogunoori, Bibhuti Mishra, Lopa Mishra, Kazufumi Ohshiro, Shuyun Rao, Sobla Ziadi

#### Exhibit B

Page 21 of 24

#### **Minimum Contents of Development Plan**

The initial Development Plan shall contain as much material as possible from the below, and each annual update to the Development Plan shall include, at a minimum, the following information:

• The date of the Development Plan and the reporting period covered by the Development Plan.

- Identification and nature of each active relationship between Company and its Affiliates, Sublicensees or subcontractors in the research, development or commercialization of Licensed Products or Patent Rights
- Significant projects completed during the reporting period by Company or its Affiliates, Sublicensees or subcontractors in the research, development or commercialization of Licensed Products or Patent Rights.
- Significant projects currently being performed by Company or its Affiliates, Sublicensees or subcontractors in the research, development or commercialization of Licensed Products or Patent Rights.
- Future projects expected to be undertaken during the next reporting period by Company or its Affiliates, Sublicensees or subcontractors in the research, development or commercialization of Licensed Products or Patent Rights.
- Projected timelines to product launch of each Licensed Product prior to first Sale.
- Projected annual Net Sales for each Licensed Product after first Sale.
- Significant changes to the current Development Plan since the previous Development Plan and the reasons for the changes.
- · Significant assumptions underlying the Development Plan and the future variables that may cause significant changes to the Development Plan.

Page 22 of 24

#### Exhibit C

#### Format of Royalty Report



## Royalty Report

Licensee:	[Company Name]	Agreement #: [GW License ID]
Inventor(s):	[Lead inventor et al.]	Patent #(s):
Period Covered:	[1st Half of 20XX]	Prepared By:
From	[period start date]	Date:
To	[period end date]	Approved By:
		Date:
	If license covers several major pro	duct lines, please prepare a separate report for each

If license covers several major product lines, please prepare a separate report for each line. Then combine all product lines into a summary report.

Report Type: 

Single Product Line Report

Multiple product Summary Report Page

Multiple product Summary Report Page \_\_\_\_ of \_\_\_ pages
 Product Line Detail: Line:

Trade Name Page

Report Currency: US Dollars Other (specify)

					Period Royalty Amount			
Country		Allowances (if allowed)	Net Sales	Royalty Sales Rate	This Period	This Year to Date	This Period - Prior Year	Year to date Prior Year
			\$ -		\$ -			
			\$ -		\$ -			
			\$ -		\$ -			
			\$ -		\$ -			
			S -		\$ -			
			\$ -		\$ -			
			\$ -		\$ -			
			\$ -		\$ -			
			\$ -		\$ -			
			\$ -		\$ -			
	1		\$ -		\$ -			
Total	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
Conversion rate	e if other than US	Dollars						
Royalties in US	Dollars				\$ -	\$ -	\$ -	\$ -

Page 23 of 24

Exhibit D

**Invoice of Past Patent Costs** 

## THE GEORGE WASHINGTON UNIVERSITY

## WASHINGTON, DC

#### Remit To:

The George Washington University Technology Commercialization Office 1922 F Street, N.W., 4th Floor Washington, DC 20052 United States 202-994-5866

#### Billed To:

Bullfrog Al Holdings, Inc. 325 Ellington Blvd., #317 Gaithersburg, MD 20878 United States

	LIC-022-06-Bullfrog-001 days from license effective date
Invoice #	LIC-022-06-Bullfrog-001
Pay Terms	30 days from license effective date
Agrmnt ID	LIC-022-06-Bullfrog
Tech ID	020-030-Mishra

Receivable						Amount Due
Past Patent Costs						
Firm	Invoice #	Patent #	GW Internal ID	Invoice Date	Invoice Amount	
Sterne Kessler	535749	63/113,745	020-030-Mishra-P	10/14/2020	\$ 76.50	
Sterne Kessler	543884	63/113,745	020-030-Mishra-P	12/22/2020	\$ 1,869.50	
Sterne Kessler	546102	63/113,745	020-030-Mishra-P	1/27/2021	\$ 296.00	
Sterne Kessler	554489	63/147,141	020-030-Mishra-P2	3/31/2021	\$ 1,200.50	
Sterne Kessler	556001	63/147,141	020-030-Mishra-P2	4/29/2021	\$ 328.00	
Sterne Kessler	560247	63/113,745	020-030-Mishra-P	5/28/2021	\$ 373.00	
Sterne Kessler	567253	63/147,141	020-030-Mishra-P2	7/21/2021	\$ 54.00	
Sterne Kessler	567252	63/113,745	020-030-Mishra-P	7/21/2021	\$ 54.00	
Sterne Kessler	571357	63/147,141	020-030-Mishra-P2	8/27/2021	\$ 351.50	
Sterne Kessler	575321	63/113,745	020-030-Mishra-P	9/22/2021	\$ 355.00	
Sterne Kessler	578403	63/147,141	020-030-Mishra-P2	10/22/2021		
Sterne Kessler	583945	63/113,745	020-030-Mishra-P	11/16/2021	\$ 1,511.00	
				Sub total:	\$6,550.00	
ax ID: 53-0196584					Total Due:	\$6,550.00



Page 1 of 1 Printed: 12/13/2021

# EXCLUSIVE LICENSE AGREEMENT Johns Hopkins University and BullFrog AI Holdings, Inc. JHU Agreement Number A40219

This AGREEMENT is entered into by and between the Johns Hopkins University ("JHU"), a Maryland corporation having an address at 3400 N. Charles Street, Baltimore, Maryland, 21218- 2695, and BullFrog AI Holdings, Inc., ("LICENSEE"), a Nevada corporation having an address at 325 Ellington Blvd., #317, Gaithersburg, MD 20878, and is effective on the 22<sup>nd</sup> day of February, 2022 ("EFFECTIVE DATE").

#### RECITALS

WHEREAS, JHU owns, by assignment or otherwise from members of its faculty and staff, certain valuable inventions, know-how, and data as specified in <a href="Exhibit A-">Exhibit A-</a>, which JHU desires to have commercialized to make useful products and services available for the benefit of the public, including members of undeveloped countries and poor populations, as soon as possible, in accordance with JHU's mission and purpose;

WHEREAS, LICENSEE and JHU entered into a Non-Disclosure Evaluation, and Option Agreement dated October 15, 2021 ("OPTION AGREEMENT"); and

WHEREAS, LICENSEE exercised the license option from JHU on November 22, 2021, and in accordance with the terms of the OPTION AGREEMENT, the parties now wish to enter into an exclusive license agreement; and

WHEREAS, LICENSEE desires to obtain certain rights in accordance with this AGREEMENT so that it may develop, manufacture, use and/or distribute certain products and services for public use and benefit as soon as possible.

NOW THEREFORE, the parties agree, with the intent to be legally bound, as follows:

#### 1. DEFINITIONS AND SCOPE

Capitalized terms have the meanings provided by Exhibit B or as defined in the body of this AGREEMENT.

#### 2. GRANT OF LICENSES

- 2.1. Grant of Exclusive Patent License. Subject to this AGREEMENT, JHU grants LICENSEE an exclusive license under the LICENSED PATENTS to make, have made, use, import, export, offer to sell and sell LICENSED PRODUCTS in the LICENSED TERRITORY and FIELD OF USE and to grant SUBLICENSES subject to the limitations provided by this AGREEMENT.
- 2.2. Grant of Non-Exclusive Right to Use Data, and Know-How. JHU grants LICENSEE a non-exclusive right to use the LICENSED DATA, or LICENSED KNOW-HOW, existing as of the EFFECTIVE DATE of this AGREEMENT and as identified in and subject to restrictions identified in <a href="Exhibit A-1"><u>Exhibit A-1</u></a>. This right to use is granted solely to LICENSEE to permit LICENSEE to make, have made, use, import, export, offer to sell, sell, develop, and commercialize LICENSED PRODUCTS in the LICENSED TERRITORY in the FIELD OF USE, provided that LICENSEE may grant SUBLICENSES to LICENSED DATA and LICENSED KNOW-HOW, solely in connection with SUBLICENSES of the LICENSED PATENTS and solely to the extent needed to practice the LICENSED PATENTS and subject to the limitations provided by this AGREEMENT.

2.3. Affiliate Rights and Obligations. The LICENSED RIGHTS granted herein extend to AFFILIATES, except that AFFILIATES may not grant SUBLICENSES without JHU's written consent. An AFFILIATE that exercises rights under this AGREEMENT shall automatically be bound by all terms and conditions of this AGREEMENT, including but not limited to indemnity and insurance provisions and the obligation to pay ROYALTIES. All acts or omissions by an AFFILIATE shall be considered acts or omissions of LICENSEE, which is, and shall remain, liable for them.

- 2.4. Sublicense Notification. LICENSEE shall provide a complete and unredacted copy of each SUBLICENSE to JHU within thirty (30) days of execution. Each SUBLICENSE shall (i) expressly reference this AGREEMENT and declare void and unenforceable against JHU any terms contrary to this AGREEMENT; (ii) prohibit sublicensing by the SUBLICENSEE; (iii) expressly incorporate the Articles (inclusive of subsections) of this AGREEMENT numbered 4, 5, 6, 7, 8, 9, 10, 11, and 12 for the benefit of JHU; and (iv) acknowledge JHU as a third party beneficiary of the SUBLICENSE having the right to audit and enforce its terms and (v) expressly require SUBLICENSEE to provide LICENSEE diligence reports on an annual basis for the express purpose of providing those SUBLICENSEE diligence reports to JHU. In addition, each SUBLICENSE shall provide for its own immediate termination or expiration upon termination of this AGREEMENT, unless LICENSEE's entire right and interest in such SUBLICENSE (including all rights to receive ROYALTIES and other payments) is assigned in writing to JHU with JHU's consent, which shall not be unreasonably withheld or delayed. Failure to comply with the requirements of this Section 2.4 shall cause any purported SUBLICENSE to be void.
- 2.5. Retained Research and Publication Rights. JHU retains the unrestricted right, on behalf of itself, its faculty and staff and non-profit academic or research institutions to whom JHU extends such rights, to practice and use any LICENSED RIGHTS described in <a href="Exhibit A-1">Exhibit A-1</a> for any research or non-profit purpose, including sponsored research and collaborations with commercial entities and assessment and treatment of patients at Johns Hopkins Health System/JHU institutions. In addition, the right of JHU's faculty and staff to publish all information concerning what is described in <a href="Exhibit A-1">Exhibit A-1</a> shall not be restricted by this AGREEMENT.
- 2.6. Government Rights. LICENSED PATENTS arising from research funded in whole or part by the United States government are subject to the Bayh Dole Act and its implementing regulations (35 U.S.C. §§ 200-204, 37 CFR Part 401) (collectively, "Bayh Dole Obligations"), including requirements to take effective steps in a reasonable time to achieve practical application of the LICENSED PATENTS in the FIELD OF USE and to assure LICENSED PRODUCTS sold or produced in the United States be "manufactured substantially in the United States." LICENSEE shall comply with, and cooperate with, JHU in assuring compliance with the Bayh Dole Obligations. JHU's obligations under Title 35 Sections 200-204 of the United States Code include the grant of an irrevocable, non-exclusive, nontransferable, royalty-free worldwide license to LICENSED PATENTS by JHU to the United States government, and a statement of United States government patent rights on all LICENSED PATENTS. All determinations of federal research funding involvement will be made solely by JHU, and JHU's determination shall be honored by LICENSEE.

- 2.7.1. The parties will cooperate such that essential medicines developed under this AGREEMENT can be made available in LEAST DEVELOPED COUNTRIES. JHU agrees to consider reasonable requests of LICENSEE for a commensurate reduction of payment obligations to JHU to facilitate the availability of LICENSED PRODUCTS in such countries.
- 2.7.2. Provided JHU first consults with LICENSEE, pursuant to this Section 2.7.2, JHU retains the right to grant rights to manufacture, use, distribute, sell and import the LICENSED RIGHTS described in <a href="Exhibit A-1"><u>Exhibit A-1</u></a> to a QUALIFIED HUMANITARIAN ORGANIZATION for HUMANITARIAN PURPOSES, provided that any such grant shall expressly prohibit the manufacture, use, distribution, sale or importation of any LICENSED PRODUCT in a country other than a LEAST DEVELOPED COUNTRY. Prior to granting such rights, JHU will notify LICENSEE, and LICENSEE shall have the first right to grant such rights to such QUALIFIED HUMANITARIAN ORGANIZATION.
- 2.8. Commercial Development Sublicenses. In the event LICENSEE is unable or unwilling to develop a LICENSED PRODUCT for an unserved market, use, indication or territory, upon JHU's written request and LICENSEE'S failure to provide JHU with a reasonable development plan for such unserved market, use, indication, or territory within ninety (90) days of such written request, LICENSEE shall negotiate with one or more potential sublicensees identified by JHU to authorize development of such product. LICENSEE shall not, however, be obligated to enter into a sublicense that poses a material risk to the successful development and commercialization of LICENSED PRODUCTS by LICENSEE.
- **2.9. Exclusions.** Nothing in this AGREEMENT imposes obligations on JHU or grants rights in any JHU technology, intellectual property or other assets except as expressly identified in this AGREEMENT. Except as specifically provided in this AGREEMENT, JHU does not have any obligation to provide to LICENSEE any know how, inventions, data, materials, or assistance.

#### 3. DILIGENCE AND DILIGENCE REPORTS

- **3.1. Milestones.** LICENSEE shall achieve the MILESTONES set forth in <u>Exhibit A-3</u> and shall notify JHU of the achievement of each MILESTONE within thirty (30) days of achieving them.
- 3.2. Extension of Diligence Milestone. LICENSEE may request, in writing, an extension of the period for achieving a diligence MILESTONE set forth in Exhibit A-3 (each a MILESTONE) by up to six months. JHU will grant the requested extension provided (i) LICENSEE has diligently pursued achievement of the MILESTONE; and (ii) LICENSEE remits the milestone payment amount within thirty (30) days of achievement of the delayed MILESTONE. The extension of a MILESTONE shall automatically extend the deadline for subsequent MILESTONES of Exhibit A-3 respecting the same subject matter by like amount. LICENSEE may seek extensions for MILESTONES no more than twice during the term of this AGREEMENT.

3

**3.3. Diligence Reports.** Annually, on or before March 1 of each year, LICENSEE shall submit a Diligence Report for the prior calendar year to JHU substantially in the form attached as <u>Exhibit D</u> and in sufficient detail to facilitate JHU's compliance with its Bayh Dole Obligations.

#### 4. FEES, ROYALTIES, MILESTONES, AND EQUITY CONSIDERATION

- **4.1. Licensee's Obligation to Pay Fees, Royalties and Other Payments.** As partial consideration for the rights granted by JHU under this AGREEMENT, LICENSEE shall pay to JHU all ROYALTIES, fees, PAST PATENT COSTS, PATENT COSTS, SUBLICENSE NON-ROYALTY CONSIDERATION, and other payments LICENSED PARTIES are required to pay JHU under this AGREEMENT. SALES, actions, or omissions by any LICENSED PARTY are deemed to be SALES, actions, or omissions of LICENSEE.
- **4.2. Upfront License Fee.** LICENSEE shall pay to JHU a nonrefundable UPFRONT LICENSE FEE as specified in Exhibit A-2 within thirty (30) days of the EXECUTION DATE. The UPFRONT LICENSE FEE paid by LICENSEE to JHU shall not be credited towards any other payments LICENSEE is required to pay JHU under this AGREEMENT.
- 4.3. Annual License Fee. LICENSEE shall pay to JHU annually on or before January 1 of each calendar year the ANNUAL LICENSE FEE as specified in Exhibit A-2.
- **4.4. Patent Costs.** LICENSEE shall reimburse JHU for all PAST PATENT COSTS specified in Exhibit A-2 according to the time schedule specified in Exhibit A-2. PATENT COSTS will be invoiced to LICENSEE on a rolling basis as processed by JHU or JHU's patent counsel and are due and payable within thirty (30) days of receipt by LICENSEE.
- **4.5. Minimum Annual Royalty.** By January 1 of each calendar year, LICENSEE shall pay JHU the MINIMUM ANNUAL ROYALTY ("MAR") specified in Exhibit A-2. MAR payments are non-refundable and will be credited against ROYALTIES incurred by LICENSEE for the calendar year in which the MAR was due. No MAR credits will be applied to ROYALTIES incurred in prior or subsequent calendar years.
- **4.6. Royalties on Licensed Products and Reports.** Within forty-five (45) days of the end of each calendar quarter following FIRST COMMERCIAL SALE, LICENSEE shall pay ROYALTIES in accordance with <a href="Exhibit A-2">Exhibit A-2</a> and submit the electronic Excel Quarterly SALES & ROYALTY Report set forth in <a href="Exhibit C">Exhibit C</a>. ROYALTIES shall be paid on all SALES, use or manufacture of LICENSED PRODUCTS in the LICENSED TERRITORY by all LICENSED PARTIES.
- 4.7. Milestone Payments. Within thirty (30) days of achieving a MILESTONE, LICENSEE shall pay the related milestone payment to JHU as specified in Exhibit A-3.

- **4.8. Private Offering Purchase Rights.** As partial consideration in addition to license fees, in the event of any private offering of the LICENSEE's equity securities for cash (or in satisfaction of debt issued for cash)(also outline on Exhibit A-5):
  - 4.8.1. JHU and/or its Assignee (as defined below) may purchase for cash up to one percent (1%) of the securities or interests issued in such offering.
    - 4.8.1.1. "Assignee" means: (a) any entity to which JHU's participation rights under this Section 1 have been assigned either by JHU or another entity; or (b) any entity that is controlled by JHU.
  - **4.8.2.** In any private offering subject to this AGREEMENT ("Offering"), JHU and/or its Assignee's purchase right shall be at the same price and on the same terms as the most favored other investors, except that JHU and/or its Assignee shall not have any board representation or board meeting attendance rights.

4.8.3. LICENSEE shall give JHU at least thirty (30) days advance written notice of the terms of each Offering, including the names of the investors and the amounts to be invested by each, and JHU may elect to exercise its right of purchase, in whole or in part, by written notice given to the LICENSEE within fifteen (15) business days after receipt of LICENSEE'S notice. To exercise this right, JHU must provide the written notice of its election to invest per the prior sentence and must sign all purchase and shareholder agreements that are signed by the other investors. If JHU and/or its Assignee elects not to purchase or fails to give an election notice within such period, JHU's purchase right will not apply to the Offering if (and only if and to the extent) it is consummated within ninety (90) days on the same or less favorable (to the investor) terms as stated in LICENSEE's notice to JHU.

All rights under this Section 1.4 will not apply to the issuance of stock to employees and other service providers pursuant to a plan approved by LICENSEE's board of directors, or to shares issued as additional consideration in lending or leasing transactions. In the event of the closing of a firm commitment underwritten public offering, the rights granted in Section 1.4 will terminate (in addition to any earlier termination pursuant to their terms) immediately before such closing.

- **4.8.4.** JHU's rights respecting equity of or securities in LICENSEE are cumulative. In the event of a conflict, the provision of this AGREEMENT granting greater interests or purchase rights to JHU will govern.
- **4.8.5.** This Section 1 shall survive the termination of this AGREEMENT.
- 4.9. Patent Expiration and Royalty Adjustments.
  - 4.9.1. Expiration of Valid Claims. Upon expiration of all VALID CLAIMS, LICENSEE's ROYALTY obligation shall be reduced by 50%.

2

- 4.9.2. Royalty Stacking. In the event a LICENSEE pays royalties on one or more third party patents ("OTHER ROYALTIES") as a requirement to make, use or sell a LICENSED PRODUCT, then the LICENSEE may deduct 50% of the amount paid for such OTHER ROYALTY from the ROYALTIES owed to JHU under this AGREEMENT. At no time, however, may the effective ROYALTY rate applicable to a LICENSED PRODUCT that requires OTHER ROYALTIES be less than 50% of the applicable ROYALTY rate as set forth in <a href="Exhibit A-2">Exhibit A-2</a>. No deduction under this Section 4.9.2 shall be made for OTHER ROYALTIES paid to an AFFILIATE, division, or corporation sharing a common business location or any corporate officer with LICENSEE or to any SUBLICENSEE.
- **4.10. Royalty Duration.** LICENSEE's obligation to pay ROYALTIES on SALES of each LICENSED PRODUCT shall remain in effect for the longer of (i) 10 years from date of FIRST COMMERCIAL SALE, or (ii) the expiration of all VALID CLAIMS, and thereafter LICENSEE shall no longer be obligated to pay ROYALTIES in connection with the SALES of each LICENSED PRODUCT.
- **4.10.1. International Licensed Products.** The duration of the LICENSEE's obligation to pay ROYALTIES shall be determined on a country-by-country basis from the date of FIRST COMMERCIAL SALE to the date of expiration of all VALID CLAIMS.
- **4.11. Sublicense Non-Royalty Consideration.** LICENSEE shall pay to JHU the SUBLICENSE NON-ROYALTY CONSIDERATION as stated on Exhibit A-2 within sixty (60) days of receipt of SUBLICENSE NON-ROYALTY CONSIDERATION by LICENSEE.
- **4.12. Assignment Fee.** LICENSEE shall pay to JHU an assignment fee as provided for in Exhibit A-4 within sixty (60) days of receipt of assignment consideration from its assignee.
- **4.13. Currency.** All payments by LICENSEE to JHU shall be made in U.S. Dollars. Computation of conversion to U.S. Dollars from foreign currency transactions shall be made on a quarterly basis using the exchange rate quoted by United States Federal Reserve Bank for the last business day of the calendar quarter for which payment is due.
- **4.14. Non-U.S. Taxes.** LICENSEE shall pay all non-U.S. taxes imposed on all amounts payable by LICENSEE under this AGREEMENT. Such tax payments are not deductible from any payments due to JHU.
- **4.15. Invoicing by JHU.** Payments shall be due in accordance with this AGREEMENT, and JHU shall invoice LICENSEE for each payment due. Should JHU send an invoice to LICENSEE, it may do so in electronic form via e-mail sent to the e-mail address supplied by LICENSEE from time to time, and will be deemed received by LICENSEE upon transmission.
- **4.16. Purchase Orders.** If at any time LICENSEE requires a Purchase Order to complete payment to JHU under this AGREEMENT or a new Purchase Order number is issued on an annual basis, LICENSEE shall provide Purchase Order No. with JHU Agreement AXXXXX to <a href="mailto:jHTVReports@JHU.edu">jHTVReports@JHU.edu</a> or other email address provided by JHTV. Alternatively, LICENSEE may inform JHU of need for or change in Purchase Order number on the electronic Excel Quarterly Royalty and Sales Report

6

- **4.17. Payment Methods.** All payments to JHU shall be made either by check or wire transfer, in accordance with the payment instructions set forth in Exhibit A-2 as may be updated from time to time.
- 4.18. Interest. Payments not received when due shall bear interest at the rate of six percent (6%) per annum (compounded monthly) from the date due until paid in full.

### 5. ROYALTY REPORTS AND ACCOUNTING

**8.1. Royalty Reports.** Beginning with the FIRST COMMERCIAL SALE of a LICENSED PRODUCT, LICENSEE shall thereafter submit to JHU a Quarterly Sales and Royalty Report thirty (30) days after the end of each calendar quarter (even if there are no sales during that quarter), along with royalty payment under Section 4.6. LICENSEE agrees to submit an electronic Excel royalty report using the electronic royalty report template provided by JHU. This report will be in the form of <a href="Exhibit C">Exhibit C</a> and will state the number, description, and aggregate SALES of LICENSED PRODUCTS during the completed calendar quarter. All indicated columns shall be populated as they pertain to the completed calendar quarter with adjustments and unusual occurrences documented.

- 5.2. Accounting and Audit Rights. Each LICENSED PARTY shall maintain complete and accurate books and records, for no less than seven years, relating to the rights and obligations under this AGREEMENT and any amounts payable to JHU. Such books and records shall include information sufficient to permit JHU to confirm the accuracy and completeness of any payments and reports delivered to JHU and compliance in all other respects with this AGREEMENT. Upon 14 days' notice, a LICENSED PARTY shall make such books and records available for inspection by JHU or its designee (provided that such designee has signed a confidentiality agreement with terms consistent with those in Article 6 of this Agreement) during normal business hours, to verify any reports, accuracy and completeness of payments and/or compliance with this AGREEMENT. In the event the inspections shows an underpayment to JHU of 5% or more for any quarter during the period examined, LICENSEE shall bear the full cost of the inspection, which shall be due and payable (along with past due ROYALTY, ROYALTY shortfall and other payment amounts plus interest per Section 4.18 from the date that such payments should have been made to JHU) within thirty (30) days of receiving notice from JHU of the inspection results. JHU may exercise this inspection right not more than annually, unless prior inspections show consistent underpayment of 10% or more (in which case JHU may conduct follow up inspections at its discretion).
- **5.3. Statute of Limitations.** Notwithstanding any applicable statute of limitation, LICENSEE agrees that it shall pay JHU for any underpayments revealed by an inspection for a period of seven (7) years prior to the inspection.
- **5.4. Final Royalty Report and Payment**. Within ninety (90) days of termination of this AGREEMENT, each LICENSED PARTY shall submit a final written Sales and Royalty Report and pay all outstanding amounts due under this AGREEMENT.

7

#### 6. CONFIDENTIAL INFORMATION

- **6.1. Term of Confidentiality.** During the term of this AGREEMENT and for a period of three (3) years thereafter, the parties agree that all CONFIDENTIAL INFORMATION disclosed by a party shall be maintained in confidence by the receiving party and shall not be disclosed by the receiving party to any third party unless agreed to in writing by the disclosing party or compelled by a court of competent jurisdiction; nor shall any such CONFIDENTIAL INFORMATION be used by the receiving party for any purposes other than those contemplated by this AGREEMENT.
- **6.2. Standard for Confidentiality.** Each party shall maintain the security of CONFIDENTIAL INFORMATION it receives from the other party by employing reasonable safeguards that are no less secure than those used to protect its own confidential records.
- **6.3. Permitted Disclosures.** These obligations respecting CONFIDENTIAL INFORMATION do not preclude disclosures about this AGREEMENT and amounts paid by LICENSED PARTIES as part of routinely prepared summary documents or financial reports, nor do they impede or impair JHU's exercise of retained research and publication rights pursuant to Section 2.5, provided that JHU not disclose LICENSEE's CONFIDENTIAL INFORMATION in such publications.

#### 7. **DISCLAIMERS, LIABILITY LIMITATION**

- 7.1. DISCLAIMER. JHU MAKES NO WARRANTIES UNDER THIS AGREEMENT. ALL TANGIBLE AND INTANGIBLE MATTER, INTELLECTUAL PROPERTY, TECHNOLOGY, RIGHTS, DATA, KNOW-HOW, AND MATERIALS ("DELIVERABLES") LICENSED, GRANTED, OR PROVIDED BY JHU ARE "AS IS." JHU MAKES NO REPRESENTATIONS WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, AS TO ANY MATTER INCLUDING WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, MERCHANTABILITY, USEFULNESS, TITLE, NONINFRINGEMENT, VALIDITY, ENFORCEABILITY, USE, UTILITY, SCOPE, OR SUCCESFUL OPERATION OF DELIVERABLES.
- 7.2. LIMITS OF LIABILITY. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES, SUCH AS LOSS OF PROFITS OR INABILITY TO USE DELIVERABLES, HOWEVER ARISING, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Under no circumstances shall JHU be liable for damages in excess amounts received by JHU under this AGREEMENT during the 12 months prior to the event giving rise to the claim for damages.

#### 8. <u>INDEMNITY AND INSURANCE</u>

8.1. Indemnification. LICENSEE and each applicable LICENSED PARTY (each an "Indemnitor" and collectively "Indemnitors") shall protect, defend, and indemnify the JHU INDEMNITEES from and against any claims, losses, or damages of third parties (i) allegedly arising from or related in any way to any act or omission of an Indemnitor performing or exercising rights granted under this AGREEMENT, or (ii) allegedly caused by or arising in any way from LICENSED PRODUCTS. Indemnitors shall pay to defend the JHU INDEMNITIES against any claim subject to this Section 8.1 with counsel reasonably acceptable to JHU, and shall pay and/or hold the JHU INDEMNITEES harmless as against any judgments, fees, expenses, or other costs arising from or incidental to any such lawsuit, claim, demand or other action, whether or not any JHU INDEMNITEE is named as a party defendant in any such lawsuit and whether or not the JHU INDEMNITEES are alleged to be negligent or otherwise responsible for any injuries to persons or property.

8

- **8.1.1.** Exclusions. The LICENSED PARTY Indemnification obligation as stated herein excludes: (i) claims arising solely from the practice by JHU of its retained rights under Section 2.5 of this AGREEMENT; and (ii) claims arising solely from the negligent use or administration by a JHU INDEMNITEE of a LICENSED PRODUCT (but any related claim of product liability or Indemnitor negligence shall remain subject to Indemnification).
- 8.1.2. Notice, Cooperation, and Participation. JHU or a JHU Indemnitee shall provide LICENSEE with prompt notice of any claims subject to indemnification, and will provide reasonable cooperation in the investigation and defense of such claims. JHU shall have the right to participate in the defense of any claim with counsel of its choice and at its own expense. JHU shall have the right to approve any settlement against JHU or that imposes any liability or obligation on JHU, such approval not to be unreasonably withheld. JHU shall not be entitled to indemnification if it concludes any settlement or compromise of a claim without the prior written consent of LICENSEE, which consent shall not be unreasonably withheld, delayed, or conditioned.
- 8.2. Insurance. LICENSEE shall, continuing throughout the term of this AGREEMENT and for a period of three years thereafter, obtain and maintain, in full force and effect and at LICENSEE's sole cost and expense, the insurance coverage as set forth in <a href="Exhibit E">Exhibit E</a>. LICENSEE shall provide written proof of such insurance coverage to JHU within 30 days of EXECUTION DATE or initial coverage, whichever is later, and each renewal thereof. This AGREEMENT and the licenses granted herein shall immediately and automatically terminate in the event LICENSEE or a LICENSED PARTY (as applicable) fails to obtain the required insurance or if the insurance lapses or is cancelled.
- **8.3. Survival.** The foregoing indemnification obligations shall survive termination or expiration of this AGREEMENT, and shall not be subject to any limitation of liability set forth in this AGREEMENT.

#### 9. PATENTS

**9.1. Title and Authority.** JHU shall retain and hold title to all patents and patent applications included in the PATENT RIGHTS. JHU retains all decision-making authority with respect to patent filing and prosecution of the PATENT RIGHTS.

- 9.2. Domestic Filing and Prosecution. JHU shall have sole control over the selection of counsel, filing, prosecution, maintenance and management of all issued patents and pending and future patent applications in the United States that are subject to this AGREEMENT. JHU, at LICENSEE's expense, shall have the right to file, prosecute and maintain all patents and patent applications included in the PATENT RIGHTS. JHU shall request its patent counsel to timely copy LICENSEE on all official actions and written correspondence with any patent office and to afford LICENSEE an opportunity to comment on prosecution matters. LICENSEE may elect to abandon its participation in, and rights to, a patent application or issued patent filed in the United States, provided that LICENSEE notifies JHU in writing at least ninety (90) days before any due date for any pending Office Action or matter or any maintenance fee due date in the case of an issued patent. Such election shall not relieve LICENSEE of the obligation to reimburse JHU for PATENT COSTS and PAST PATENT COSTS associated with such application that were incurred before JHU received actual notice of LICENSEE's abandonment. Thereafter, JHU may file, prosecute, and/or maintain such patent applications or patents at its own expense and for its own benefit and any PATENT RIGHTS granted on such applications or patents shall be excluded from the LICENSED PATENTS. Failure to provide such notification may be considered by JHU to be LICENSEE's authorization to proceed at LICENSEE's expense.
- 9.3. Foreign Filing and Prosecution. Upon LICENSEE's written request and at LICENSEE's expense, JHU will file and prosecute PATENT RIGHTS in one or more foreign jurisdiction. JHU or its designee shall have sole control over the selection of counsel, filing, prosecution, maintenance and management of all foreign issued patents and pending and future patent applications that are subject to this AGREEMENT. Upon written notification to JHU and its patent counsel at least ninety (90) days in advance of any filing, response, or fee deadline, LICENSEE may elect to abandon its participation in, and rights to, a patent application filed in a foreign jurisdiction. Such election shall not relieve LICENSEE of the obligation to reimburse JHU for PATENT COSTS and PAST PATENT COSTS associated with such application that were incurred before JHU received actual notice of LICENSEE's abandonment. Thereafter, JHU may file, prosecute, and/or maintain such foreign patent applications or patents at its own expense and for its own benefit and any PATENT RIGHTS granted on such applications or patents shall be excluded from the LICENSED PATENTS.
- 9.4. Common Interest. All non-public information exchanged between JHU and the LICENSED PARTIES or their respective counsel regarding preparation, filing, prosecution, and maintenance of the PATENT RIGHTS shall be deemed CONFIDENTIAL INFORMATION. In addition, the parties acknowledge and agree that, with respect to such preparation, filing, prosecution and maintenance of the PATENT RIGHTS, the interests of the parties are to obtain the strongest patent protection possible, and as such, are aligned and are legal in nature. The parties agree and acknowledge that they have not waived, and nothing in this AGREEMENT constitutes a waiver of, any legal privilege concerning the PATENT RIGHTS or the CONFIDENTIAL INFORMATION, including privilege under the common interest doctrine and similar or related doctrines.

#### 9.5. <u>INFRINGEMENT.</u>

**9.5.1. Notification of Infringement by third party.** Each party will promptly notify the other in writing in the event it discovers, receives notice of, or otherwise reasonably suspects infringement by a third party.

10

- 9.5.2. Suits for Infringement. LICENSEE shall have the first right, at its own expense, to initiate and prosecute an infringement action against one or more third parties to enforce the LICENSED PATENTS in the FIELD OF USE in the LICENSED TERRITORY, provided that LICENSEE: (i) notifies JHU at least ninety (90) days in advance of any such suit; (ii) does not file said action without the prior written consent of JHU; and (iii) carefully considers the views of JHU and the public interest in making its decision whether or not to file suit. LICENSEE: (i) shall not initiate an infringement action in the absence of a good faith belief in the infringement, validity and enforceability of the asserted claims after reasonable investigation, (ii) shall at all times keep JHU informed as to the status of the action and shall consult with JHU throughout the action; and (iii) shall at all times carefully consider the views of JHU with respect to any infringement action, including, for example, choice of litigation counsel, venue, and litigation strategy. LICENSEE shall pay to JHU 20% of any monetary award, settlement or recovery, net of all reasonable LICENSEE and JHU attorneys' fees and out-of-pocket costs and expenses paid to third parties by LICENSEE and/or JHU in connection with each suit or settlement.
- 9.5.3. Party Communications. All communications concerning a suit or potential suit against a third party between JHU and LICENSEE shall be treated as CONFIDENTIAL INFORMATION and are agreed to be subject to all available privileges and protections including the joint defense privilege and common interest privilege. Settlement or other voluntary final disposition of the suit may not be concluded without the prior written consent of JHU. JHU shall reasonably cooperate in any such litigation at LICENSEE's expense.
- 9.5.4. JHU's Secondary Right to Enforce. LICENSEE understands and agrees that JHU has no obligation to bring suit against third parties for infringement of the LICENSED PATENTS. In the event LICENSEE does not initiate an infringement action within ninety (90) days after its discovery of or receiving notification of alleged infringement, JHU may initiate and prosecute such infringement action in its sole discretion and on its own behalf. LICENSEE shall reasonably cooperate in such litigation at JHU's request, including as a co-plaintiff, and agrees to provide any evidence, witnesses or other support of litigation as needed at its own expense. Upon initiation of an infringement action by JHU, JHU shall have the sole right to seek resolution of the alleged infringement through litigation, settlement agreement or otherwise. After the ninety day period of discovery/notice has elapsed, LICENSEE shall not be permitted to transfer its rights or sublicense the LICENSED PATENTS or otherwise reach an agreement with any suspected infringer that would impact JHU's action in any way. Any recovery from JHU's action shall be for JHU's sole benefit and account. All communications concerning a suit or potential suit against a third party between JHU and LICENSEE shall be treated as CONFIDENTIAL INFORMATION and are agreed to be subject to all available privileges and protections including the joint defense privilege and common interest privilege.

- 9.6. Third Party Invalidity Actions. LICENSEE shall defend at LICENSEE's expense any declaratory judgment or other action brought by a third party naming LICENSEE and/or JHU as a defendant and alleging invalidity of any of the PATENT RIGHTS unless such action is brought as a counterclaim to a suit against the third party initiated by JHU pursuant to JHU's secondary right to enforce. JHU may, in its sole discretion and at its own expense, assume control of the defense of any third party action naming JHU as a defendant, in which case LICENSEE shall cooperate fully with JHU in such defense at its own expense.
- 9.7. Waiver of Invalidity Claims. LICENSEE, on behalf of itself, AFFILIATES, and SUBLICENSEES, understands and agrees that transfer of LICENSED RIGHTS under this AGREEMENT will confer substantial benefits to them, even in the absence of one of more VALID CLAIMS. Such benefits include "early mover" advantage. In addition, LICENSEE on behalf of itself, AFFILIATES, and SUBLICENSEES understands and agrees that the consideration paid for LICENSED RIGHTS reflects the nature and risks of early-stage technology, and the consideration required for a license to later stage technology would be significantly higher. Accordingly, each LICENSED PARTY agrees that it shall not initiate any action or proceeding to invalidate PATENT RIGHTS and hereby waives any rights they may have to do so.
- **9.8. Patent Challenges.** Notwithstanding the foregoing, if a LICENSED PARTY initiates an action or proceeding challenging the validity or scope of PATENT RIGHTS or that a LICENSED PRODUCT practices the PATENT RIGHTS, the following shall apply:

- (a) JHU may terminate this AGREEMENT upon written notice to LICENSEE and/or the LICENSED PARTY.
- (b) No payments or reports required by this AGREEMENT shall be suspended or delayed during any challenge to PATENT RIGHTS and no such payments shall be subject to refund or recoupment for any reason.
- (c) Not less than ninety (90) days prior to initiating any challenge to a PATENT RIGHTS, the party challenging PATENT RIGHTS (the "Challenging Party") shall provide written notice of the expected challenge to JHU which shall include a clear statement of the factual and legal basis for the challenge, and an identification of all prior art, documents, products or other matter the Challenging Party believes to provide a basis for such challenge.
- (d) If such action or proceeding determines that at least one claim of the PATENT RIGHTS is a VALID CLAIM or practiced by a LICENSED PRODUCT, LICENSEE and the Challenging Party shall, thereafter, pay to JHU three times all payment amounts which LICENSEE and Challenging Party would otherwise be required to be paid under this AGREEMENT, other than PATENT COSTS. LICENSEE shall not be obligated to pay increased charges if it is not a party to the challenge to PATENT RIGHTS, has not assisted or facilitated the challenge, and has fully cooperated with JHU in the defense of such challenge.
- 9.9. Marking. All LICENSED PRODUCTS shall be marked with the number of the applicable licensed patent(s) in accordance with each country's patent laws.

12

#### 10. DISPUTES

- 10.1. Governing Law, Jurisdiction and Venue. This AGREEMENT shall be construed, and legal relations between the parties shall be determined, in accordance with the laws of the State of Maryland applicable to contracts executed and wholly to be performed within the State of Maryland without giving effect to the principles of conflicts of laws. Any disputes between the parties to the AGREEMENT shall be brought in the state or federal courts located in Baltimore, Maryland. Both parties hereby waive their right to a jury trial and consent to jurisdiction in such courts with respect to any disputes between them.
- **10.2. Resolution**. The parties shall attempt in good faith to resolve all disputes through means other than litigation, such as mediation, arbitration, or structured negotiations. Each party agrees that, prior to initiating litigation, it will confer with other party about alternatives to litigation that may enable them to resolve the dispute fairly and efficiently.

#### 11. TERM AND TERMINATION

- 11.1. Term. The term of this AGREEMENT shall commence on the EFFECTIVE DATE and shall continue until the date of expiration of the last to expire patent included within PATENT RIGHTS, or if no patents issue, then for 20 years from the EFFECTIVE DATE. LICENSEE shall not make, use, sell, import, export or offer for sale any LICENSED PRODUCTS after termination (but not expiration) of this AGREEMENT
- 11.2. Licensee Termination for Convenience. LICENSEE may terminate this AGREEMENT upon ninety (90) days' advance written notice.
- 11.3. JHU Termination for Cause. JHU may terminate this AGREEMENT upon thirty (30) days' written notice to LICENSEE in the event of any material breach hereof, provided that LICENSEE does not cure such breach prior to expiration of such thirty (30) day period. JHU may terminate this AGREEMENT immediately upon written notice to LICENSEE in the event of a material breach that is incapable of cure. A material breach may include:
  - (a) LICENSEE's delinquency with respect to payment or reporting;
  - (b) Failure to timely achieve a MILESTONE specified in <u>Exhibit A-3</u> or otherwise failing to diligently develop, commercialize, and sell LICENSED PRODUCTS throughout the term of this AGREEMENT;
  - (c) Non-compliance with record keeping or audit obligations as stated in Articles 3 and 5 of this AGREEMENT;
  - (d) Voluntary bankruptcy or insolvency of LICENSEE.
  - (e) Non-compliance with LICENSEE'S insurance obligations.
- 11.4. Licensee Obligations Upon Termination or Expiration. Upon expiration or termination of this AGREEMENT for any reason, LICENSEE shall remit payment to JHU for all amounts due or incurred prior to the effective date of termination, and any non-cancellable expenses (such as PATENT COSTS) undertaken prior to termination.
- 11.5. Effect of Termination. Upon termination of this AGREEMENT pursuant to 11.2 or 11.3, all rights and licenses granted by JHU to LICENSEE under this AGREEMENT shall terminate and all rights in, to, and under the LICENSED RIGHTS will revert to JHU.

13

#### 12. MISCELLANEOUS

- 12.1. Use of Name. LICENSEE may not use the name, trademarks, logos, or trade dress of The Johns Hopkins University, The Johns Hopkins Health System, and any of their constituent parts, such as JHU, Johns Hopkins, Hopkins, the Johns Hopkins Hospital, Johns Hopkins Medicine or any contraction thereof or the name of INNOVATORS in any advertising, promotional literature, Web sites, electronic media applications, sales literature, fundraising documents, or press releases and other print or electronic communications without prior written consent from an authorized representative of JHU. Any request to make use of such names shall be made at least thirty (30) business days' in advance of any proposed use and may be made by written request through JHTV. JHU shall have the right to list LICENSEE and display the logotype or symbol of LICENSEE on JHU's website and on JHU publications as a licensee of JHU technology.
- 12.2. Independent Parties. Nothing in this AGREEMENT shall be construed to create any agency, employment, partnership, joint venture or similar relationship between the parties other than that of a licensor/licensee. Neither party shall have any right or authority whatsoever to incur any liability or obligation (express or implied) or otherwise act in any manner in the name or on the behalf of the other, or to make any promise, warranty or representation binding on the other.
- 12.3. Notice of Claim. Each party shall give the other party or its representative prompt notice of any suit or action filed, or of any claim made against them arising out of the performance of this AGREEMENT.
- 12.4. No Assignment. Neither party may assign this AGREEMENT, in whole or in part, without the prior written consent of the other party. Notwithstanding the foregoing, LICENSEE may assign this AGREEMENT in accordance with the terms and transfer fee requirements set forth in Exhibit A-4.

12.5. Notices. Any notice under any of the provisions of this AGREEMENT shall be deemed given when deposited in the mail, postage prepaid, registered or certified first class mail or by nationally-recognized private mail carrier and addressed to the applicable party at the address stated below, or such other address as such party shall specify for itself by like notice to other party. Transmission of notice by electronic mail is insufficient to meet the requirements of this provision.

#### If to JHU:

Executive Director Johns Hopkins Technology Ventures 1812 Ashland Avenue, Suite 110 Baltimore, Maryland 21205

#### If to LICENSEE:

BullFrog AI Holdings, Inc. 325 Ellington Blvd., #317, Gaithersburg, MD 20878

14

#### LICENSEE contacts by agreement function:

Legal: Vin Singh, MS, MBA

vin@bullfrogai.com

Patent: Alan Alfano, PhD

alan.a@bullfrogai.com

Licensing: Alan Alfano, PhD

alan.a@bullfrogai.com

Billing: Vin Singh, MS, MBA

vin@bullfrogai.com

Insurance: Vin Singh, MS, MBA

vin@bullfrogai.com

Reporting: Vin Singh, MS, MBA

vin@bullfrogai.com

- 12.6. Export Control. Certain of the LICENSED RIGHTS may be subject to United States laws and regulations (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979) controlling the export of technical data, computer software, laboratory prototypes, and other commodities. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances that such transfers shall not be made to certain foreign countries without prior approval of such agency. LICENSEE or the applicable LICENSED PARTY shall fully comply with such export control laws. JHU makes no representation respecting the requirements for such a license, or that, if required, that such a license will be issued.
- 12.7. Successors and Assigns. This AGREEMENT shall bind and inure to the benefit of the successors and permitted assigns of the parties.
- 12.8. No Waivers; Severability. No waiver of any breach of any provision of this AGREEMENT shall constitute a waiver of any other breach of the same or other provision of this AGREEMENT, and no waiver shall be effective unless made in writing and signed by the party waiving. Any provision of this AGREEMENT prohibited by or unenforceable under any applicable law of any jurisdiction shall as to such jurisdiction be deemed ineffective and deleted without affecting any other provision of this AGREEMENT, which shall be interpreted so as to most fully achieve the intentions of the parties.
- 12.9. Entire Agreement. This AGREEMENT supersedes all previous agreements and understandings relating to its subject matter, whether oral or in a writing, and constitutes the entire agreement of the parties and shall not be amended or altered in any respect except in a writing executed by the parties.
- 12.10. No Agency. LICENSEE agrees that no representation or statement by any JHU employee shall be deemed to be a statement or representation by JHU, and that LICENSEE was not induced to enter this AGREEMENT based upon any statement or representation of JHU, or any employee of JHU. JHU is not responsible for any publications, experiments or results reported by any JHU employee prior to, or after, the EFFECTIVE DATE, including those reported by any of the INNOVATORS.

- 12.11. Binding Agreement. Exchange of this AGREEMENT in draft or final form between the parties shall not be considered a binding offer, and this AGREEMENT shall not be deemed final or binding on either party until the final AGREEMENT has been signed by both parties.
- 12.12. Delays or Omissions. Except as expressly provided by this AGREEMENT, no delay or omission to exercise any right, power or remedy accruing to any party, shall impair any such right, power or remedy to such party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or in any similar breach or default be deemed a waiver of any other prior or subsequent breach or default. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this AGREEMENT, or any waiver on the part of any party of any provisions or conditions of this AGREEMENT, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies either under this AGREEMENT or by law or otherwise afforded to any party, shall be cumulative and not alternative.
- 12.13. Survival. All representations, warranties, covenants and agreements made in this AGREEMENT and which by their express terms or by implication are to be performed or continue to apply after the execution and/or termination of this AGREEMENT or are prospective in nature shall survive such expiration and/or termination. In addition and for avoidance of doubt, the following articles shall survive any termination or expiration: Articles 5, 6, 7, 8, 9, 10, and 11.
- 12.14. No Third-Party Beneficiaries. Nothing in this AGREEMENT shall be construed as giving any person, firm, corporation or other entity, other than the parties and their successors and permitted assigns, any right, remedy or claim under or in respect of this AGREEMENT or any provision hereof.
- 12.15. Headings. Article headings are for convenient reference and are not a part of this AGREEMENT. All referenced Exhibits are part of this AGREEMENT.

12.16. Electronic Signature. Any signature, including any electronic symbol or process affirmatively attached to or associated with this AGREEMENT and adopted by JHU or LICENSEE to sign, authenticate, or accept such contract or record acceptance of the AGREEMENT, hereto shall have the same legal validity and enforceability as a manually executed signature or use of a paper-based recordkeeping system to the fullest extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act or any state law based on the Uniform Electronic Transactions Act, and the parties hereby waive any objection to the contrary.

[The Balance of This Page Intentionally Left Blank - Signature Page Follows]

16

IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be executed in duplicate counterparts, each of which shall be deemed to constitute an original, effective as of EFFECTIVE DATE. The undersigned verify that they have the authority to bind to this AGREEMENT the party on behalf of which they are executing.

This AGREEMENT includes the following Exhibits:

Exhibit A: Financial Terms

Exhibit A-1: LICENSED RIGHTS, FIELD OF USE, and LICENSED TERRITORY

Exhibit A-2: PATENT COSTS, Fees, ROYALTIES, and Payment Terms

Exhibit A-3: MILESTONES

Exhibit A-4: Permitted Assignment

Exhibit A-5: Equity Consideration - Private Offering Purchase Rights

Exhibit A-6: Table of LICENSED PATENTS

Exhibit A-7: Publication List for LICENSED DATA and LICENSED KNOW-HOW

Exhibit B: Definition of Terms

Exhibit C. Quarterly Sales & Royalty Report Form Exhibit D: Diligence and Annual Report Form

Exhibit E: Insurance

By:

Johns Hopkins University BullFrog AI Holdings, Inc.

Struct L. Lousouris

ODCD7880512C416...

By:

Name: Steven L. Kousouris Name: Vin Singh, MS, MBA

Title: Executive Director, JHTV Title: Founder & CEO

Date: February 22, 2022 | 2:22 PM EST Date: February 22, 2022 | 8:22 AM PST

ASG Mt TH

#### Exhibit A (A-1, A-2, A-3, A-4, A-5, A-6, A-7)

#### Exhibit A-1: LICENSED RIGHTS, FIELD OF USE, and LICENSED TERRITORY

JHU TECH ID #C13270 - "An Improved Formulation of Mebendazole and Drug Combination for Improved Cancer

Vin Singh

Therapy"

JHU TECH ID, CASE TITLE, and INVENTORS

INVENTORS:

Gregory Riggins, Avadhut Joshi, Renyuan Bai, Tara Williamson, Verena Staedtke

LICENSED PATENTS SEE PATENT TABLE BELOW (EXHIBIT A-6)

LICENSED KNOW-HOW SEE REFERENCE LIST BELOW FOR BOTH KNOW-HOW

AND DATA (EXHIBIT A-7)

LICENSED DATA SEE REFERENCE LIST BELOW FOR BOTH KNOW-HOW AND DATA (EXHIBIT A-7)

FIELD OF USE Treatment of any human cancer or neoplastic disease, including in clinical trials

LICENSED TERRITORY WORLDWIDE

18

#### Exhibit A-2

#### PATENT COSTS, Fees, ROYALTIES, and Payment Terms

UPFRONT LICENSE FEE

Two hundred fifty thousand US Dollars (USD \$250,000), payable as listed below:

- (a) Fifty (50) thousand US Dollars (USD \$50,000) upon execution of this AGREEMENT, in partial consideration (due within 30 days of the EFFECTIVE DATE); and
- (b) Two hundred (200) thousand US Dollars (USD \$200,000) upon the earlier of (i) completion of BullFrog AI IPO,
   (ii) \$10 million USD financing, or (iii) within nine (9) months of the EFFECTIVE DATE.

#### PAST PATENT COSTS

#### \$116,903.53 payable as follows:

- (a) \$41,561.53 within thirty (30) days of invoice after the Effective Date
- (b) \$37,671.00 within four (4) months of the Effective Date
- (c) \$37,671.00 within ten (10) months of the Effective Date

#### MINIMUM ANNUAL ROYALTY ("MAR")

Due by January 1 of each calendar year:

1<sup>st</sup> year: USD \$5,000 due 1/1/2023 2<sup>nd</sup> year: USD \$10,000 due 1/1/2024 3<sup>rd</sup> year: USD \$20,000 due 1/1/2025 4<sup>th</sup> year: USD \$30,000 due 1/1/2026

 $5^{th}$  year, etc.: USD \$50,000 due 1/1/2027 (until FIRST COMMERCIAL SALE)

Upon FIRST COMMERCIAL SALE of a LICENSED PRODUCT the MAR shall be: \$250,000 due on January 1 in the year after the FIRST COMMERCIAL SALE.

#### ROYALTY

#### 3.5% on LICENSED PRODUCTS

## SUBLICENSE NON-ROYALTY CONSIDERATION

The percent of all consideration, as outlined below, received by LICENSEE from a SUBLICENSEE in exchange for grant of SUBLICENSE rights under this AGREEMENT, but excluding (i) any consideration received by LICENSEE for ROYALTIES on SUBLICENSEE SALES (ROYALTIES on SALES by SUBLICENSEES will be treated as if LICENSEE made the SALE), and (ii) any payment of PAST PATENT COSTS or PATENT COSTS made by SUBLICENSEE to LICENSEE.

- a) 20% Prior to dosing of the first patient in the first Phase II Clinical Trial
- b) 15% After dosing of the first patient in the first Phase II Clinical Trial, but prior to dosing of a first patient in a Phase III or REGISTRATIONAL CLINICAL TRIAL
- c) 10% after dosing of the first patient in a Phase III or REGISTRATIONAL CLINICAL TRIAL

19

#### **Payment Instructions**

Checks are to be made payable to the "Johns Hopkins University." All check payments from LICENSEE to JHU shall be sent to:

Executive Director
Johns Hopkins Technology Ventures The Johns Hopkins University
1812 Ashland Avenue, Suite 110
Baltimore, MD 21205
Attention: JHU AGREEMENT No. A40219

or such other addresses which JHU may designate in writing from time to time. .

Wire transfers may be made through:

#### DOMESTIC ACH & WIRE

Johns Hopkins University – JHTV M&T Bank 1 M&T Plaza Buffalo, NY 14203 ABA #022000046 Account number: 9864226981 Type of account: depository CTX format is preferred; CCD+ is also accepted Attention: JHU AGREEMENT A40219

#### INTERNATIONAL FED WIRE

Johns Hopkins University – JHTV M&T Bank 1 M&T Plaza Buffalo, NY 14203 ABA #022000046 Account number: 9864226981 Type of account: depository CHIPS ABA number: N/A IBAN number: N/A Attention: JHU AGREEMENT A40219

LICENSEE shall be responsible for any and all costs associated with wire transfers.

Date or Deadline	Description of MILESTONE	Milestone Payment Fee
Within 6 months of EFFECTIVE	•	·
DATE	Financing of \$10M in LICENSEE	NO FEE
None	Validation of EU jurisdictions for granted EPO patent	NO FEE
Within 6 months of EFFECTIVE		
DATE	Submission of Development Plan to JHU/JHTV	NO FEE
Within 36 months of the		
EFFECTIVE DATE	Enrollment of a first patient in a first Phase 2 clinical trial for the first LICENSED PRODUCT	NO FEE
None	COMPLETION of the first Phase 2 clinical trial for each LICENSED PRODUCT	\$250,000
Within 36 months from the COMPLETION of the first Phase 2 study for the first LICENSED PRODUCT	Enrollment of a first patient in the first REGISTRATIONAL CLINICAL TRIAL	NO FEE
		\$500,000 (if Phase 3);
None	COMPLETION of REGISTRATIONAL CLINICAL TRIAL for each LICENSED PRODUCT	\$250,000 (if Phase 2b)
None	MARKET APPROVAL for each LICENSED PRODUCT – US (FDA)	\$750,000
None	MARKET APPROVAL for each LICENSED PRODUCT – outside of US	\$500,000
None	FIRST COMMERCIAL SALE for the first LICENSED PRODUCT	NO FEE
	First twenty (20) million dollars (USD \$20,000,000) NET SALES REVENUE of a LICENSED	
None	PRODUCT in the United States	\$1,000,000
None	First year cumulative NET SALES REVENUE of a LICENSED PRODUCT exceeds \$100M	\$2,000,000
None	First year cumulative NET SALES REVENUE of a LICENSED PRODUCT exceeds \$500M	\$10,000,000
	First year cumulative NET SALES REVENUE of a LICENSED PRODUCT exceeds \$1000M (i.e.,	
None	\$1B)	\$20,000,000
None	COMPLETION of each first-in-human trial for any indication other than Glioblastoma	\$250,000

- a) Pursuant to Section 3.1 of the AGREEMENT, milestone payment fees set forth in the above table shall be payable within thirty (30) days of each LICENSED PRODUCT achieving such MILESTONE.
- b) In the event that a Phase I, II and/or Phase III clinical trial is conducted at JHU, LICENSEE is excused from making the accrued related milestone payments fees to JHU until the earlier of, a clinical trial milestone is met where such sites include at least two (2) sites other than JHU or the milestone for the receipt of regulatory approval from the FDA (or marketing approval from a foreign equivalent of the FDA) ("MARKET APPROVAL") is met. Under such circumstance, LICENSEE agrees that it will pay the accrued Phase I, II and/or Phase III milestone payments fees upon completion and when it submits milestone payment fee to JHU for MARKET APPROVAL. Further, in the event that a Phase I and/or Phase III and/or Phase III clinical trial is not required for MARKET APPROVAL, LICENSEE agrees that it will pay the accrued Phase I and/or Phase III milestone payment fees otherwise due under Phase I through Phase III milestones when it submits milestone payment fee to JHU for MARKET APPROVAL.
- c) The milestones described above shall be deemed achieved if the objectives are met by LICENSEE or any SUBLICENSEE. Any amounts payable by LICENSEE hereunder may be assigned to, and payable by, a SUBLICENSEE.

Exhibit A-4

#### **Permitted Assignment**

- 1. LICENSEE may assign this AGREEMENT as part of a sale or merger of substantially all of LICENSEE's business or assets, regardless of whether such a sale occurs through an asset sale, stock sale, merger or other combination, provided:
  - (a) LICENSEE provides written notice to JHU at least thirty (30) days in advance of such assignment;
  - (b) The assignee agrees, in a writing delivered to JHU, to be bound by all provisions of this AGREEMENT; and
  - (c) LICENSEE remits an assignment fee to JHU equal to
    - i. the greater of twice the MAR applicable to the year when the assignment will be completed; OR
    - ii. one hundred thousand US dollars (USD \$100,000)

22

21

#### Exhibit A-5

#### **Equity Consideration – Private Offering Purchase Rights**

Private Offering Purchase Rights. In the event of any private offering of the LICENSEE's equity securities for cash (or in satisfaction of debt issued for cash):

- 1. JHU and/or its Assignee (as defined below) may purchase for cash up to 1% of the securities or interests issued in such offering.
  - 1.1. "Assignee" means: (a) any entity to which JHU's participation rights under this Section 1 have been assigned either by JHU or another entity; or (b) any entity that is controlled by JHU
- 2. In any private offering subject to this AGREEMENT ("Offering"), JHU and/or its Assignee's purchase right shall be at the same price and on the same terms as the most favored other investors, except that JHU and/or its Assignee shall not have any board representation or board meeting attendance rights.

3. Licensee shall give JHU at least thirty (30) days advance notice of the terms of each Offering, including the names of the investors and the amounts to be invested by each, and JHU may elect to exercise its right of purchase, in whole or in part, by written notice given to LICENSEE within fifteen (15) business days after receipt of LICENSEE's notice. To exercise this right, JHU must provide the written notice of its election to invest per the prior sentence and must sign all purchase and shareholder agreements that are signed by the other investors. If JHU and/or its Assignee elects not to purchase or fails to give an election notice within such period, JHU's purchase right will not apply to the Offering if (and only if and to the extent) it is consummated within ninety (90) days on the same or less favorable (to the investor) terms as stated in LICENSEE's notice to JHU.

All rights under this Section 1.4 will not apply to the issuance of stock to employees and other service providers pursuant to a plan approved by LICENSEE's board of directors, or to shares issued as additional consideration in lending or leasing transactions. In the event of the closing of a firm commitment underwritten public offering, the rights granted in Section 1.4 will terminate (in addition to any earlier termination pursuant to their terms) immediately before such closing.

4. JHU's rights respecting equity of or securities in LICENSEE are cumulative. In the event of a conflict, the provision of this AGREEMENT granting greater interests or purchase rights to JHU will govern.

This Section 1 shall survive the termination of this AGREEMENT.

23

# Exhibit A-6 Table of LICENSED PATENTS

			File	Application			Patent	Expiration	Composition,
JHU ID	Title	Serial Number	Date	Type	Country	Status	Number	Date	MoU
P13270-	An Improved Formulation of								
01	Mebendazole and Drug Combination to	62/112,706	06 Feb	Provisional	US	Expired			
	Improve Anti- cancer Activity		2015						
	An Improved Formulation of								
P13270-	Mebendazole and Drug Combination to		08 Feb		PCT -			11 Aug	
02	Improve Anti- cancer Activity	PCT/US2016/016968	2016	PCT	Parent	Expired		2016	Both
P13270-	MEBENDAZOLE POLYMORPH FOR		04 Aug			•		08 Feb	
03	TREATEMENT AND PREVENTION OF	15/548,959	2017	PCT	US	GRANTED	11,110,079	2036	Both
	TUMORS								
P13270-	Mebendazole Polymorph For Treatment		08 Feb					08 Feb	
04	And Prevention Of Tumors	16747414.7	2016	PCT	EPO	GRANTED	Pending	2036	Both
P13270-	MEBENDAZOLE POLYMORPH FOR		08 Feb					08 Feb	
05	TREATMENT AND PREVENTION OF	253854	2016	PCT	Israel	GRANTED	253854	2036	Both
	TUMORS								
P13270-	An Improved Formulation of								
06	Mebendazole and Drug	2016800144274	08 Feb	PCT	China	GRANTED	1ZL20168-	08 Feb	Both
	Combination to Improve Anti-		2016				0014427.4	2036	
	cancer Activity								
P13270-	An Improved Formulation of								
07	Mebendazole and Drug	201717028684	08 Feb	PCT	India	GRANTED	352734	08 Feb	Both
	Combination to Improve Anti-		2016					2036	
	cancer Activity								
P13270-	Mebendazole Polymorph For Treatment		08 Feb					08 Feb	
08	And Prevention Of Tumors	2017-541687	2016	PCT	Japan	GRANTED	6796586	2036	Both
P13270-	CONTINUATION: Mebendazole		13 Aug		United				
09	Polymorph For Treatment And Prevention	17/402,131	2021	CON	States	PENDING			Both
	Of Tumors								

#### Exhibit A-7

#### Publication List for LICENSED DATA and LICENSED KNOW-HOW

- 1. Gallia GL, Holdhoff M, et al. Mebendazole and temozolomide in patients with newly diagnosed high-grade gliomas: results of a phase 1 clinical trial. Neuro-Oncology Advances. 2021;3(1):1-8
- 2. Williamson T, Mendes TB, et al. Mebendazole inhibits tumor growth and prevents lung metastasis in models of advanced thyroid cancer. *Endocrine-Related Cancer*. 2020:27;123-136
- Skibinski CG, Williamson T, Riggins GJ. Mebendazole and radiation in combination increase survival through anticancer mechanisms in an intracranial rodent model of malignant meningioma. J. Neuro-Oncology. 2018:140;529-538
- 4. Bai RY, Staedtke V, et al. Brain Penetration and Efficacy of Different Mebendazole Polymorphs in a Mouse Brain Tumor Model. Clin Cancer Res. 2015:21(15);3462-3470
- 5. Bai RY, Staedtke V, et al. Antiparasitic mebendazole shows survival benefit in 2 preclinical models of glioblastoma multiforme. *Neuro-Oncology*. 2011:13(9);974-982
- 6. Bai RY, Staedtke V, et al. Effective treatment of diverse medulloblastoma models with mebendazole and its impact on tumor angiogenesis. Neuro-Oncology. 2014:0;1-10
- 7. Williamson T, Bai RY, et al. Mebendazole and a non-steroidal anti-inflammatory combine to reduce tumor initiation in a colon cancer preclinical model. *Oncotarget*. 2016:7(42);68571-68584

#### **DEFINITIONS**

"AFFILIATE" means any corporation, licensee, partnership, joint venture or other entity, which controls, is controlled by or is under common control with LICENSEE, as evidenced by the direct or indirect ownership of at least 50% of voting rights governing the entity or the contractual power to control such rights.

"COMBINATION PRODUCT" means a collection or group of products sold together (such as in a kit or package) that contains (i) a LICENSED PRODUCT and (ii) one or more other functional products ("Other Products") that has been sold separately for use without the LICENSED PRODUCT and which is not essential to the use or practice of the LICENSED PRODUCT. For example, a diagnostic panel comprising a LICENSED PRODUCT and an independent diagnostic biomarker.

"COMPLETION" of a clinical trial milestone means first public release of TOP-LINE data.

"CONFIDENTIAL INFORMATION" means information disclosed by a party (the "Disclosing Party") to the other party (the "Receiving Party") in connection with performance of this AGREEMENT that (i) concern the LICENSED RIGHTS and has been maintained by the Disclosing Party as nonpublic or proprietary information, and (ii) is marked Confidential or otherwise expressly designated as Confidential. To be deemed CONFIDENTIAL INFORMATION, oral disclosures must (i) concern the LICENSED RIGHTS, have been maintained by the Disclosing Party as nonpublic or proprietary information, and be described in writing as confidential by the Disclosing Party within fourteen (14) days of disclosure to the Receiving Party. CONFIDENTIAL INFORMATION does not include information that (a) was already in the Receiving Party's possession before the disclosure by the Disclosing Party; (b) has been published or is later published, unless such publication is a breach of this AGREEMENT; (c) is received by the Receiving Party from a third party not under an obligation of confidentiality; or (d) is independently developed by the Receiving Party's employees who did not have access to CONFIDENTIAL INFORMATION.

"DISCOVERED PRODUCT" means a product, material, or service that is identified, selected or determined to have utility in whole or in part by the use of a LICENSED PRODUCT, including the use of a screening method or assay covered by the LICENSED RIGHTS.

"EXECUTION DATE" means the date that the last party to sign executes this AGREEMENT. "FIELD OF USE" is defined in Exhibit A-1.

"FIRST COMMERCIAL SALE" means the first transfer by a LICENSEE to a third party for value of a LICENSED PRODUCT, with the exemption of materials transferred for use in a clinical trial at a nominal cost to the recipient.

26

"HUMANITARIAN PURPOSE" means practice of LICENSED RIGHTS in the prevention or treatment of disease in humans by or on behalf of any QUALIFIED HUMANITARIAN ORGANIZATION (including, for clarity, practice of LICENSED RIGHTS by contractors, manufactures or distributors acting for or on behalf of such QUALIFIED HUMANITARIAN ORGANIZATIONs on a fee-for-service, fee-for-product or charitable basis): (i) to manufacture LICENSED PRODUCTS anywhere in the world for the sole and express purposes of distribution and use of such LICENSED PRODUCTS in one or more LEAST DEVELOPED COUNTRIES, and (ii) to sell or otherwise distribute LICENSED PRODUCTS for use solely in one or more LEAST DEVELOPED COUNTRIES; provided, however, that sales and distribution of LICENSED PRODUCTS shall not be deemed made for humanitarian purposes unless products are distributed at locally-affordable prices.

"INNOVATORS" means the individuals who invented, authored, or created the LICENSED RIGHTS as identified in in Exhibit A-1.

"JHU INDEMNITEES" means JHU, The Johns Hopkins Hospital, The Johns Hopkins Health System Corporation, and their affiliated entities, their present and former trustees, officers, INNOVATORS, agents, faculty, employees and students.

"LEAST DEVELOPED COUNTRY" means those jurisdictions so defined by the United Nations Country Classification in the most recent United Nations' publication "Statistical Annex."

"LICENSED DATA" means the data specified in Exhibit A-1 that exists as of the EFFECTIVE DATE of this AGREEMENT.

"LICENSED KNOW-HOW" means the know-how described in Exhibit A-1 that exists as of the EFFECTIVE DATE of this AGREEMENT.

"LICENSED PARTIES" means LICENSEE, AFFILIATE, and/or SUBLICENSEE (as applicable).

"LICENSED PATENTS" means the patents and patent applications listed on Exhibit A-1, and includes any foreign patent applications sharing the same disclosure, and any divisional, continuation, or reexamination applications of the listed patents or applications, and every patent that issues or reissues from such applications.

"LICENSED PRODUCT" means any service, process, method, material, compositions, drug, or other product that (i) comprises, constitutes, or embodies the LICENSED RIGHTS, (ii) requires use or practice of the LICENSED RIGHTS by LICENSED PARTIES or their customers, or (iii) is a DISCOVERED PRODUCT.

"LICENSED RIGHTS" means all rights respecting LICENSED PATENTS, LICENSED DATA, and LICENSED KNOW-HOW granted to LICENSEE in Article 2 of this AGREEMENT.

"LICENSED TERRITORY" means the territory specified in Exhibit A.-1. "MILESTONE" means a diligence milestone or event specified in Exhibit A-3.

"NET SALES REVENUE" means and includes the gross value of everything of value received by LICENSED PARTIES as consideration for the SALE of LICENSED PRODUCTS or COMBINATION PRODUCTS, including the fair market value of equity, intangible rights, services and other things of value directly provided in return for SALES except for SUBLICENSEE NON-ROYALTY CONSIDERATION, as that term is defined in <a href="Exhibit A-2"><u>Exhibit A-2</u></a> of this AGREEMENT.

NET SALES REVENUE generated from COMBINATION PRODUCTS shall be determined with the formula: COMBINATION PRODUCT NET SALES REVENUE = NET SALES REVENUE\*C/(C+D), where C is the total gross invoice price of the LICENSED PRODUCT when sold separately and D is the total gross invoice price of the Other Product(s) when sold separately. In the event that no such separate sales are made of the LICENSED PRODUCT or Other Product in such COMBINATION PRODUCT during the royalty paying period in question, NET SALES REVENUE, for the purposes of determining ROYALTY payments shall be calculated using the above formula where C is the commercial value of the LICENSED PRODUCT sold separately and D is the commercial value of the Other Product(s) active ingredients or components sold separately. Any such estimates shall be determined using criteria to be mutually agreed upon by the parties. Such estimates shall be reported to JHU with the reports to be provided pursuant to Section 5.1 hereof. The term "Other Products" does not include solvent, diluents, excipients, buffers or the like used in formulating a product.

- import, export, excise and sales taxes, and custom duties;
- shipping charges and transportation from the place of manufacture to the customer's premises or point of installation;
- cash, trade or quantity discounts actually granted to end users;
- patient assistance and co-pay programs;
- sales rebates actually paid or credited to end users including managed care rebates and chargebacks; and
- allowances or credits to end users because of rejections or returns.

For clarity, NET SALES REVENUE shall not include SALES between LICENSED PARTY and its AFFILIATES or SUBLICENSES for the purpose of subsequent resale to a third party, but shall include SALES by AFFILIATES or SUBLICENSEES to Third Parties. In the event that the LICENSED PRODUCT is consumed, depleted or exhausted by the AFFILIATE or SUBLICENSEE, then such use shall be deemed a SALE.

"PATENT COSTS" means all costs of prosecuting and maintaining any LICENSED PATENT, including reasonable attorneys' fees and expenses, and fees for patent filing(s), maintenance, annuities, translation, and defense against claims of infringement or invalidity, including fees and costs incurred in administrative proceedings or disputes pursuant to the America Invents Act of 2011 (such as an Inter Partes Review, Post Grant Review or Derivation Proceedings before the U.S. Patent Trial and Appeal Board), incurred by JHU. PATENT COSTS excludes PAST PATENT COSTS.

"PAST PATENT COSTS" means all PATENT COSTS that are incurred by JHU prior to the EXECUTION DATE of this AGREEMENT and are able to be billed to LICENSEE on the EXECUTION DATE. For the avoidance of doubt, those PATENT COSTS incurred before the EXECUTION DATE but not available for billing until after the EXECUTION DATE will be billed as PATENT COSTS.

"PATENT RIGHTS" means the rights granted to LICENSEE in respect of the LICENSED PATENTS (and subject to the rights reserved or maintained by JHU).

28

"QUALIFIED HUMANITARIAN ORGANIZATION" means any governmental agency, non- governmental agency or other not-for-profit organization that has as one of its bona fide missions to address the public health needs of underserved populations on a not-for-profit basis. For clarity, QUALIFIED HUMANITARIAN ORGANIZATIONS do not include non-governmental agencies and not-for-profit organizations that are formed or established for the benefit of any for-profit entity.

"REGISTRATIONAL CLINICAL TRIAL" means, with respect to a given Product, either: (a) a Phase III Clinical Trial with such Product; or (b) a Phase IIb Clinical Trial that, at the time of commencement, is expected to be the basis for initial Regulatory Approval of such Product.

"ROYALTIES" means payments owed to JHU in consideration of the rights granted to LICENSED PARTIES under this AGREEMENT that are determined as a percentage of NET SALES REVENUE as explicitly set forth in Exhibit A-2 of this AGREEMENT.

"SALE" means a sale, license, lease, performance, transfer, delivery, contract to provide, or other disposition or conveyance for value of a LICENSED PRODUCT.

"SUBLICENSE" means an agreement in which LICENSEE (i) grants or otherwise transfers any of the LICENSED RIGHTS, (ii) agrees not to assert or seek a legal remedy for the practice of LICENSED RIGHTS, or (iii) creates an obligation to grant, assign or transfer any LICENSED RIGHTS to any other entity (other than an AFFILIATE).

"SUBLICENSEE" means any person or entity to which LICENSEE has granted a SUBLICENSE under this AGREEMENT.

"SUBLICENSE NON-ROYALTY CONSIDERATION" is defined in Exhibit A-2 of this AGREEMENT.

"TOP-LINE DATA" means, with respect to a clinical study, a summary of patient demographic data, data for the primary endpoint, and safety data derived from the unblinded, locked clinical trial database.

"VALID CLAIM" means (i) any claim of an issued and unexpired patent within the LICENSED PATENTS that has not been (a) conclusively revoked or held unenforceable, unpatentable or invalid by a competent court or tribunal and which is unappealable or unappealed in the time allowed for appeal, and (b) irrevocably disclaimed, cancelled, withdrawn or abandoned or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise; or (ii) a pending claim of a pending patent application within the LICENSED PATENTS.

29

#### Exhibit C

Quarterly Sales and Royalty Report

#### LICENSEE LETTERHEAD

QUARTERLY SALES & ROYALTY REPORT FOR LICENSE AGREEMENT BETWEEN THE JOHNS HOPKINS UNIVERSITY AND LICENSEE NAME

						E	ffective Date								
	JHU Agreemei	et No.:_AXX	XXX												
	JHU Technolo	gy Case Nos	.:_CXXXXX_		i			all JHU licensed o	ases)	i					
	Period:	From		То		l	Calendar Qu	arter:							
	TOTAL ROYA				\$ -	ı									
									CENSED PRODU		SED SERVI	CE line.			
				nsed Service Summa					prepare a separate ro ate)	yalty chart.					
	(Please indicate)			uct or Licensed Serv											
		Multi-License	d Product/Mult	ti-Licensed Service S	Summary Repor	rt (Specify s	which, prepare ch	art for both as app	oropriate)						
	Mandatory Pr	ovisions:											Period	2	
	Product ID	Product Name	JHU Case Nos.	First Commercial Sale Date	Country	Units Sold	Gross Sales	"Less Allowances	Any Apportionment taken	Net Sales	Royalty Rate	Conversion Rate (to USD)	Royalty Amount		
									2000000	0.00		1.0000	(USD) 0.00		
										0.00		1.0000	0.00	i b	
	TOTAL					0.00				0.00		1.0000	0.00		
				10 10		ase also no I	te any unusual oc	currences that affe	cted royalty payment :	amounts durii	ng this period				
	Check here if	5.			Yes or No	l 1	_			ı					
	Check here if	PU <b>num</b> ber i:	s needed on	JHTY invoice:	Tes or No	ı	Purchase	Order No.:							
	Certification:	s a dulv authoria	ed officer of L	ICENSEE, that the	e information s	et forth abo	ove is correct and	complete and med	ts all of the reporting	requirements	set forth in t	he Agreement.			
												•			
	Hame:														
	Title:														
	Date:				_										
	Contact Infor	maton:													
	Telephone No	-													
	Email:														
															30
							Exhibit 1	D							
					г	Niliaan	o and Anr	– nual Report							
					L	mgene	e and Am	iuai Kepori	•						
LICENSEE Name:															
JHU Agreement Number	r: A402	219													
JHU Reference Number	(s) C13270,		,	,,		_,									
Reporting Period: From			То												
A description	of progress ork-in- pro	by LICE	NSED P	ARTIES to	ward cor										ific discoveries, and documents
			11.55	a		1 611	1/	,	11	LIGEN	CED DD	ODLICE	LIGEN	GED DIGII	rma.
A description a					vernment	ai min	gs and/or a	ipprovais r	egarding any	LICEN	SED PR	ODUCI 6	r LICEN	SED RIGH	18.
Certificate of I	nsurance or	other evid	dence of	insurance											
is att	ached														
Identification of	of all LICEN	ISED PA	RTIES (A	AFFILIATE	and SUE	BLICE	NSEE):								
NO Lis	NE t attached w	ith descri	ption of r	ights exerci	sed.										
SUBLICENSE	(s) entered	during the	year:												
(copy of each S		SE attach	ed)												

A description of any Material Event (e.g., change of control, name change or other significant change related to this AGREEMENT or LICENSEE:

	_NONE
Details:	

#### SEND DILIGENCE AND ANNUAL DILIGENCE REPORT TO:

Via mail or private mail carrier: Via email (Preferred):

Licensee Reporting Group JHTVReports@JHU.EDU

Johns Hopkins Technology Ventures Expect Auto-Reply

The Johns Hopkins University No Auto-Reply?

1812 Ashland Avenue, Suite 110 Contact:

Baltimore, MD 21205 Marlene Moore at

Telephone for overnight courier: 410-614-0300 mmoore26@jhmi.edu\_or 410-614-0300

Interested in reporting via our Licensee Reporting Portal? Contact us at JHTVReports@JHU.edu to request details about this reporting option.

32

#### Exhibit E

### **Required Insurance Coverages**

- 1. Assumption of Liability. LICENSEE hereby assumes full liability for any and all lawsuits, claims, demands, judgments, costs, fees (including attorney's fees), expenses, injuries or losses arising from or relating to its use of the LICENSED PRODUCTS.
- 2. Insurance. LICENSEE will obtain and maintain Comprehensive General Liability Insurance with a reputable and financially secure insurance carrier acceptable to JHU. Prior to initial human testing or FIRST COMMERCIAL SALE of any LICENSED PRODUCT, LICENSEE will obtain and maintain in addition to the Comprehensive General Liability Insurance, Product Liability Insurance with a reputable and financially secure insurance carrier acceptable to JHU, to cover any liability arising from or relating to the LICENSED PRODUCTS. The insurance policy shall provide minimum coverage in the amounts and subject to the provisions below.
- 3. General. LICENSEE shall obtain and maintain, in full force and effect and at LICENSEE's sole cost and expense insurance policies providing:
  - a) Commercial general liability insurance (including coverage and any necessary endorsements for products /completed operations as well as for clinical trials if any such trials are to be performed by or on behalf of LICENSEE) which provides, for each annual policy period, coverage of no less than the minimum limits specified below for injury, death and property damage resulting from each occurrence during the policy period; and
  - b) If required by law, worker's compensation insurance.
- 4. Initial Policy Limits. The commercial general liability and products liability coverages shall have the following minimum limits:
  - a) Commercial general liability: one million dollars (\$1,000,000) each occurrence, two million dollars (\$2,000,000) general aggregate. LICENSEE shall have thirty (30) days following the Effective Date to obtain such coverage.
  - b) Products liability: From the date immediately prior to initial human testing or first Commercial SALE: \$5,000,000 per claim and \$10,000,000 in the aggregate.
  - c) JHU may periodically evaluate the adequacy of the minimum coverage of insurance and coverage limits specified in this AGREEMENT. JHU reserves the right to require LICENSEE to adjust the insurance coverage by modifying the types of required coverages, the limits and/or financial rating and/or the method of financial rating of LICENSEE's insurers as such changes are required of JHU by its insurance carrier. JHU shall provide LICENSEE with reasonable notice, contingent on JHU receiving timely notice from its insurance carrier, of any proposed modification, and, if so requested by LICENSEE, discuss any proposed modifications in good faith.
- **5. Policy Requirements.** Each policy of insurance required by this AGREEMENT shall:
  - a) be issued by reputable and financially secure insurance carriers having at least an A- rating (A- rating or above by A.M. Best) and an A.M. Best Class Size of at least VIII,
  - b) list each of JHU, its trustees, officers, employees, faculty, staff, students, agents and their successors, heirs and assigns as additional insureds,

33

- c) be endorsed to provide that the insurer waives all subrogation rights it has or may have against any additional insured, and
- d) be primary in respect of all additional insureds.

- 6. Evidence of Insurance. LICENSEE shall provide JHU with a Certificate of Insurance from each such insurer which evidences compliance by LICENSEE with its obligations under this AGREEMENT. Upon the request of JHU, LICENSEE shall provide JHU with a copy of the policy, status of claims and claims history respecting any of the insurance required to be maintained by LICENSEE under this AGREEMENT. Further, LICENSEE will not cancel or fail to renew the identified insurance without giving JHU at least thirty (30) days' prior written notice of such cancellation.
- 7. Primary Coverage. All insurance of LICENSEE will be primary coverage; other insurance of JHU and JHU Indemnities will be excess and noncontributory.
- 8. Clarifications. For the avoidance of doubt, the minimum insurance coverage and limits set forth in this AGREEMENT do not constitute a limitation on LICENSEE's liability or obligations to indemnify or defend JHU and the JHU INDEMNITEES and any other additional insured under this AGREEMENT.

### **LICENSE AGREEMENT**

This license agreement (the "<u>Agreement</u>") is entered into and made effective as of July 8, 2022 (the "<u>Effective Date</u>") between The Johns Hopkins University Applied Physics Laboratory LLC, a Maryland limited liability company, having business offices at 11100 Johns Hopkins Road, Laurel, Maryland 20723 ("<u>APL</u>") and BullfrogAI, Inc., a Delaware corporation having business offices at P.O. Box 336, Boyds, Maryland 20841 ("<u>Licensee</u>"). For purposes of this Agreement, APL and Licensee may be individually referred to as a "<u>Party</u>," and collectively referred to as the "<u>Parties</u>."

This Agreement includes attached <u>Appendix A</u> (APL Patent Rights), <u>Appendix B</u> (APL Copyrights), <u>Appendix C</u> (APL Know-how), <u>Appendix D</u> (Stock Issuance Agreement), <u>Appendix E</u> (Fees and Payment Options), <u>Appendix F</u> (Form of Diligence and Annual Report), and <u>Appendix G</u> (Form of Quarterly Sales and Royalty Report), the entire contents of which are incorporated herein by reference.

#### BACKGROUND

WHEREAS, The Johns Hopkins University ("JHU") through APL has acquired or is entitled to acquire through assignment or otherwise all right, title, and interest, with the exception of any applicable retained rights by the United States government, in certain intellectual property, including patentable and non-patentable intellectual property as described in Appendices A, B, and C, and JHU has granted APL responsibility for, as well as operating control and unencumbered use of, the intellectual property;

WHEREAS, APL desires to have the APL IP (as defined below) perfected and marketed as soon as possible so that resulting products and services may be available for public use and benefit; and

WHEREAS, Licensee desires to acquire a license under the APL IP for the purposes of exploiting Licensed Products and Licensed Services in the Territory and in the Field of Use, as set forth and defined below.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

#### 1. DEFINITIONS

Unless otherwise specifically provided herein, the following defined terms shall have the following meanings:

- 1.1 "Accounting Standards" shall mean the accounting standards applicable to Licensee, its Affiliates or Sublicensees as reported in their audited financial statements, and may include Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS).
- 1.2 "Affiliate" shall mean any corporation or other business entity controlled by, controlling, or under common control with, APL or Licensee. For this purpose, "control" shall mean direct or indirect beneficial ownership of at least a fifty percent (50%) of the equity interests of, or at least a fifty percent (50%) interest in the income of such corporation or other business entity, or any business entity that is more than fifty percent (50%) owned by a business entity that owns more than fifty percent (50%) of APL or Licensee, or such other relationship as in fact, constitutes actual control.

1

- 1.3 "APL Copyrights" shall mean (a) APL's copyrights in or related to the APL Know-How and APL Patent Rights, and (b) the copyrights specifically set forth in Appendix B.
- 1.4 "APL IP" shall mean collectively, the APL Patent Rights, the APL Copyrights, and the APL Know-How.
- 1.5 "APL Know-How" shall mean any Know-How (a) Controlled by APL as of the Effective Date and that is described in the APL Patent Rights or is uniquely necessary to practice the inventions claimed in the APL Patent Rights, or (b) described or specifically set forth in Appendix C, and in each case, not general know-how broadly applicable across multiple technologies.
- 1.6 "APL Patent Rights" shall mean:
  - (a) the patents and patent applications specifically set forth in <u>Appendix A</u> and any United States patents that issue therefrom or on inventions originally disclosed therein (including any and all divisionals, continuations, and continuations-in-part solely to the extent that all of the claims of any such continuations-in-part are wholly supported by the patents, patent applications, and/or invention disclosures set forth in <u>Appendix A</u>) together with reexaminations or reissues of such United States patents; and
  - (b) any foreign (non-United States) patents and patent applications claiming priority to any patents or patent applications specifically set forth in <u>Appendix A</u> and any patents issuing therefrom or on inventions originally disclosed therein (including any and all divisionals, continuations, and continuations-in-part solely to the extent that all of the claims of any such continuations-in-part are wholly supported by the patents and/or patent applications set forth in <u>Appendix A</u>) together with any re-examinations or reissues of such foreign patents.
- 1.7 "Calendar Quarter" shall mean a period of three (3) consecutive months ending on the last day of March, June, September, or December, respectively.
- 1.8 "Calendar Year" shall mean a period of twelve (12) consecutive months beginning on January 1 and ending on December 31.
- 1.9 "Control" shall mean, with respect to any intellectual property right, the possession of the right (whether by ownership, license, or otherwise (other than pursuant to a license granted under this Agreement)), to assign, or grant a license, sublicense, or other right to or under, such intellectual property right as provided for herein without violating the terms of any agreement or other arrangement with any Third Party.

- 1.10 "Excluded Entity" shall mean (a) the United States government including any agency, department, commission, board, corporation, or instrumentality of the United States government, (b) any Person associated with the development or commercialization of alcohol, tobacco products, private prisons, military armaments, or pornography, or (c) any Person on any list of prohibited individuals or entities enacted under United States economic sanctions and anti-boycott
- 1.11 "Field of Use" shall mean analytical services for applications in biological and chemical derived pharmaceutical therapeutics, and application of analytics in the development and testing of pharmaceutical products.
- 1.12 "First Commercial Sale" shall mean, on a country-by-country and Licensed Product-by-Licensed Product or Licensed Service-by-Licensed Service basis, the first commercial transfer or disposition for value of such Licensed Product or Licensed Service in such country to a Third Party by Licensee, or any of its Affiliates or Sublicensees, in each case, after all necessary Governmental Approvals have been obtained for such country.
- 1.13 "Governmental Approval" shall mean, with respect to a Licensed Product or Licensed Service in a country or region, all approvals, licenses, registrations, and authorizations of the relevant Governmental Authority, if applicable, required for the commercialization of such Licensed Product or Licensed Service in such country.
- 1.14 "Governmental Authority" shall mean any: (a) nation, principality, state, commonwealth, province, territory, county, municipality, district, or other jurisdiction of any nature; (b) federal, provincial, state, local, municipal, foreign, or other government; (c) governmental or quasi-governmental authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, board, instrumentality, officer, official, representative, organization, unit, body, or entity and any court or other tribunal); (d) multi-national or supranational organization or body; or (e) individual, entity, or body exercising, or entitled to exercise, any executive, legislative, judicial, administrative, regulatory, police, military, or taxing authority of any nature.
- 1.15 "Improvements" shall mean any and all Know-How, Patent Rights, copyrights, or other intellectual property conceived or created by APL or created by or on behalf of Licensee incorporating or based upon the APL IP on or after the Effective Date.
- 1.16 "Know-How" shall mean any proprietary results, data, inventions, trade secrets, and other information, in any tangible or intangible form, including databases, discoveries, practices, methods, tests, assays, techniques, specifications, processes, formulations, formulae, protocols, procedures, drawings, plans, designs, diagrams, sketches, documentation, and materials, including pharmaceutical, chemical, and biological materials and their sequences.
- 1.17 "Law" or "Laws" shall mean all applicable laws, statutes, rules, regulations, ordinances, and other pronouncements having the binding effect of Law of any Governmental Authority.

3

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

- 1.18 "Licensed Product" shall mean any product or part thereof made, developed, discovered, used, or sold by Licensee or an Affiliate or Sublicensee of Licensee, which:
  - (a) is covered in whole or in part by a Valid Claim; or
  - (b) employs or incorporates the APL Know-How or APL Copyrights.
- 1.19 "<u>Licensed Analytic Product</u>" shall mean any Licensed Product that includes software or data.
- 1.20 "Licensed Pharmaceutical Product" shall mean any Licensed Product that is a pharmaceutical.
- 1.21 "<u>Licensed Service</u>" shall mean any process, method, or part thereof, made, developed, used, or sold by Licensee or an Affiliate or Sublicensee of Licensee, which:
  - (a) is covered in whole or in part by a Valid Claim; or
  - (b) employs or incorporates the APL Know-How or APL Copyrights.
- "Net Sales" shall mean and include everything of value received by Licensee, its Affiliates, and its Sublicensees for the sale, license, lease, or other transfer of 1.22 Licensed Products and for the performance of Licensed Services, but does not include Non-Royalty Sublicensing Income or sublicensee end sales of Licensed Pharmaceutical Product. Net Sales include currency and the fair market value of equity, intangible rights, services, and other things of value provided to, or received by, Licensee, its Affiliates, and its Sublicensees for the sale, license, lease, or other transfer of Licensed Products and/or for the performance of Licensed Services, other than Non-Royalty Sublicensing Income. Net Sales may be calculated using the accrual or cash method, but such calculation must (a) be consistent from month to month and year to year and (b) use the same method used generally by Licensee in reporting its business activity for applicable Accounting Standards. The following items are excluded from Net Sales only to the extent that they are separately billed to purchasers of Licensed Products or Licensed Services: (i) import, export, excise and sales taxes, custom duties, and shipping charges; (ii) costs of packing, insurance covering damage during shipping, and transportation from the place of manufacture to the customer's premises or point of installation; and (iii) credits (including credit card chargebacks) or allowances, refunds or discounts, if any, actually granted on account of price adjustments, recalls, rejection or return of services previously sold, leased or otherwise disposed of; provided, that such deductions or exclusions shall be determined in accordance with applicable Accounting Standards, consistently and strictly applied. If a Licensed Product is sold in combination with other products, services, ingredients, or substances or as part of a kit or package, Net Sales of such Licensed Product shall include revenues and fees received for the entire combination, kit, or package. If a Licensed Service is provided in combination with other products, services, ingredients, or substances or results in the production of a kit or package, Net Sales of such Licensed Service shall include revenues and fees received for the entire combination, kit, or package.

4

- (a) the reasonable cost of research and development services to be performed thereafter by Licensee for or on behalf of Sublicensee, if Licensee is required to perform such services for Sublicensee, including under a written agreement to perform such services;
- (b) reimbursement of the amount paid for patent fees incurred by Licensee;
- (c) royalty payments to Licensee based on Sublicensee's sale of Licensed Products or Licensed Services, where royalties are provided and will be paid to APL on Sublicensee's Net Sales under this Agreement; and
- (d) the amount of any milestone payment made to APL under this Agreement as a result of activity of Licensee or Sublicensee, which results in a milestone payment by Sublicensee to Licensee under the Sublicense; provided that the difference between the milestone payment to be paid to APL and the milestone payment paid to Licensee by Sublicensee shall be considered NRSI.
- 1.24 "Patent Rights" shall mean any of the following, whether existing now or in the future anywhere in the world: issued patents, including inventor's certificates, substitutions, extensions, confirmations, reissues, re-examinations, renewals, or any like governmental grant for protection of inventions, and any pending provisional or non-provisional applications for any of the foregoing.
- 1.25 "Person" shall mean any natural person, corporation, firm, business trust, joint venture, association, organization, company, partnership, or other business entity, or any Governmental Authority or political subdivision thereof.
- 1.26 "Sublicense" shall mean an agreement entered into by Licensee and any Third Party including a license or option to obtain a license to research, develop, make, have made, use, sell, offer to sell, import, perform, or offer to perform a Licensed Product or Licensed Service, or including a covenant not to sue or any transfer of rights to the APL IP.
- 1.27 "Sublicensee" shall mean any Third Party to whom Licensee has entered into a Sublicense.
- 1.28 "Territory" shall mean worldwide.
- 1.29 "Third Party" shall mean any Person other than APL, Licensee, or any of their respective Affiliates.
- "Valid Claim" shall mean a claim of (a) an issued, unexpired patent in the APL Patent Rights, which claim has not been revoked or held unenforceable or invalid by a decision of a court or Governmental Authority of competent jurisdiction from which no appeal can be taken, or with respect to which an appeal is not taken within the time allowed for appeal, and that has not been disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer, or otherwise; or (b) a pending patent application in the APL Patent Rights, which claim has not been abandoned, disclaimed, allowed to lapse, or finally determined to be unallowable by the applicable Governmental Authority in a decision from which no appeal can be taken, or with respect to which an appeal is not taken within the time allowed for appeal.

5

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

The definition of each of the following terms is set forth in the section of the Agreement indicated below.

Defined Term	Section
2018 License	4.5(a)(i)
Achievement Date	3.2(a)
Agreement	Preamble
APL	Preamble
APL Indemnitees	8.1
Confidential Information	10.1
Diligence Milestone	3.2(a)
Diligence Report	5.1(a)
Disclosing Party	10.1
Effective Date	Preamble
Federal Laws	2.2(b)(i)
Government	2.2(b)(i)
Independent Accountant	5.4
JHU	Recitals
JHU Names	12.3(b)
Key Employees	12.1
Liabilities	8.1
License	2.1
Licensee	Preamble
Milestone	4.2(b)
Milestone Payment	4.2(b)
New Securities	4.5(d)
Non-Sales Fees	4.3(a)(ii)
Notice	4.5(d)
Party	Preamble
Parties	Preamble

<b>Defined Term</b>	Section
Patent Costs	7.2
Performance Milestone	4.2(a)
Performance Milestone Payment	4.2(a)

Receiving Party	10.1
Royalty	4.3(a)
Royalty Report	5.2(a)
Royalty Term	4.3(d)
Sale of the Company	4.5(f)
Sales Milestone	4.2(b)
Sales Milestone Payment	4.2(b)
Shares	4.5(a)
Term	11.1
Third Party IP	4.3(c)(i)

All terms defined in this Agreement may be used in the singular or plural, and a reference to the singular includes the plural and vice versa.

#### 2. LICENSE GRANT

2.1 **License Grants.** APL hereby grants to Licensee and Licensee hereby accepts an exclusive license in the Territory for the Field of Use, under the APL IP, to research, develop, make, have made, use, sell, offer to sell, import, perform, and offer to perform the Licensed Products and/or Licensed Services (the "License").

#### 2.2 Retained Rights.

- (a) Retained Rights. APL retains on behalf of itself and its Affiliates a non- exclusive, royalty-free, perpetual, irrevocable, worldwide right to practice, make, and use, or allow others to practice, make, and use, APL IP for any research and development use for its non-profit purposes, including educational, clinical, and government purposes, and research purposes including sponsored research and collaborations with commercial entities outside of the Field of Use.
- (b) Government Rights; Related Licensee Obligations.
  - (i) APL IP arising from research funded in whole or in part by United States government (the "Government") research funding may be subject to Title 35 U.S.C. Sections 200-212, the Federal Acquisition Regulation (FAR), the Defense Federal Acquisition Regulation Supplement (DFARS) or other supplements to the FAR, and other federal laws and regulations (collectively, the "Federal Laws"). Any action taken by APL to fulfill its obligations thereunder shall be and hereby is deemed to be consistent with APL's obligations hereunder.

7

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

- (ii) APL's obligations under the Federal Laws may include the grant of a non-exclusive, nontransferable, irrevocable, paid-up worldwide license to APL IP by APL to the Government, and a statement of Government patent rights on certain APL Patent Rights.
- (iii) Any and all determinations of Government funding will be made solely by APL, and APL's determination shall be final and binding on Licensee, its Affiliates, and its Sublicensees.
- (iv) Any Licensed Products embodying, or produced through the use of, APL IP, arising from research funded in whole or in part by the Government, that are used or sold in the United States must be manufactured substantially in the United States for so long as the License remains exclusive, unless Licensee obtains a prior written waiver from the Government, if required, specifically authorizing the manufacture of Licensed Products outside of the United States.

(c)

Right to Refuse. APL shall at all times retain the right to refuse to accept any subcontract or other agreement to perform any work under any such subcontract or other agreement between APL and Licensee in APL's sole discretion. APL has a technical direction agent relationship with the Government, which requires that APL refrain from performing any work under any contract or agreement that would jeopardize its or its employees' ability to act for the Government as an impartial or neutral evaluator.

### (d) Exclusions.

- (i) Except for those rights specifically granted by APL to Licensee under this Agreement, APL does not grant to Licensee any other rights, implied, or otherwise, regardless of whether any other rights are or may be required to exploit any APL IP.
- (ii) Except as otherwise specifically provided in this Agreement, APL does not have any obligation to provide to Licensee any additional information, know how, inventions, data, results, materials, or other assistance after the Effective Date hereof.
- (iii) Notwithstanding the License grant, Licensee shall not have the right to use the APL IP to solicit or conduct research or development with or for the benefit of Excluded Entities, unless Licensee has obtained the prior written approval of APL.

### 2.3 Sublicensing.

(a) Right to Sublicense. Subject to the terms and conditions of this Section 2.3 and otherwise as set forth in the Agreement, Licensee may grant Sublicenses to Third Parties without any right to sublicense further; provided, that Licensee has requested and obtained the prior written approval of APL for Licensed Analytic Product or Licensed Services, which approval shall not be unreasonably withheld (provided, that it shall not be unreasonable to withhold consent if the applicable Third Party is an Excluded Entity). APL shall provide a response to a request for a sublicense within 30 business days.

- (b) <u>Mandatory Terms of Sublicenses</u>. Each and every Sublicense granted by Licensee to Sublicensees (as permitted under<u>Section 2.3(a)</u> above) for Licensed Analytic Product or Licensed Services must comply with all of the following requirements:
  - (i) the Sublicense shall be made specifically subject to all of the terms and conditions of this Agreement;
  - (ii) the Sublicense shall specifically provide that the Sublicensee is not permitted to further sublicense;
  - (iii) the Sublicense shall specifically include for the benefit of APL the provisions of Section 5 ("Reports and Records"), Section 8 ("Indemnification, Assumption of Liability, Limitation of Liability, Disclaimers, and Insurance"), Section 9 ("Marking and Standards"), Section 10 ("Confidentiality"), and Section 12.3 ("Use of Name") of this Agreement, and APL shall expressly be made a third party beneficiary of all such provisions;
  - (iv) the Sublicense shall provide that upon the expiration or earlier termination of this Agreement (pursuant to Section 11 hereof) all of Licensee's rights in such Sublicense shall, at APL's sole discretion, be transferred to APL, including the right to receive all royalty payments owed by Sublicensee under the terms thereof, without offset for debts or obligations owed by Licensee to Sublicensee; and
  - (v) the Sublicense shall not be valid against APL as to terms, conditions, obligations, or limitations that exceed or conflict with the terms and conditions of this Agreement as applicable to APL.
- (c) Licensee shall provide APL with a copy of each Sublicense agreement and any other agreement that transfers intellectual property rights granted hereunder to a Third Party, within five (5) business days following the execution of such agreement.
- (d) Notwithstanding the Sublicensee's payment obligation to Licensee, Licensee shall be directly responsible for all Royalties and payments due pursuant to Section 4.
- 2.4 Delivery of APL IP. APL shall deliver Licensee requested physical or tangible APL IP, existing on the Effective Date, to Licensee within thirty (30) days of the Effective Date.

9

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

#### 3. DILIGENCE

3.1 **Diligence.** Licensee shall use commercially reasonable efforts to develop, manufacture, market, and sell Licensed Products and Licensed Services in the Territory.

## 3.2 Diligence Milestones.

(a) Licensee, at its sole expense, shall achieve each event listed below (each, a "<u>Diligence Milestone</u>") by the corresponding achievement date (each, an "<u>Achievement Date</u>"):

Diligence Milestone	Achievement Date
First service contract, memorandum of understanding	
(MOU), or equivalent	June 30, 2022
Raise \$5,000,000 or initial public offering	December 31, 2022
Company reaches \$50,000 net sales	December 31, 2022
Company reaches \$300,000 net sales	December 31, 2023
Company reaches \$1,000,000 net sales	December 31, 2024

(b) Licensee, upon written request to and approval from APL, may be granted an extension of one or more of the above Diligence Milestones by six (6) months up to two (2) times for a total possible extension of twelve (12) months; provided, that Licensee pays APL five thousand dollars (\$5,000.00) per extension. If APL agrees to extend a particular Diligence Milestone, all subsequent Diligence Milestones will be extended by the same time period.

### 4. FEES, MILESTONE PAYMENTS, ROYALTIES, AND OTHER CONSIDERATION

#### 4.1 Annual License Fees

Licensee shall pay APL annual license fees as follows:

Payment Date	Amount Due
Within 90 days of Effective Date	\$10,000
First anniversary of the Effective Date and each year	\$1,500
thereafter	

### 4.2 Intentionally Omitted.

### 4.3 Royalties.

- (a) Royalty. As further consideration for the License, during the Royalty Term, Licensee shall pay to APL a non-refundable, non-creditable royalty (the "Royalty") equal to:
  - (i) Eight percent (8%) of quarterly Net Sales of Licensed Services or Licensed Analytic Products, on a Licensed Service-by-Licensed Service or Licensed Analytic Product-by-Licensed Analytic Product basis, regardless of whether sold by Licensee or a Sublicensee or Affiliate of Licensee.

- (ii) Three percent (3%) of quarterly Net Sales of Licensed Pharmaceutical Products, on a Licensed Pharmaceutical Product- by-Licensed Pharmaceutical Product basis, regardless of whether sold by Licensee or an Affiliate of Licensee, and
- (iii) Eight percent (8%) of quarterly profit or fees realized on each contract performed by Licensee, its Affiliates, and its Sublicensees using any Licensed Service or Licensed Analytic Product, but excluding any amounts otherwise included in Net Sales of Licensed Services or License Analytic Product (the "Non-Sales Fees").

Notwithstanding Licensee's obligation to pay to APL the Royalties as specified in this Section 4.3(a), Licensee shall pay to APL minimum annual royalty payments (each, a "Minimum Annual Royalty Payment") in the amounts and by the dates indicated below:

Payment Date	Minimum Annual Royalty Payment
December 31, 2022	\$30,000
December 31, 2023	\$80,000
December 31, 2024	\$300,000
December 31 of each year after 2024 during the Royalty	\$300,000
Term	

For the avoidance of doubt, Licensee shall pay a Minimum Annual Royalty Payment for a calendar year even if the Royalties for that calendar year do not reach the amount of the Minimum Annual Royalty Payment.

(b) Licensee shall make quarterly payments to APL of all Royalties due under this <u>Section 4.3</u> on a quarterly basis as set forth in <u>Section 4.7</u>. If Licensed Products are made, used, imported, or offered for sale by Licensee, any Affiliate and/or any Sublicensee on or before the date of expiration or termination of any Valid Claim or APL Copyright, then Licensee shall pay to APL the full Royalty payment required under this <u>Section 4.3</u> based on Net Sales earned by Licensee, its Affiliate and/or its Sublicensee from the sale of such Licensed Products, even if such Licensed Products are sold after the date of expiration or termination of this Agreement.

11

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

#### (c) Royalty Reduction.

- (i) Notwithstanding anything in this Section 4.3, if a Third Party Controls a patent relating to a Licensed Product or Licensed Service, a license or other right to which is necessary for the use, manufacture, sale, import, export, performance, or other exploitation of such Licensed Product or Licensed Service without infringing that intellectual property, then Licensee shall have the right (but not the obligation) to obtain a license to such Third Party intellectual property (the "Third Party IP"). In the event Licensee obtains such license, fifty percent (50%) of the royalties that Licensee actually pays to such Third Party for the exploitation of such Licensed Product or Licensed Service in a country during a Calendar Quarter may be credited against Royalties otherwise payable by Licensee to APL under Section 4.3(a) for such Licensed Product or Licensed Service in such country in such Calendar Quarter.
- (ii) The maximum aggregate reduction in the Royalty otherwise payable by Licensee to APL under Section 4.3(a) with respect to any Licensed Product or Licensed Service in any country during a given Calendar Quarter during the applicable Royalty Term pursuant to Section 4.3(d) shall be fifty percent (50%).
- (d) Royalty Term. Unless prohibited by Applicable Law, Licensee's obligation to pay Royalties with respect to a Licensed Product or Licensed Service in a particular country in the Territory, even if reduced as provided in this Section 4.3, shall commence upon the First Commercial Sale of such Licensed Product or Licensed Service in such country and shall expire on a country-by-country and Licensed Product-by-Licensed Product and Licensed Service-by-Licensed Service basis on the later of (i) the expiration of the last to expire Valid Claim that covers (in whole or in part) a Licensed Product or Licensed Service (if applicable) in such country or (ii) the date that is twenty (20) years after First Commercial Sale of such Licensed Product or Licensed Service in such country (the "Royalty Term"). Upon expiration of the Royalty Term with respect to a Licensed Product or Licensed Service in a country, the Licensed Product or Licensed Product or Licensed Product or Licensed Product or Licensed Service in such country. If a Licensed Product or Licensed Service is not covered by a Valid Claim or APL Copyright at any period during a Royalty Term, then the Royalty otherwise payable shall be reduced by 50%.

### 4.4 Non-Royalty Sublicensing Income.

- (a) Licensee shall pay APL on the following graduated scale for NRSI received from each sublicensee, on a per sublicensee basis, for any NRSI that includes an Licensed Analytic Product or Licensed Service:
  - (i) Fifty percent (50%) of the first five-hundred thousand dollars (\$500,000) of NRSI received from each sublicensee;
  - (ii) Twenty-Five percent (25%) of NRSI over five-hundred thousand dollars (\$500,000) received from each sublicensee.
- (b) Licensee shall pay APL three percent (3%) of NRSI received from licensees for NRSI on Licensed Pharmaceutical Products.

12

- 4.5 Equity.
- (a) <u>Equity Grant.</u>

- (i) Licensee confirms that Licensee previously issued to APL a warrant to acquire that number of shares of common stock of Licensee equal to five percent (5%) of the outstanding shares of stock of Licensee as of March 31, 2019 (the "2019 Shares"), pursuant to the Stock Purchase Agreement executed in connection with the previous license effective February 27, 2018 between APL and Licensee (the "2018 License"). To the extent that the terms of section 4.5 under this Agreement are inconsistent with the terms of Section 6.2 (b) of the 2018 License, the terms of Section 4.5 under this Agreement shall control.
- (ii) As further consideration for this License, Licensee shall additionally issue to APL that number of shares of common stock of Licensee equal to one percent (1%) of the outstanding shares of stock of Licensee as of the Effective Date (collectively with the 2019 Shares known hereinafter as the "Shares"), pursuant to the Stock Issuance Agreement attached hereto as Appendix D.
- (b) Anti-Dilution. If at any time after the Effective Date and prior to an initial public offering, and before Licensee receives a total of five million dollars (\$5,000,000) cash in exchange for the issuance of Licensee's equity securities and/or debt securities that are convertible into or exercisable or exchangeable for Licensee's equity securities, Licensee issues any (i) shares of Licensee's common stock or (ii) securities that are convertible into or exercisable for shares of Licensee's common stock, then Licensee shall issue additional shares of common stock to APL such that immediately after such issuance to APL the total number of shares of common stock issued to APL under this Section 4.5 remains and constitutes one percent (1%) of the outstanding shares of stock of Licensee
- (c) Information Rights. If, at any time, prior to an initial public offering, and as long as APL owns any Shares (including any issued pursuant to Section 4.5(b)), Licensee shall promptly provide to APL annual and quarterly financial statements, annual operating plan, and quarterly capitalization table updates. Additionally, Licensee shall provide to APL such other information respecting the business, affairs, and financial condition of Licensee as APL may reasonably request from time to time.
- (d) Preemptive Rights. If, at any time, prior to an initial public offering, if Licensee proposes to offer and sell any equity securities (other than pursuant to an equity incentive plan) ("New Securities"), Licensee shall offer APL its pro rata share (on a fully-diluted, as converted, basis) of such New Securities. Licensee will provide written notice to APL of the anticipated date of the closing of the sale of such New Securities (the "Notice"), which date shall be no less than twenty (20) days after the date of the Notice. APL may exercise its right to purchase all or any of its pro rata portion of the New Securities by providing written notice to Licensee no less than ten (10) days prior to the proposed closing date of the sale of such New Securities. Except as otherwise agreed by the Parties, the equity securities purchased by APL shall be issued under the same terms and subject to the same conditions as those offered to the other purchasers of the New Securities.

13

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

- Registration Rights. Until such time as APL is permitted to sell all of its shares in the Licensee pursuant to Rule 144 under Securities Act of 1933, as amended (e) (the "Securities Act"), if Licensee at any time proposes to register any of its securities under the Securities Act for sale to the public, whether for its own account or for the account of other security holders or both (except with respect to registration statements on Forms S-4, S-8 or another form not available for registering the registrable securities for sale to the public), each such time it will give prompt written notice to APL of its intention to do so. Upon the written request of APL, received by Licensee within thirty (30) days after giving of any such notice by Licensee, to register any of the Shares (including any issued pursuant to Section 4.5(b)), Licensee will use its commercially reasonable efforts to effect such registration, cause it to become effective promptly and maintain it as effective for at least thirty six (36) months (or less if all the shares of capital stock included therein are sooner sold). If so requested by APL, Licensee shall enter into an underwriting agreement in customary form with any underwriter selected by Licensee with respect to such registration. Notwithstanding any other provision of this Section 4.5(e), if the underwriter(s) advise(s) Licensee in writing that marketing factors require a limitation on the number of shares to be underwritten, then Licensee shall so advise APL, and the number of Shares that may be included in the underwriting shall be allocated among stockholders that have notified Licensee of their intention to include shares in the registration, including APL, in proportion (as nearly as practicable) to the number of shares owned by each such stockholder. Notwithstanding anything in this Section, Licensee shall have the right to terminate or withdraw any registration initiated by it before the effective date of such registration, whether or not APL has elected to include Shares in such registration. All expenses incurred by Licensee and APL in connection with any registration hereunder for the Shares (including any issued pursuant to Section 4.5(b)), including reasonable fees and disbursements of accountants and counsel for APL, but excluding underwriting discounts and commissions and transfer taxes, shall be borne solely by Licensee.
- (f) <u>Drag-Along Rights</u>. If, at any time, prior to an initial public offering, the holders of at least a majority of the then-outstanding capital stock of Licensee and the Board of Directors of Licensee approve a sale, in any one transaction or a series of related private transactions (irrespective of how structured), of capital stock of Licensee which, in the aggregate, represents more than fifty percent (50%) of the outstanding capital stock of Licensee on a fully-diluted basis (a "<u>Sale of the Company</u>"), then Licensee has the right to require APL to participate in such Sale of the Company with respect to the Shares (including any issued pursuant to <u>Section 4.5(b)</u>), on a pro rata basis for the same consideration per share and otherwise on the same terms as the other shareholders who are disposing their shares of the same class. APL shall not be required to comply with the foregoing sentence in connection with any proposed Sale of the Company unless:

14

- any representations and warranties to be made by APL in connection with such transaction are limited to those related to authority, ownership, and ability to convey title to the Shares;
- (ii) APL shall not be liable for the inaccuracy of any representation or warranty made by any other Person other than Licensee (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of Licensee as well as breach by any stockholder of any identical representations, warranties, and covenants provided by all stockholders);
- (iii) liability shall be limited to APL's applicable share of a negotiated aggregate indemnification amount that applies equally to all stockholders (not to exceed the amount of consideration payable to the stockholders);
- (iv) upon the consummation of the proposed Sale of the Company each holder of each class or series of capital stock will receive the same amount of consideration per share as is received by other holders in respect of their shares of such class or series of capital stock; and
- (v) subject to clause (iv) above, if any holders of any capital stock of Licensee are given an option as to the form and amount of consideration to be received as a result of the proposed Sale of the Company, all holders of such class or series of capital stock will be given the same option.

- (g) Tag-Along Rights. If, at any time, prior to an initial public offering, any of the shareholders of Licensee propose to sell in any one or more private transactions, capital stock of Licensee which, in the aggregate, represents more than fifty percent (50%) of the outstanding capital stock of Licensee on a fully-diluted basis (other than in a reorganization of Licensee employees) and have not required APL to sell a pro rata portion of its Shares in such transaction, then APL shall have the right to participate in such sale with respect to the Shares (including any issued pursuant to Section 4.5(b)), on a pro rata basis for the same consideration per share and otherwise on the same terms as the other shareholders who are disposing their shares of the same class.
- 4.6 **Currency**. All payments hereunder shall be made in U.S. dollars. Royalties in dollars shall be computed by converting the Royalty in the currency of the country in which the sales were made at the exchange rate for dollars prevailing at the close of the last business day of the relevant calendar quarter for which Royalties are being calculated, as quoted by the United States Federal Reserve Bank.

15

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

#### 4.7 Payment Terms.

- (a) All payments due hereunder are payable by check or wire transfer to the address listed in Section 12.6 or using the wiring instructions provided by APL, as applicable, and shall be deemed received when the complete payment is credited to APL's bank account. Until all funds are received by APL, the payment by Licensee is not considered to be complete. No transfer, exchange, collection, or other charges, including any wire transfer fees, shall be deducted from such payments.
- (b) Royalties shall be paid by Licensee to APL, in amounts set forth in Section 4.3, for each Calendar Quarter within sixty (60) days of the end of such Calendar Quarter, until the applicable Royalty Term expires. If this Agreement terminates before the end of a Calendar Quarter and the obligation to pay Royalties does not survive such termination, the payment for that terminal fractional portion of a Calendar Quarter shall be made within sixty (60) days after the date of termination of this Agreement.
- (c) All payments (including Royalties and Milestone Payments) payable hereunder that are overdue shall bear interest until paid at a rate equal to one and one half percent (1.5%) per month, but in no event to exceed the maximum rate of interest permitted by Applicable Law. This provision for interest shall not be construed as a waiver of any rights APL has as a result of Licensee's failure to make timely payment of any amounts.

### 4.8 Taxes.

- (a) In the event that any taxes, withholding or otherwise, are levied by any taxing authority of any Governmental Authority in connection with accrual or payment of any Royalties or other payments payable to APL under this Agreement, Licensee shall be solely responsible to pay such taxes to the local tax authorities on behalf of APL, as a nonprofit, tax-exempt organization as defined in Section 501(c)(3) of the Internal Revenue Code.
- (b) Should Licensee be required under any Law of any Governmental Authority to withhold or deduct any portion of the payments on Royalties or other payments due to APL, then the sum payable to APL shall be increased by the amount necessary to yield to APL an amount equal to the sum it would have received had no withholdings or deductions been made. No such withholdings or deductions shall be creditable against any payments Licensee makes or is required to make to APL. APL shall cooperate reasonably with Licensee in the event Licensee elects to assert, at its own expense, any exemption from any such tax or deduction.
- 4.9 Payments and Reports Due During Pendency of Any Dispute. All payments and obligations accrued and owing hereunder shall be and remain due and owing notwithstanding any dispute between the Parties hereto, and any such dispute shall not suspend any obligations of the Parties under this Agreement. Licensee understands and agrees that all payments made by Licensee to APL shall be non- refundable even if the APL IP is later determined by a court of competent jurisdiction to be invalid or not applicable to any particular Licensed Product or Licensed Service. In addition, during the pendency of any dispute Licensee must continue to submit all reports required hereunder.

16

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

# 5. REPORTS AND RECORDS

### 5.1 Diligence Reports.

- (a) During the Term, Licensee shall deliver to APL a written annual diligence report (each, a "<u>Diligence Report</u>") within thirty (30) days of the end of each Calendar Year. Each Diligence Report will cover Licensee's (and any of its Affiliates' and Sublicensees') activities related to the development and commercialization of all Licensed Products and Licensed Services and obtaining any Governmental Approvals necessary for commercialization of Licensed Products and Licensed Services.
- (b) Each Diligence Report shall be in the same form and substance as the Form of Diligence and Annual Report set forth in <u>Appendix F</u>, and will include information to demonstrate the progress made in the development and commercialization of Licensed Products and Licensed Services during the applicable year, and at a minimum shall include the following to the extent applicable:
  - (i) summary of development and commercialization conducted during such period;
  - (ii) key scientific and technical discoveries;
  - (iii) summary of work in progress;
  - (iv) good faith estimate of resources (dollar value) spent by or on behalf of Licensee, its Affiliates and its Sublicensees in the reporting period on the development and commercialization of Licensed Products and Licensed Services; and

current schedule of anticipated events or milestones, including anticipated timeline for achievement of the Diligence Milestones.

Royalty Reports are Confidential Information of Licensee.

### 5.2 Royalty Reports.

(a) No later than sixty (60) days after the end of each Calendar Quarter, Licensee shall provide to APL a written report (each, a "Royalty Report") covering all sales of Licensed Products and Licensed Services in the Territory by Licensee, its Affiliates, and Sublicensees, all profits or fees realized on contracts performed by Licensee, its Affiliates, and Sublicensees using Licensed Products or Licensed Services, as well as all NRSI received by Licensee, its Affiliates, and Sublicensees.

17

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

- (b) Each such Royalty Report shall be in the same form and substance as the Form of Quarterly Sales and Royalty Report as set forth in <u>Appendix G</u>, and at a minimum shall set forth in reasonable detail:
  - the total gross sales (including all service, implementation, maintenance and other related fees) for each Licensed Product and Licensed Service on a country-by-country basis;
  - (ii) the calculation of the amount of Net Sales for each Licensed Product and Licensed Service on a country-by-country basis;
  - (iii) the Non-Sales Fees on a Licensed Product-by-Licensed Product and Licensed Service-by-Licensed Service basis;
  - (iv) pursuant to <u>Section 4.3</u>, the calculation of the amount of Royalties due on such Net Sales for each Licensed Product and Licensed Service on a country-by-country basis, and the Non-Sales Fees for each Licensed Product and Licensed Service, including any exchange rate used and any offsets against or decreases in Royalties due pursuant to <u>Section 4</u>; and
  - (v) the NRSI on a Licensed Product-by-Licensed Product and Licensed Service-by-Licensed Service basis.

Royalty Reports are Confidential Information of Licensee.

- Books and Records. For a period of five (5) years from the date of each report pursuant to Section 5.2, Licensee shall maintain accurate books and records adequate to verify the Royalties and Milestone Payments due and payable under this Agreement. Such books and records shall be maintained at Licensee's principal place of business and shall be available for inspection in accordance with Section 5.4.
- Audit. Licensee shall make available its books and records for audit by an independent certified public accountant or accounting firm selected by APL and reasonably acceptable to Licensee (the "Independent Accountant"), on reasonable notice (but not less than five (5) business days) during regular business hours, not to exceed once per calendar year, and following the initial public offering, not during the period in which the independent public accounting firm engaged by Licensee is conducting its annual audit of Licensee's financial statements. Licensee's acceptance of APL's selection of said Independent Accountant shall not be unreasonably withheld. Such Independent Accountant shall not disclose to APL any information other than that information relating solely to the accuracy of, or necessity for, the reports and payments made hereunder. The fees and expense of the Independent Accountant performing such verification shall be borne by APL, unless the audit reveals an underpayment of Royalty by more than five percent (5%), in which case the cost of the audit shall be paid by Licensee.

18

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

Licensee Self-audit. Prior to an initial public offering Licensee will conduct an independent audit of sales, Non-Sales Fees, NRSI, and Royalties paid and payable to APL at least once every two (2) years if the cumulative sum of annual sales of Licensed Products and Licensed Services, annual Non-Sales Fees, and annual NRSI exceeds Ten Million Dollars (\$10,000,000). The audit will address the amount of gross sales and gross profits for contracts, by or on behalf of Licensee, its Affiliates, and Sublicensees during the audit period, the amount of funds owed to APL under this Agreement, and whether the amount owed has been paid to APL, as reflected in the records of Licensee, its Affiliates, and Sublicensees. Licensee shall pay all self-audit costs and shall submit the auditor's report promptly to APL upon completion. The independent certified public accountant or accounting firm may include the accounting firm that Licensee engages to audit its financial statements.

### 6. COMPLIANCE WITH LAWS

- 6.1 Compliance with Applicable Laws. Licensee shall at all times during the Term and for so long as it shall exercise its rights to the APL IP under the License comply with all Laws that may apply with respect to the import, export, manufacture, use and other commercial exploitation of the APL IP or any other activity undertaken pursuant to this Agreement.
- Government Rights. Licensee understands that the APL IP may have been developed under a funding agreement with the Government and, if so, that the Government may have certain rights relative thereto. This Agreement is explicitly made subject to the Government's rights under any funding agreement and any applicable Law. If there is a conflict between a funding agreement with the Government, applicable Law, and this Agreement, the terms of the funding agreement with the Government or applicable Law shall prevail. Specifically, this Agreement may be subject to terms and conditions specified in the Federal Laws, and Licensee agrees to take all reasonable action necessary on its part to enable APL to satisfy its obligations thereunder, relating to the APL IP.
- 6.3 Export Control Regulations. It is understood that APL and Licensee are subject to United States Laws controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the Export Administration Act of 1979), and that the obligations of APL hereunder are contingent on compliance with applicable United States export Laws. The transfer of certain technical data and commodities may require a license from the cognizant agency of the Government and/or written assurances by Licensee that Licensee shall not export data or commodities to certain foreign countries without prior approval of such agency. APL neither represents that a license shall not be required nor that, if required, it shall be issued. Licensee represents and warrants that it will comply with, and will cause its Sublicensees and Affiliates to comply with all United States export control Laws, rules, and regulations. Licensee is solely responsible for any violation of such Laws by itself or its Affiliates or Sublicensees, and it will indemnify, defend, and hold APL and its Affiliates harmless for the consequences of any such violation.

Committee on Foreign Investment in the United States. The regulations of the Government require submission of a declaration or notice to the Committee on Foreign Investment in the United States forty-five (45) days before consummation of certain transactions with a foreign person. In order to facilitate the exchange of technical information under this Agreement, Licensee shall not, without appropriate prior notice to the Committee on Foreign Investment in the United States and simultaneous prior written notice to APL, pursue or complete any covered transaction as defined under 31 CFR 800.207 or 31 CFR 801.210. Failure by Licensee to provide such prior written notice to APL or appropriate prior notice to the Committee on Foreign Investment in the United States shall constitute a material breach of this Agreement. APL, at its sole discretion, may allow Licensee to cure such material breach in accordance with Section 11.2(b). APL neither represents that notice to the Committee on Foreign Investment in the United States of any particular transaction is required, nor that, if required, any such transaction will be permitted to proceed by the Government.

### 7. INTELLECTUAL PROPERTY

### 7.1 Improvements.

- (a) Licensee hereby grants to APL a non-exclusive, fully paid up, perpetual, irrevocable, and worldwide license under Licensee-owned Improvements for internal research and development use for its non-profit purposes, including educational, clinical, public service, and government purposes.
- (b) APL hereby grants to Licensee a non-exclusive, fully paid up, perpetual, irrevocable, and worldwide license, within the Field of Use and Territory, for any APL-owned Improvements created by one or more APL employees where said Improvements were fully funded by License under a separate research and development agreement, wherein this section 7.1(b) is subject to the terms and conditions of said separate research and development agreement.
- (c) APL grants to Licensee an exclusive option to negotiate a license, within the Field of Use and Territory and subject to any contractual or statutory restrictions, for any APL-owned Improvements created by one or more APL employees and not funded by Licensee. Licensee may exercise said option within ninety (90) days of Licensee's notice of said Improvement by informing APL in writing. Upon exercise of said option, and for a reasonable period not to exceed sixty (60) calendar days, APL and Licensee agree to negotiate in good faith to establish the terms of a new license agreement or an amendment to this License.
- (d) Upon request by APL or Licensee, the other party shall provide a report of available Improvements within the field of use to the requesting party within sixty (60) days. Upon request, Improvements subject to Section 7.1(a) or Section 7.1(b), shall be provided within ninety (90) days, subject to the terms of this agreement.

20

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

- Patent Costs. The Parties shall each pay for X percent (X%) of the costs of patent preparation, filing, prosecution, maintenance, and management, including all interferences, reissues, re-examinations, oppositions, or requests for patent term extensions, including reasonable attorneys' fees (collectively, "Patent Costs"), for each APL Patent Right. Licensee shall reimburse APL for X percent (X%) of all past Patent Costs for each APL Patent Right within thirty (30) days of receipt of an invoice from APL, which will indicate the total number of licensees for each APL Patent Right. For each APL Patent Right, Licensee agrees to pay to APL X percent (X%) of all future Patent Costs incurred after the Effective Date and throughout the Term hereof. For these purposes, X is 1 divided by the total number of licensees (including APL) of the APL Patent Rights times 100. For example, if there are 4 licensees, each licensee is responsible for ¼ or 25% of the Patent Costs. Licensee may terminate its obligation with respect to future Patent Costs for a particular APL Patent Right in any particular country upon three (3) months advance written notice to APL. Upon APL's receipt of such notice, Licensee's rights under any license to such APL Patent Rights shall terminate immediately. APL may elect to maintain such APL Patent Rights at its sole discretion and expense and shall be free to license any such rights to Third Parties without further obligation to Licensee with respect to such terminated APL Patent Rights.
- Patent Prosecution and Maintenance. APL or its designee shall have sole control over the filing, prosecution, maintenance, and management of all issued patents and pending and future patent applications encompassing the APL Patent Rights. During the Term of this Agreement, APL shall keep Licensee reasonably informed, at Licensee's expense, of substantive official actions and written correspondence with any patent office regarding APL Patent Rights. APL will provide Licensee with draft copies of any nonprovisional patent applications claiming inventions(s) included in the materials listed in Appendices A, B, or C, at least seven (7) days in advance of filing. Licensee shall provide any feedback to APL within five (5) days. If no feedback is received, or if filing deadlines require, APL will proceed with the filing in order to meet such deadlines. APL will be under no obligation to incorporate feedback provided by Licensee into the patent applications prior to filing.

## 7.4 Third Party Infringement and Invalidity.

- (a) <u>Notification</u>. Each Party will notify the other promptly in writing when any actual, alleged or threatened infringement of APL IP by another is discovered or reasonably suspected.
- (b) <u>Licensee's First Right to Enforce</u>. Licensee shall have the first right, at its own expense, to enforce the APL IP licensed under <u>Section 2.1</u> against any infringement or alleged infringement thereof in the Field of Use. Licensee shall not initiate an infringement action without the prior written consent of APL, which consent shall not be unreasonably withheld or delayed, and without a good faith belief in the validity of the asserted claims of infringement after reasonable investigation. Licensee shall consult with and keep APL informed of the status of any action. Licensee may, at its own expense, control and defend such action in a manner consistent with the terms of the Agreement.
- (c) No Final Disposition Without APL Consent. No settlement, consent judgment or other voluntary final disposition of an infringement suit may be concluded without the prior written consent of APL, which consent shall not be unreasonably withheld or delayed. APL shall reasonably cooperate in any such litigation at Licensee's sole expense.

- (d) APL's Secondary Right to Enforce. Licensee understands and agrees that APL has no obligation to bring suit against Third Parties for infringement of APL IP. However, if Licensee does not initiate an infringement action with respect to the APL IP licensed under Section 2.1 within ninety (90) days after notification of the alleged infringement, then APL may, at its sole option and expense, take whatever steps APL deems necessary (consistent with the terms hereof) to enforce any APL IP, to control, settle, and defend any patent infringement suit APL may bring in any court of competent jurisdiction, and to recover for APL's own account any resulting damages, awards, or settlements. Upon initiation of any action to enforce the APL IP by APL, Licensee shall thereafter have no right to enter into a sublicense or otherwise reach an agreement with the alleged infringer that would have the effect of settling, terminating, or foreclosing APL's action.
- (e) Patent Invalidity Suit. Licensee shall defend at Licensee's expense any declaratory judgment or other action brought by a Third Party naming Licensee or APL, or their respective Affiliates, as a defendant and alleging invalidity of any APL IP licensed under Section 2.1; provided, however, Licensee shall not defend such action to the extent that such action resulted from the gross negligence or willful misconduct of such APL Indemnitee or material breach of this Agreement by APL; and , and provided further that APL notifies Licensee promptly of any such lawsuit, claim, demand or other action. APL in its discretion may elect to solely defend any such action at its own expense, in which case Licensee shall cooperate fully with APL in connection therewith.
- (f) Recovery. Licensee shall pay to APL a share of forty percent (40%) of any infringement recovery by Licensee in connection with each suit or settlement, less reasonable attorneys' fees and out-of-pocket expenses paid to Third Parties, which shall be equally apportioned between Licensee and APL.

### 8. INDEMNIFICATION, ASSUMPTION OF LIABILITY, LIMITATION OF LIABILITY, DISCLAIMERS, AND INSURANCE

Indemnification. Licensee will defend, with counsel reasonably acceptable to APL, indemnify, and hold harmless APL and its Affiliates, and its and their trustees, officers, faculty, employees, and students (the "APL Indemnitees") against any and all losses, expenses, claims, actions, lawsuits, and judgments thereon (including attorney's fees through the appellate levels) (collectively "Liabilities") which may be brought against APL Indemnitees by Third Parties as a result of or arising out of: (a) any negligent act or omission of Licensee, its Sublicensees or Affiliates, or its or their agents or employees; (b) any breach of this Agreement; or (c) the manufacture, use, production, sale, offer for sale, lease, importation, consumption, or advertisement by Licensee, its Sublicensees or Affiliates, or its or their agents or employees of any Licensed Products, Licensed Services, or APL IP licensed under Section 2.1; provided, however, Licensee shall not defend, indemnify, or hold harmless any APL Indemnitee from any Liabilities to the extent that such Liabilities are finally determined to have resulted from the gross negligence or willful misconduct of such APL Indemnitee. APL and Licensee shall promptly notify the other Party of any lawsuit, claim, demand, or other action related to the APL IP. Licensee's obligation to indemnify APL Indemnitees shall survive the expiration or termination of this Agreement, and shall continue after any assignment of this Agreement by Licensee under Section 12.2.

22

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

8.2 **Assumption of Liability.** Licensee hereby assumes full liability for any and all lawsuits, claims, demands, judgments, costs, fees (including attorney's fees), expenses, injuries, or losses arising from or relating to the Licensed Products, Licensed Services, or any APL IP licensed under <u>Section 2.1</u> provided, <u>however</u>, Licensee shall not be responsible for any Liabilities to the extent that such Liabilities are finally determined to have resulted from the gross negligence or willful misconduct of APL.

### 8.3 Limitation of Liability.

- (a) APL and its Affiliates shall have no liability to Licensee for any loss or damages Licensee may incur as a result of the invalidity of any of the APL Patent Rights.
- (b) APL and its Affiliates shall have no responsibility with respect to Licensee's own trademarks and trade name, and Licensee in respect to the use thereof will defend, indemnify, and hold harmless APL and its Affiliates against any and all Third Party claims.
- (c) NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT, NEITHER PARTY NOR ITS AFFILIATES SHALL BE LIABLE FOR ANY SPECIAL, LOST PROFIT, EXPECTATION, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, EXEMPLARY, OR OTHER INDIRECT DAMAGES IN CONNECTION WITH ANY CLAIM ARISING OUT OF OR RELATED TO THIS AGREEMENT, WHETHER GROUNDED IN TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, CONTRACT, OR OTHERWISE. EXCEPT WITH RESPECT TO EITHER PARTY'S CONFIDENTIALITY OBLIGATIONS, APL'S TOTAL LIABILITY FOR ANY AND ALL CLAIMS OR ACTIONS ARISING FROM OR RELATED TO THIS AGREEMENT WILL IN NO EVENT EXCEED THE TOTAL AMOUNT PAID BY LICENSEE TO APL.
- 8.4 **DISCLAIMER OF WARRANTIES.** APL AND ITS AFFILIATES MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND HEREBY DISCLAIM ALL SUCH WARRANTIES, AS TO ANY MATTER WHATSOEVER, INCLUDING THE CONDITION OF ANY APL IP, LICENSED PRODUCT OR LICENSED SERVICE, WHETHER TANGIBLE OR INTANGIBLE, LICENSED UNDER THIS AGREEMENT; OR OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, OF SUCH APL IP, LICENSED PRODUCT OR LICENSED SERVICE. APL PROVIDES LICENSEE THE RIGHTS GRANTED UNDER THIS AGREEMENT AS IS AND WITH ALL FAULTS, AND MAKES NO WARRANTY OR REPRESENTATION (A) REGARDING THE VALIDITY OR SCOPE OF THE APL IP; (B) THAT EXPLOITATION OF THE APL IP WILL NOT INFRINGE ANY PATENTS OR OTHER INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY; OR (C) THAT ANY THIRD PARTY IS NOT CURRENTLY INFRINGING OR WILL NOT INFRINGE THE PATENT RIGHTS.

23

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

#### 8.5 Insurance.

(a) Prior to First Commercial Sale of any Licensed Product or Licensed Service, Licensee shall obtain and maintain comprehensive general liability insurance, including insurance for product liability, professional liability, worker's compensation, and umbrella coverage with a reputable and financially secure insurance carrier, to cover any liability arising from or relating to the Licensed Products or Licensed Services. Such insurance policy shall also name the APL Indemnitees as additional insureds. Licensee shall furnish a Certificate of Insurance or other evidence of compliance with this insurance requirement upon APL's request. All insurance obtained by Licensee shall be primary coverage; any other insurance that may be obtained by APL or APL Indemnitees will be excess and noncontributory.

(b) Licensee shall not cancel such insurance without thirty (30) days prior notice to APL. Unless replaced by comparable insurance, such cancellation shall be cause for termination of this Agreement.

### 9. MARKING AND STANDARDS

- 9.1 Licensee agrees to mark and have its Sublicensees mark any and all Licensed Products (or their containers or labels) that are made, sold, or otherwise disposed of by Licensee or Sublicensees under the License, in accordance with any applicable marking statute; provided, that Licensee does not need to mark Licensed Products (or their containers or labels) if such Licensed Products are used solely for Licensee's own internal research purposes and/or used for validation studies on Licensee's behalf.
- 9.2 Licensee shall act in good faith to maintain satisfactory standards in respect to the nature of the Licensed Product or Licensed Service manufactured and/or sold by Licensee. Licensee shall act in good faith to ensure that all Licensed Products or Licensed Services manufactured and/or sold by it shall be of a quality that is appropriate to products or processes of the type here involved. Licensee agrees that similar provisions shall be included in all Sublicenses.

24

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

### 10. CONFIDENTIALITY

- 10.1 Confidential Information. From time to time during the Term, a Party (the "<u>Disclosing Party</u>") may disclose or make available to the other Party (the "<u>Receiving Party</u>") information about its business affairs, confidential intellectual property, trade secrets, Know-How, copyrights, trademarks, designs, data, algorithms, code, patent applications and oral communications relating to the Disclosing Party's IP, Third Party confidential information, and other sensitive or proprietary information, with such information indicated and/or marked by the Disclosing Party to be "Confidential" or "Proprietary" (collectively, "<u>Confidential Information</u>"). Confidential Information shall not include information that, at the time of disclosure and as established by documentary evidence:
  - (a) is or becomes generally available to and known by the public other than as a result of, directly or indirectly, any breach of this <u>Section 10</u> by the Receiving Party or any of its employees, agents or representatives;
  - (b) is or becomes available to the Receiving Party on a non-confidential basis from a Third Party source, provided, that such Third Party is not and was not prohibited from disclosing such Confidential Information;
  - (c) was known by or in the possession of the Receiving Party or its employees, agents or representatives prior to being disclosed by or on behalf of the Disclosing Party; or
  - (d) was or is independently developed by the Receiving Party without reference to or use of, in whole or in part, any of the Disclosing Party's Confidential Information.
- 10.2 **Receiving Party Obligations**. The Receiving Party shall:
  - (a) protect and safeguard the confidentiality of the Disclosing Party's Confidential Information with at least the same degree of care as the Receiving Party would protect its own Confidential Information, but in no event with less than a commercially reasonable degree of care;
  - (b) not use the Disclosing Party's Confidential Information, or permit it to be accessed or used, for any purpose other than to exercise its rights or perform its obligations under this Agreement;
  - (c) not disclose any such Confidential Information to any Person, except to the Receiving Party's its Affiliates' employees, agents or representatives who need to know the Confidential Information to assist the Receiving Party (or its Affiliates), or act on its behalf, to exercise its rights or perform its obligations under this Agreement and who are bound by written obligations of confidentiality and restrictions on use that cover such Confidential Information and are at least as stringent as those set forth in this Agreement; and
  - (d) immediately notify the Disclosing Party upon discovery of an unauthorized disclosure or use of such Confidential Information, cooperate with the Disclosing Party to retrieve such Confidential Information, and take reasonable steps to prevent any further unauthorized disclosure or use of such Confidential Information.

25

- 10.3 Court or Government Order. Notwithstanding anything in this Agreement to the contrary, the Receiving Party may make disclosures of Confidential Information of the Disclosing Party to the extent required to be disclosed pursuant to applicable federal, state or local Law or a valid order issued by a court or governmental agency of competent jurisdiction; provided, that (a) the Receiving Party gives the Disclosing Party prompt written notice of such requirement prior to disclosure, (b) the Receiving Party reasonably cooperates with the Disclosing Party's efforts to limit the scope of the information to be provided or to obtain an order protecting the information from public disclosure, and (c) the Receiving Party discloses only that portion of the Confidential Information that is legally required to be disclosed.
- 10.4 **Return Of Confidential Information**. Upon expiration or termination of this Agreement, the Receiving Party and its employees, agents and representatives shall promptly return to the Disclosing Party all copies, whether in written, electronic or other form or media, of the Disclosing Party's Confidential Information, or destroy all such copies and, at the Disclosing Party's written request, certify in writing to the Disclosing Party that such Confidential Information has been destroyed.
- 10.5 APL Right to Publish. APL may publish manuscripts, abstracts or the like describing any APL IP, provided that such publications do not contain any of Licensee's Confidential Information, unless APL obtains the prior written approval of Licensee to include Licensee's Confidential Information in any such publications. APL shall provide thirty (30) days written notice to Licensee for Licensee's review and comments of each proposed publication that contains Licensee's Confidential Information.
- 10.6 **Remedies.** The Receiving Party shall be responsible for any breach of this <u>Section 10</u> caused by any of its employees, agents, or representatives. The Disclosing Party may seek equitable relief (including injunctive relief) against the Receiving Party to prevent the breach or threatened breach of this Section 10 and to secure its enforcement, in addition to all other remedies available at Law.

10.7 **Survival.** The provisions of this Section 10 shall survive the expiration or termination of this Agreement for ten (10) years, except that the provisions of this Section 10 shall be perpetual with respect to trade secrets.

### 11. TERM; TERMINATION

11.1 **Term**. This Agreement shall commence as of the Effective Date and remain in force until the expiration of all applicable Royalty Terms unless terminated earlier as provided herein (the "Term").

#### 11.2 Termination

(a) For Convenience. Licensee shall have the right to terminate this Agreement upon sixty (60) days prior written notice to APL; provided, that Licensee ceases (i) using the Licensee, (ii) developing, making, using, selling or otherwise exploiting Licensed Products or Licensed Services, and (iii) certifies that it has returned or destroyed all proprietary and confidential Know-How in its (and its Affiliates' and Sublicensees') possession.

26

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

- (b) For Material Breach. APL and Licensee shall each have the right to terminate this Agreement if the other Party commits a material breach of an obligation under this Agreement and fails to cure any such breach within sixty (60) days of receipt of written notice from the non-breaching Party. If the material breach is not curable, or if not cured within such period, the non-breaching Party may terminate this Agreement effective immediately. A material breach shall include but not be limited to the following: (i) failure to deliver to APL any payment at the time such payment is due under this Agreement, (ii) failure to meet or achieve a Diligence Milestone by the applicable Achievement Date (and any permitted extension), (iii) failure to possess and maintain required insurance coverage, and (iv) delivery of a false report to APL. Such termination shall be effective upon further written notice to the breaching Party after failure by the breaching Party to cure. If Licensee commits a material breach of an obligation under this Agreement and fails to cure any such breach within sixty (60) days of receipt of written notice from APL, APL, instead of terminating this Agreement, may, in its sole discretion, elect to convert the License into a non-exclusive license.
- (c) For Insolvency. The License and rights granted in this Agreement have been granted on the basis of the special capability of Licensee to perform research and development work leading to the manufacture and commercialization of the Licensed Product(s) or Licensed Service(s). Accordingly, Licensee covenants and agrees that in the event any proceedings under Title 11, United States Code or any amendment thereto, be commenced by or against Licensee, and, if against Licensee, said proceedings shall not be dismissed with prejudice before either an adjudication in bankruptcy or the confirmation of a composition, arrangement, or plan of reorganization, or in the event Licensee shall be adjudged insolvent or make an assignment for the benefit of its creditors, or if a writ of attachment or execution be levied upon the License hereby created and not be released or satisfied within ten (10) days thereafter, or if a receiver be appointed in any proceeding or action to which Licensee is a party with authority to exercise any of the rights or privileges granted hereunder and such receiver be so discharged within a period of forty-five (45) days after his appointment, any such event shall be deemed to constitute a breach of this Agreement by Licensee and, APL, at the election of APL, but not otherwise, ipso facto, and without notice or other action by APL, may terminate this Agreement and all rights of Licensee hereunder and all rights of any and all persons claiming under Licensee.
- (d) For Patent Challenge. APL may terminate this Agreement immediately if Licensee or any of its Sublicensees or Affiliates directly or indirectly initiate or prosecute any lawsuit or any other civil or administrative proceeding making any claim or counterclaim, of any kind in any court, tribunal, agency, or governmental entity anywhere in the world, challenging the validity or enforceability of the APL Patent Rights. Licensee or any of its Sublicensees or Affiliates shall provide advance written notice to APL before Licensee or any of its Sublicensees or Affiliates initiates such challenge, and shall pay royalties to APL at the rate of two (2) times the rates provided for in Section 4.3(a) during the pendency of the challenge. Should the outcome of such challenge determine that any claim of APL Patent Rights is both valid and infringed, Licensee or any of its Sublicensees or Affiliates shall thereafter pay royalties to APL at the rate of three (3) times the rates provided for in Section 4.3(a). Licensee or any of its Sublicensees or Affiliates shall pay APL directly all royalties due under this Section 11.2(d) instead of paying such royalties into an escrow or other similar account. In the event that the challenge brought by Licensee or any of its Sublicensees or Affiliates will not have the right to recover or recoup any royalties paid before or during the pendency of the challenge. Whether the challenge brought by the Licensee or any of its Sublicensees or Affiliates is successful, Licensee or any of its Sublicensees or Affiliates is and attorney fees incurred by APL as a result of the challenge.

27

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

#### 11.3 Effects of Termination.

- (a) Upon termination of this Agreement for any reason, Licensee shall remain responsible to pay to APL any amounts accrued and due to APL under this Agreement as of the effective date of such termination. Any termination of this Agreement shall be without prejudice to APL's right to recover all amounts accruing to APL prior to the effective date of termination. Except as otherwise provided, should this Agreement be terminated for any reason, Licensee shall have no rights, express or implied, under any intellectual property rights which are the subject matter of this Agreement, nor have the right to recover any Royalties, fees, payments, or costs paid to APL hereunder.
- (b) Upon termination, except under Section 11.2(a), Licensee shall have the right to dispose of Licensed Products then in its possession and to complete existing contracts for such Licensed Products, so long as contracts are completed within six (6) months from the date of termination, and subject to the payment of Royalties to APL as provided in Section 4 hereof. Licensee agrees to destroy progeny and derivatives thereof remaining in Licensee's possession after six (6) months from the date of termination. Failure to terminate on any basis shall not prejudice or impact APL's rights and ability to subsequently terminate for the same or a related basis.
- (c) Termination of this Agreement shall not preclude either Party from pursuing all rights and remedies it may have hereunder or at Law or in equity with respect to any breach of this Agreement nor prejudice either Party's right to obtain performance of any obligation. Licensee agrees that breach of terms of this Agreement would immediately and irreparably damage APL in a way not capable of being fully compensated by monetary damages and accordingly, APL is entitled to seek injunctive relief in addition to such other relief to which it may be entitled at Law or in equity.

11.4 **Survival**. All representations, warranties, covenants, and agreements made herein and which by their express terms or by implication are to be performed or continue to apply after the execution and/or termination hereof, or are prospective in nature, shall survive such execution and/or termination, as the case may be. In addition and for avoidance of doubt, the following sections shall survive any termination or expiration: Sections 1 (Definitions), 4.3(b) (Royalty Upon Termination or Expiration), 4.5 (Equity), 4.7 (Payment Terms), 5.3 (Books and Records), 8 (Indemnification, Assumption of Liability, Limitation of Liability, Disclaimers, and Insurance), 10 (Confidentiality), 11 (Term; Termination), and 12 (Miscellaneous Provisions). In addition, if Licensee is required to continue to pay Royalties on Net Sales after termination or expiration, then all of the terms and conditions of this Agreement shall remain in full force and effect other than Sections 2 (License Grant), 3 (Diligence), 4.1 (Annual License Fees), 4.2 (Milestone Payments), 5.1 (Diligence Reports), and 7 (Intellectual Property).

2.8

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

### 12. MISCELLANEOUS PROVISIONS

12.1 **Restrictive Covenant.** Certain employees of APL possess knowledge, expertise, or skills that are related to the APL IP that is licensed hereunder to Licensee ("Key Employees"). During the Term and for a period of two (2) years thereafter, neither Licensee nor any of its Affiliates or its or their representatives, will solicit, recruit, or hire any Key Employee of APL to work for another party other than APL, or engage in any activity that would cause any Key Employee of APL to violate any agreement with APL.

### 12.2 Assignment.

- (a) Licensee may assign or delegate its rights or obligations under this Agreement only under the following circumstances:
  - (i) by providing APL with written notice of the proposed assignment, including the proposed assignee's contact information, at least thirty (30) days prior to the date of assignment, and obtaining APL's express written consent to the proposed assignment, which consent shall not be unreasonably withheld; or
  - (ii) as part of a sale or change of control, regardless of whether such a sale or change of control occurs by operation of Law or through an asset sale, stock sale, merger or other combination, or any other transfer of Licensee's entire business.
- (b) Prior to any assignment (including an assignment by operation of Law), (i) the proposed assignee must agree in writing to APL to be bound by this Agreement, and (ii) Licensee must pay APL an assignment fee in the amount of twenty thousand dollars (\$20,000) due within thirty (30) days of assignment agreement execution.
- (c) Any attempt by Licensee to assign this Agreement that fails to comply with Section 12.2(a) and 12.2(b) is null and void.
- (d) This Agreement shall extend to and be binding upon the successors and legal representatives and permitted assigns of APL and Licensee.

29

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

### 12.3 Use of Name.

- (a) Except as specifically provided in this <u>Section 12.3</u>, nothing contained in this Agreement confers any right to either party hereto to use in advertising, publicity, or other promotional activities any name, trade name, trademark, or other designation of the other party hereto (including any contraction, abbreviation, or simulation of any of the foregoing).
- (b) The name of The Johns Hopkins University Applied Physics Laboratory LLC, The Johns Hopkins University or any of its constituent parts, or any contraction thereof (collectively, the "JHU Names"), shall not be used for any purpose in any advertising, promotional literature, Web sites, electronic media applications, sales literature, fundraising documents, press releases, or other print or electronic communications, without prior written consent from an authorized representative of APL, or the respective institution, as applicable. Any request to make use of any names under the JHU Names shall be made at least fifteen (15) business days' in advance of any proposed use and shall be made by written request.
- (c) APL may disclose to all APL inventors or creators of APL IP licensed under Section 2.1 the terms and conditions of this Agreement upon their request.
- (d) APL may acknowledge to Third Parties the existence of this Agreement and the extent of the Licenses granted to Licensee under Section 2.1, but APL shall not disclose the financial terms of this Agreement to Third Parties, except where APL is required by law to do so. Licensee hereby grants APL permission to include Licensee's name and a link to Licensee's website in APL's annual reports and on APL's website to showcase technology transfer-related stories.
- (e) Licensee may acknowledge to Third Parties the existence of this Agreement and the extent of the Licenses granted to Licensee under <u>Section 2.1</u>, but Licensee shall not disclose the financial terms of this Agreement to Third Parties, except where APL is required by law to do so or to potential investors that have executed confidentiality agreements with terms at least as stringent as those in <u>Section 10</u>.
- (f) APL shall have the right to list Licensee and display the logotype or symbol of Licensee on APL's website and on APL publications.
- 12.4 **Independent Parties.** Nothing in this Agreement shall be construed to create any agency, employment, partnership, joint venture, or similar relationship between the Parties other than that of a licensor/licensee. Neither Party shall have any right or authority whatsoever to incur any liability or obligation (express or implied) or otherwise act in any manner in the name or on the behalf of the other, or to make any promise, warranty, or representation binding on the other.
- 12.5 **Notice of Claim.** Each Party shall give the other Party or its representative immediate notice of any suit or action filed, or prompt notice of any claim made, against them arising out of the performance of this Agreement.

12.6 **Notices.** Any notice, request, approval, or consent required or permitted to be given under this Agreement shall be in writing and directed to a Party at its address or e- mail address shown below or such other address or e-mail address as such Party shall have last given by notice to the other Party. A notice will be deemed received: if delivered personally, on the date of delivery; if mailed, five (5) days after deposit in the United States mail; if sent via overnight courier, one (1) business day after deposit with the courier service; or if sent via e-mail, upon confirmation of receipt by the intended recipient.

For APL:

with a copy (which shall not constitute notice) to:

The Johns Hopkins University Applied Physics Laboratory LLC Attn: Office of Technology Transfer 11100 Johns Hopkins Road Laurel, MD 20723-6099 E-mail:

Royalty and other payments to APL shall be addressed as follows:

The Johns Hopkins University Applied Physics Laboratory Attention: Accounting & Finance Group Development Fund Accountant MS: MP1-S186 11100 Johns Hopkins Road Laurel, MD 20723-6099

For Licensee:

with a copy (which shall not constitute notice) to:

Bullfrog AI, Inc. P.O. Box 336 Boyds, Maryland 20841 E-Mail: vin@bullfrogai.com

- 12.7 **No Waivers; Severability.** No waiver of any breach of this Agreement shall constitute a waiver of any other breach of the same or other provision of this Agreement, and no waiver shall be effective unless made in writing and signed by the Party waiving. Any provision hereof prohibited by or unenforceable under any applicable Law of any jurisdiction shall as to such jurisdiction be deemed ineffective and deleted without affecting any other provision of this Agreement, which shall be interpreted so as to most fully achieve the intentions of the Parties.
- 12.8 **Entire Agreement.** Except for the 2018 License, this Agreement supersedes all previous agreements and understandings relating to the subject matter hereof, whether oral or in a writing, and constitutes the entire agreement of the Parties hereto and shall not be amended or altered in any respect except in a writing executed by the Parties. In the event of conflicting terms between this License and the 2018 License, the terms of this License will control.

31

- 12.9 **No Agency.** Licensee agrees that no representation or statement by any APL employee shall be deemed to be a statement or representation by APL, and that Licensee was not induced to enter this Agreement based upon any statement or representation of APL, or any employee of APL. APL is not responsible for any publications, experiments, or results reported by any APL employee prior to, or after, the Effective Date.
- 12.10 **Binding Agreement.** Exchange of this Agreement in draft or final form between the Parties shall not be considered a binding offer, and this Agreement shall not be deemed final or binding on either Party until the final Agreement has been signed by both Parties.
- 12.11 **Delays or Omissions.** Except as expressly provided herein, no delay or omission to exercise any right, power, or remedy accruing to any Party hereto, shall impair any such right, power, or remedy to such Party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or in any similar breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent, or approval of any kind or character on the part of any Party of any breach or default under this Agreement, or any waiver on the part of any Party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies either under this Agreement or by Law or otherwise afforded to any Party, shall be cumulative and not alternative.
- 12.12 **No Third Party Beneficiaries.** Nothing in this Agreement shall be construed as giving any Person, other than the Parties hereto and their successors and permitted assigns, any right, remedy or claim under or in respect of this Agreement or any provision hereof.
- 12.13 **Headings.** Article headings are for convenient reference and not a part of this Agreement. All Exhibits are incorporated herein by this reference.
- 12.14 Interpretation. All references to particular Exhibits, Articles, or Sections shall mean the Exhibits to, and Sections and Articles of, this Agreement, unless otherwise specified. Any reference herein to any defined term shall include both the singular and the plural, whether or not both forms are included in the reference. The words "including," "include," and "includes" and the phrases "such as," and "for example," and the equivalents of such words and phrases shall be deemed to be followed by "without limitation." Unless otherwise specified, any action requiring the consent of a Party shall be read to mean that such Party is expected to act reasonably in considering whether to provide consent and that consent, if provided, shall be provided without unreasonable delay. As used herein, any calculation of an equity interest on a "fully diluted basis" shall be performed assuming the conversion of all outstanding shares of preferred stock into common stock and the exercise, conversion and/or exchange of all outstanding stock options and warrants to acquire shares of capital stock or any other securities exercisable, convertible and/or exchangeable into shares of capital stock. Except as otherwise expressly provided herein, all terms of an accounting or financial nature shall be construed in accordance with GAAP, as in effect from time to time. Unless the context otherwise requires, countries shall include territories. References to any specific Law or article, section or other division thereof shall be deemed to include the applicable then-current amendments or any replacement Law or article, section or other division thereof.

12.15 Governing Law. The laws of the State of Maryland, without giving effect to its choice of law provisions, shall govern all matters arising out of or relating to this Agreement, including its interpretation, construction, performance, and enforcement. Any legal suit, action, or proceeding arising out of or relating to this Agreement shall be brought in the Circuit Court for Baltimore City or in the United States District Court for the District of Maryland. Each of the Parties waives, to the fullest extent permitted by law, any objection which it may now or later have to the exclusive jurisdiction of or the laying of venue in the Circuit Court for Baltimore City, Maryland or the United States District Court for the District of Maryland, including any objections based upon inconvenient forum. The Parties agree that a final judgment in any such suit, action, or proceeding may be enforced in other jurisdictions as provided by law. As specifically provided by Md. COMMERCIAL LAW Code Ann. § 22-104, APL and Licensee agree that this Agreement shall not be governed by the Maryland Uniform Computer Information Transactions Act as adopted in Maryland under Title 22 of the Commercial Law Article of the Maryland Annotated Code, as may be amended from time to time.

[Signature Page Follows]

32

APL PROPRIETARY/CONFIDENTIAL BullfrogAI Prometheus License, July 2022

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their respective officers thereunto duly authorized to be effective as of the Effective Date.

Bullfrog AI, Inc	The Johns Hopkins University Applied Physics Laboratory LLC
Docusigned by: Vininder Single 9F617F725108429	DocuSigned by:  Jim Broskow  51AEFB3389AD481
Signature	Signature
Vininder Singh	Jim Broskow
Printed Name	Printed Name
CEO	Tech Transfer AGS
Printed Title	Printed Title
	33

### APPENDIX A

#### **APL Patent Rights**

APL ID#	US Patent App. No.	Filing/Issue Date	Title
3591-SPL	U.S. Patent No. 10,146,801	12/04/2018	"Apparatus and Method for Distributed Graph Processing"
4097-SPL	U.S. Patent No. 10,936,965	03/02/2021	"Method and Apparatus for Analysis and Classification of High Dimensional Data Sets"
4601-SPL	U.S. Patent No. 10,839,256	11/17/2020	"Generalized Model" Low Entropy Mixture

## APPENDIX B

# **APL Copyrights**

APL ID#	IP Protection	Title
6191-SPL	Copyright	Software and documentation for the PROMETHEUS software package for correlation, probabilistic, and network analysis
5863-SPL	Copyright	Software and documentation for the SEAGULL software package for time-series analysis
5849-SPL	Copyright	Software and documentation for Clique Tree Mixture Model for probabilistic analysis within the PROMETHEUS analytic software package
6644-SPL	Copyright	Software and documentation for the Minimum Subspace for Maximum Information algorithm within the PROMETHEUS analytic software package
6645-SPL	Copyright	Software and documentation for the Unsupervised Determination of Maximum Information Spaces algorithm within the PROMETHEUS analytic software package
3591-SPL	Copyright	Software and documentation for "Socrates: Scalable Graph Analytics"
3592-SPL	Copyright	Software and documentation for "Activity Pattern Exploration – APEX"
4097-SPL	Copyright	Software and documentation for "Clique Tree"; as implemented within Socrates
4601-SPL	Copyright	Software and documentation for "Generalized Low Entropy Mixture Model (Galileo)"
4463-SPL	Copyright	Software and documentation for "Scalable Correlation Engine"
5850-SPL	Copyright	Software and documentation for "Random Subspace Mixture Model"

### APPENDIX C

APL ID#	IP Protection	The
6191-SPL	Confidential Information	Know-how associated with the PROMETHEUS software package for correlation, probabilistic, and network analysis
5863-SPL	Confidential Information	Know-how associated with the SEAGULL software package for time-series analysis
5849-SPL	Confidential Information	Know-how associated with the Clique Tree Mixture Model for probabilistic analysis within the PROMETHEUS analytic software package
6644-SPL	Confidential Information	Know-how associated with the Minimum Subspace for Maximum Information algorithm within the PROMETHEUS analytic software package
6645-SPL	Confidential Information	Know-how associated with the Unsupervised Determination of Maximum Information Spaces algorithm within the PROMETHEUS analytic software package
3591-SPL	Confidential Information	Know-how associated with "Socrates: Scalable Graph Analytics"
3592-SPL	Confidential Information	Know-how associated with "Activity Pattern Exploration – APEX"
4097-SPL	Confidential Information	Know-how associated with "Clique Tree"; as implemented within Socrates
4601-SPL	Confidential Information	Know-how associated with "Generalized Low Entropy Mixture Model (Galileo)"
4463-SPL	Confidential Information	Know-how associated with "Scalable Correlation Engine"
5850-SPL	Confidential Information	Know-how associated with "Random Subspace Mixture Model"

### APPENDIX D

### **Stock Issuance Agreement**

This Stock Issuance Agreement (this "Agreement") is entered into and made effective as of July 8, 2022 (the 'Effective Date") between The Johns Hopkins University Applied Physics Laboratory LLC, a Maryland limited liability company, having business offices at 11100 Johns Hopkins Road, Laurel, Maryland 20723 ("APL") and BullfrogAI Holdings, Inc., a Nevada corporation, having business offices at 325 Ellington Blvd. #317, Gaithersburg, MD 20878 (the "Company"). For purposes of this Agreement, each of APL and Company may be individually referred to as a "Party," and collectively referred to as the "Parties."

WHEREAS, concurrent with the execution of this Agreement, the Parties are entering into a License Agreement dated as of the Effective Date (the "License Agreement"), pursuant to which APL is granting the Company a license to certain intellectual property owned or controlled by APL; and

WHEREAS, in partial consideration for the execution and delivery by APL of the License Agreement and the grant of the license therein by APL to the Company thereunder, the Parties hereto agreed to enter into this Agreement in order to provide for, among other things, the issuance by the Company to APL of shares of common stock of the Company in accordance with the terms and subject to the conditions of this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises, covenants and agreements contained herein and for other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, the Parties agree as follows:

### 1. ACQUISITION OF SHARES.

- (a) **Equity Issuance.** Pursuant to Section 4.5 of the License Agreement, the Company hereby issues to APL 279,159 shares (the "Shares") of the common stock, par value \$0.00001 per share, of the Company (the "Common Stock").
- (b) **Consideration.** APL agrees to grant the Company a license to certain intellectual property pursuant to the License Agreement in exchange for, among other consideration, the Shares. The Company and APL agree that the Fair Market Value of such consideration is at least \$270,000, or \$0.96 per Share, based on a valuation of at least \$27,000,000 for the Company.
- (c) Closing. The issuance of the Shares will occur contemporaneously with the execution and delivery of this Agreement at the closing (the "Closing") held at a time and place, or via the exchange of documents and signatures, as mutually agreed upon by the Parties. At the Closing, each Party will deliver an executed copy of this Agreement and such other documents as the Parties may mutually agree.
  - (d) **Defined Terms.** Capitalized terms not defined above are defined in Section 7(a) of this Agreement.

### 2. RIGHT OF FIRST REFUSAL.

- (a) **Right of First Refusal.** In the event that APL proposes to sell, pledge or otherwise transfer to a third party any Shares prior to the earlier of the IPO or one year from the date hereof the "Transfer Shares"), the Company shall have the right of first refusal to purchase all (and not less than all) of such Transfer Shares (the "Right of First Refusal"). If APL desires to transfer the Transfer Shares, APL shall promptly deliver to the Company a written notice describing fully the proposed transfer, including the number of Transfer Shares, the proposed transfer price, the name and address of the proposed Transferee and proof satisfactory to the Company that the proposed sale or transfer will not violate any applicable federal, state or foreign securities laws (the "Transfer Notice"). The Transfer Notice shall be signed both by APL and the proposed Transferee and must constitute a binding commitment of both parties to the transfer of the Transfer Shares. The Company shall have the right to purchase all, and not less than all, of the Transfer Shares on the terms of the proposal described in the Transfer Notice (subject, however, to any change in such terms permitted under Section 2(b) below) by delivery of a notice of exercise of the Right of First Refusal within thirty (30) days after the date when the Transfer Notice was received by the Company.
- (b) Transfer of Transfer Shares. If the Company fails to exercise its Right of First Refusal within thirty (30) days after receiving the Transfer Notice, APL may, not later than ninety (90) days after the Company received the Transfer Notice, conclude a transfer of the Transfer Shares subject to the Transfer Notice to the proposed Transferee on the terms and conditions described in the Transfer Notice; provided that any such sale is made in compliance with applicable federal, state and foreign securities laws and not in violation of any other contractual restrictions to which APL is bound. Any proposed transfer on terms and conditions different from those described in the Transfer Notice, as well as any subsequent proposed transfer by APL after the ninety (90) day period described above, shall again be subject to the Right of First Refusal and shall require compliance with the procedure described in Section 2(a) above. If the Company exercises its Right of First Refusal, the Parties shall consummate the sale of the Transfer Shares on the terms set forth in the Transfer Notice within sixty (60) days after the Company notifies APL of its intent to exercise the Right of First Refusal (or within such longer period as may have been specified in the Transfer Notice); provided, however, that in the event the Transfer Notice provided that payment for the Transfer Shares was to be made in a form other than cash or cash equivalents paid at the time of transfer, the Company shall have the option of paying for the Transfer Shares with cash or cash equivalents equal to the present value of the consideration described in the Transfer Notice.
  - (c) Permitted Transfers. This Section 2 shall not apply to a transfer to an Affiliate of APL.
- 3. APL REPRESENTATIONS; OTHER RESTRICTIONS ON TRANSFER.

- (a) APL Representations. In connection with the issuance and acquisition of Shares under this Agreement, APL hereby represents and warrants to the Company as follows:
  - (i) APL is acquiring and will hold the Shares for investment for its account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act.
  - (ii) APL understands that the Shares have not been registered under the Securities Act by reason of a specific exemption therefrom and that the Shares must be held indefinitely, unless they are subsequently registered under the Securities Act or APL obtains an opinion of counsel, in form and substance satisfactory to the Company and its counsel, that such registration is not required. APL further acknowledges and understands that the Company is under no obligation to register the Shares.
  - (iii) APL is aware of the adoption of Rule 144 by the Securities and Exchange Commission under the Securities Act, which permits limited public resales of securities acquired in a non-public offering, subject to the satisfaction of certain conditions, including (without limitation) the availability of certain current public information about the issuer, the resale occurring only after the holding period required by Rule 144 has been satisfied, the sale occurring through an unsolicited "broker's transaction," and the amount of securities being sold during any three-month period not exceeding specified limitations. APL acknowledges and understands that the conditions for resale set forth in Rule 144 have not been satisfied and that the Company has no plans to satisfy these conditions in the foreseeable future.
  - (iv) APL will not sell, transfer or otherwise dispose of the Shares in violation of the Securities Act, the Securities Exchange Act of 1934, or the rules promulgated thereunder, including Rule 144 under the Securities Act. APL agrees that it will not dispose of the Shares unless and until he or she has complied with all requirements of this Agreement applicable to the disposition of Shares and he or she has provided the Company with written assurances, in substance and form satisfactory to the Company, that (A) the proposed disposition does not require registration of the Shares under the Securities Act or all appropriate action necessary for compliance with the registration requirements of the Securities Act or with any exemption from registration available under the Securities Act (including Rule 144) has been taken and (B) the proposed disposition will not result in the contravention of any transfer restrictions applicable to the Shares under state securities law.
    - (v) APL is an "accredited investor" as defined in Rule 501(a) under the Securities Act.
- (b) Securities Law Restrictions. Regardless of whether the offering and sale of Shares under this Agreement have been registered under the Securities Act or have been registered or qualified under the securities laws of any State, the Company at its discretion may impose restrictions upon the sale, pledge or other transfer of the Shares (including the placement of appropriate legends on stock certificates or the imposition of stop-transfer instructions) if, in the judgment of the Company, such restrictions are necessary or desirable in order to achieve compliance with the Securities Act, the securities laws of any State or any other law.
- (c) Rights of the Company. The Company shall not be required to (i) transfer on its books any Shares that have been sold or transferred in contravention of this Agreement or (ii) treat as the owner of Shares, or otherwise to accord voting, dividend or liquidation rights to, any Transferee to whom Shares have been transferred in contravention of this Agreement.

### 4. COMPANY REPRESENTATIONS AND WARRANTIES.

The Company hereby represents, warrants, acknowledges and agrees as follows:

- (a) Organization and Corporate Power. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Maryland and has all requisite corporate power and authority to carry on its business as presently conducted.
- (b) Authorization. All corporate action required to be taken by the Company's Board of Directors and stockholders in order to authorize the Company to enter into this Agreement and the License Agreement, and to issue the Shares hereunder, has been taken. All action on the part of the officers of the Company necessary for the execution and delivery of the Transaction Agreements, the performance of all obligations of the Company under the Transaction Agreements, and the issuance and delivery of the Shares has been taken. The Transaction Agreements, when executed and delivered by the Company, shall constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors' rights generally, and (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies.

## $(c) \, \textbf{Capitalization.}$

- (i) The authorized capital of the Company consists, as of the date hereof and immediately prior to the issuance of the Shares, of (A) 100,000,000 shares of Common Stock, 27,915,863 shares of which are issued and outstanding, and (B) 10,000,000 shares of preferred stock, par value \$0.00001 per share ("Preferred Stock"), none of which are issued and outstanding. All of the outstanding shares of Common Stock have been duly authorized, are fully paid and nonassessable and were issued in compliance with all applicable federal and state securities laws.
- (ii) As of the date hereof and immediately following the issuance of the Shares, except for up to 15% of the Company's outstanding common stock which may be granted from time to time in accordance with the Company's to be adopted Equity Incentive Plan and the securities identified on Schedule 4(c)(ii) below, there are no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal or similar rights) or agreements, orally or in writing, to purchase or acquire from the Company any shares of Common Stock, or any securities convertible into or exchangeable for shares of Common Stock.

The table below reflects BullFrog AI Holdings, Inc. capital table including shares reserved for option, warrant exercises and convertible debt conversions. The last three items are estimates of the shares that would be issued for debt conversion based on the anticipated IPO.

BullFrog AI Holdings	
Capital Table @	5/31/2022

319,917 271,806

2022 34,448,617

- (d) Valid Issuance of Shares. The Shares, when issued, sold and delivered in accordance with the terms and for the consideration set forth in this Agreement, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under the Transaction Agreements, applicable state and federal securities laws and liens or encumbrances created by or imposed by APL. Assuming the accuracy of the representations of APL in Section 3 of this Agreement and subject to required federal and state securities filings, the Shares will be issued in compliance with all applicable federal and state securities laws.
- (e) Company Documents. The Company has furnished to APL true, correct and complete copies of (i) the Certificate of Incorporation and (ii) the Bylaws of the Company, which remain in full force and effect as of the date hereof.

#### 5. ASSIGNMENT.

Except as otherwise expressly provided to the contrary, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the Company and its successors and assigns and be binding upon APL and its legal representatives, heirs, legatees, distributees, assigns and transferees by operation of law, whether or not any such person has become a party to this Agreement or has agreed in writing to join herein and to be bound by the terms, conditions and restrictions hereof.

#### 6. LEGENDS.

All certificates evidencing Shares shall bear the following legends:

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL AS SET FORTH IN THE STOCK ISSUANCE AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER WITH RESPECT TO THESE SHARES, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THE COMPANY."

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED OR APPLICABLE STATE SECURITIES LAWS. THESE SHARES HAVE NOT BEEN ACQUIRED WITH A VIEW TO DISTRIBUTION OR RESALE, AND MAY NOT BE SOLD, MORTGAGED, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT FOR SUCH SHARES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND ANY APPLICABLE STATE SECURITIES OR AN OPINION OF COUNSEL, SATISFACTORY TO THE COMPANY AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER APPLICABLE STATE SECURITIES LAWS."

If required by the authorities of any State in connection with the issuance of the Shares, the legend or legends required by such State authorities shall also be endorsed on all such certificates.

### 7. MISCELLANEOUS.

- (a) **Definitions.** Capitalized terms used herein shall have the meanings set forth below.
  - "Agreement" has the meaning set forth in the Preamble.
  - "APL" has the meaning set forth in the Preamble.
  - "Board of Directors" means the Board of Directors of the Company, as constituted from time to time.
  - "Closing" has the meaning set forth in Section 1(c).
  - "Common Stock" has the meaning set forth in Section 1(a).
  - "Company" has the meaning set forth in the Preamble.
  - "Effective Date" has the meaning set forth in the Preamble.
  - "Fair Market Value" means the fair market value of a Share, as determined by the Board of Directors in good faith. Such determination shall be conclusive and binding on all persons.
  - "License Agreement" has the meaning set forth in the Recitals.
  - "Party" or "Parties" has the meaning set forth in the Preamble.
  - "Preferred Stock" has the meaning set forth in Section 4(c)(i).
  - "Right of First Refusal" has the meaning set forth in Section 2(a).
  - "Securities Act" means the Securities Act of 1933, as amended.
  - "Shares" has the meaning set forth in Section 1(a).
  - "Transferee" means any person to whom APL has directly or indirectly transferred any Share.
  - "Transfer Notice" has the meaning set forth in Section 2(a).
  - "<u>Transfer Shares</u>" has the meaning set forth in Section 2(a).
- (b) Entire Agreement. This Agreement contains the entire agreement of the Parties and there are no other promises or conditions in any other agreement between the Parties, whether oral or written, concerning the subject matter hereof. This Agreement supersedes any prior written or oral agreements between the Parties concerning the

subject matter hereof.

- (c) Governing Law. The laws of the State of Maryland, without giving effect to its choice of law provisions, shall govern all matters arising out of or relating to this Agreement, including, without limitation, its interpretation, construction, performance, and enforcement. Any legal suit, action, or proceeding arising out of or relating to this Agreement shall be brought in the Circuit Court for Baltimore City or in the United States District Court for the District of Maryland. Each of the parties waives, to the fullest extent permitted by law, any objection which it may now or later have to the exclusive jurisdiction of or the laying of venue in the Circuit Court for Baltimore City, Maryland or the United States District Court for the District of Maryland, including any objections based upon inconvenient forum. The parties agree that a final judgment in any such suit, action, or proceeding may be enforced in other jurisdictions as provided by law.
- (d) Amendment; Waiver. No amendment, alteration or modification of any of the provisions of this Agreement shall be valid or effective unless made in writing and signed by the duly authorized representatives of the Parties hereto. No waiver of any provision of this Agreement shall be valid or effective unless made in writing and signed by a duly authorized representative of the Party to be bound by such waiver. Failure of a Party to exercise any right to enforce any provision, or to require strict performance by the other Party of any provision, shall not release any Party of its obligations under this Agreement and shall not operate as a waiver of any right to insist upon strict performance, or of any Party's rights or remedies under this Agreement or at law.
- (e) Notices. All notices, requests and other communications hereunder must be in writing and delivered personally, by facsimile transmission (receipt verified), or by overnight courier (signature required) or by e-mail to the Parties at the following addresses or facsimile numbers:

For APL:

with a copy (which shall not constitute notice) to:

The Johns Hopkins University Applied Physics Laboratory, LLC Attn: Office of Technology Transfer 11100 Johns Hopkins Road Laurel, MD 20723-6099 E-mail:

For Company:

with a copy (which shall not constitute notice) to

Bullfrog AI Holdings, Inc. 325 Ellington Blvd. #317 Gaithersburg, Maryland 20878 Sichenzia Ross Ference LLP 1185 Avenue of Americas, 31<sup>st</sup> Floor

New York, NY 10036

E-Mail: vin@bullfrogai.com

- (f) Severability. If any provision of this Agreement is held invalid by any law, rule, order, or regulation of any government or by the final determination of any court of competent jurisdiction, such invalidity shall not affect the enforceability of any other provisions and such provisions shall be interpreted so as to best accomplish the objectives of such invalid provisions within the limits of applicable law or court decision.
- (g) Counterparts. This Agreement may be executed in one or more counterparts, including by electronic (PDF) transmission, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their respective officers thereunto duly authorized to be effective as of the Effective Date.

BullfrogAI Holdings, Inc.	The Johns Hopkins University Applied Physics Laboratory LLC			
Vininder Single 9F617F725108429	DocuSigned by:  Jim Broskow  51AEF83389AD481			
Signature	Signature			
Vininder Singh	Jim Broskow			
Printed Name	Printed Name			
CEO	Tech Transfer AGS			
Printed Title	Printed Title			

#### APPENDIX E

### Fees and Payment Options

### Automated Clearing House (ACH) for payments through U.S. banks only

APL encourages its licensees to submit electronic funds transfer payments through the Automated Clearing House (ACH).

### **Electronic Funds Wire Transfers**

The following account information is provided for wire payments. In order to process payment via Electronic Funds Wire Transfer sender MUST supply the following information within the transmission:

Wiring Information (Domestic):							
Company: Bank:							
Bank Address:	One East Pratt Street Baltimore, MD 21201						
Bank POC: Bank Account:	- · · · · · · · · · · · · · · · · · · ·						
Bank Account #: Routing Number:	5300445194 031000053						
Wiring Information with Swift Code							
Company:	The Johns Hopkins University Applied Physics Laboratory LLC						
Bank: Bank Address:	PNC Bank One East Pratt Street						
	Baltimore, MD 21201						
Bank POC: Bank Account:	Marcella (Marcy) Kraus (410)237-5736 Checking						
Bank Account #: Routing Number:	5300445194 031000053						
Swift Code:	PNCCUS33						
Checks							
All checks should be made payable to	"JHU/APL" and sent by US Postal Service to the following address:						
Johns Hopkins University Applied Physics Laboratory LLC							
11100 Johns Hopkins Road							
Laurel, MD 20723-6099 Attn: Accounting/Finance Group	, DevFund Acct MS: MP1-S186						
	APPENDIX F						
	Form of Diligence and Annual Report						
DATED:							
PERIOD: From	To						
scientific discoveries, summary of w	iliates and/or Sublicensees toward commercialization of Licensed Products and/or Licensed Services, including completed work, key ork- in-progress, current schedule of anticipated events or milestones, market plans (if any) for introduction of Licensed Products and/or nsactions by Licensee, Affiliates and/or Sublicensees involving or relevant to Licensed Products and/or Licensed Services:						
B. Notice of all FDA and other relevant governmental filings and/or approvals regarding any Licensed Products and/or Licensed Services made or obtained by Licensee, Affiliates and/or Sublicensees, the APL IP pertaining thereto, and the commercial names thereof:							
C. A Certificate of Insurance or other	evidence of insurance (copy attached):						
D. Affiliates and Sublicensees which	have exercised any rights to any APL IP:						
NONE List attached with descr	ription of rights exercised.						
E. Diligence and other milestones achieved:							
F. Diligence and other milestones exp	pected to be achieved this year:						
G. Sublicenses entered into during the	is year:						
NONE							
Identification of Sublicens	ees (copy of each Sublicense attached):						
H. Equity funding received:							
I. Change of control, name change or	other significant change in Licensee, Affiliates, and/or Sublicensees relevant to the Agreement or Licensee:						
NONE Details:							

J. Awards, grants and other non-equity funding received:

# Form of Quarterly Sales and Royalty Report

DATED:			<u></u>					
Period Covere	d: From: /	/ Through	/ /					
TOTAL ROY	ALTIES DUE	FOR THIS P	ERIOD \$					
TOTAL NON-	-ROYALTY	SUBLICENSI	NG INCOME (NRSI)	DUE FOR THIS	PERIOD \$			
			over several product/s act; then combine all I					parate report for each Licensed port.
			, by any Affiliates, Su each such activity.	blicensees or any	y party other than I	icensee, clearly iden	ify the responsible p	party or parties and the extent to
Report type:			sed Product/Licensed of Licensed Product or		e			
		Single Contr	act Report					
		Multi-product/service/contract Summary Report Licensee's Tradenames for Licensed Product/Licensed Service Lines						
Country	Units Sold	Gross Sales	*Less Allowances	Net Sales	Profits/ Fees	Royalty Rate	Conv. Rate	Period Royalty Amount in U.S. dollars
U.S.A Canada Europe: Japan Other: TOTAL							1.0	
* On a separate page, please indicate the reasons for any significant adjustment. Also note any unusual occurrences that affected royalty payment amounts during this period.								
I hereby certify Agreement.	y, as a duly au	nthorized office	er of Licensee, that the	information set	forth above is corre	ct and complete and r	neets all of the report	ting requirements set forth in the
By (please sign):Date:								
Printed Name	and Title:							

# EXCLUSIVE LICENSE AGREEMENT

Johns Hopkins University, Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences and BullFrog AI Holdings. Inc. JHU Agreement Number A41090

This exclusive license agreement ("AGREEMENT") is entered into by and among the Johns Hopkins University, a State of Maryland corporation, having an address at 3400 N. Charles Street, Baltimore, Maryland, 21218-2695 ("JHU"), and the Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences (Ústav organické chemie a biochemie AV ČR, v. v. i.), having an address at Flemingovo nám. 542/2, 160 00 Praha 6, Czech Republic ("IOCB") (collectively, the "LICENSORS"), and BullFrog AI Holdings, Inc., a Nevada corporation having an address at 325 Ellington Blvd., #317, Gaithersburg, MD 20878 ("LICENSEE"), and is effective on the date of publication in the Register of Contracts pursuant to Section 14 of the Act on the Register of Contracts and Section 12.6 of this AGREEMENT ("EFFECTIVE DATE").

#### RECITALS

WHEREAS, JHU and IOCB jointly developed and own, by assignment or otherwise from members of its faculty and staff, certain valuable inventions, know-how, and data identified as JHU Ref. C14956 entitled "Mebendazole Prodrugs with Enhanced Solubility and Oral Bioavailability" and as specified in <a href="Exhibit A-1">Exhibit A-1</a>, which LICENSORS desire to have commercialized to make useful products and services available for the benefit of the public, including members of undeveloped countries and poor populations, as soon as possible, in accordance with LICENSORS' mission and purpose; and

WHEREAS, LICENSORS have entered into an Inter-institutional Agreement (IIA) effective as of January 11, 2019 (JHU Agreement Ref. A34675) which authorizes JHU to administer, protect and seek commercialization opportunities for JHU Ref C14956 on behalf of both JHU and IOCB; and

WHEREAS, LICENSEE desires to obtain certain rights in accordance with this AGREEMENT so that it may develop, manufacture, use and/or distribute certain products and services for public use and benefit as soon as possible.

NOW THEREFORE, the parties agree, with the intent to be legally bound, as follows:

### 1. DEFINITIONS AND SCOPE

Capitalized terms have the meanings provided by  $\underline{\text{Exhibit B}}$  or as defined in the body of this AGREEMENT.

### 2. GRANT OF LICENSES

- 2.1. Grant of Exclusive Patent License. Subject to this AGREEMENT, LICENSORS grant LICENSEE an exclusive license under the LICENSED PATENTS to make, have made, use, import, export, offer to sell and sell LICENSED PRODUCTS in the LICENSED TERRITORY and FIELD OF USE and to grant SUBLICENSES subject to the limitations provided by this AGREEMENT.
- 2.2. Grant of Non-Exclusive Right to Use Data, and Know-How. LICENSORS grant LICENSEE a non-exclusive right to use the LICENSED DATA, or LICENSED

KNOW-HOW, existing as of the EFFECTIVE DATE of this AGREEMENT and as identified in and subject to restrictions identified in <a href="Exhibit A-1">Exhibit A-1</a> within the FIELD OF USE and LICENSED TERRITORY. This right to use is granted solely to LICENSEE to permit LICENSEE to make, have made, use, import, export, offer to sell, sell, develop, and commercialize LICENSED PRODUCTS in the LICENSED TERRITORY in the FIELD OF USE, provided that LICENSEE may grant SUBLICENSES to LICENSED DATA and LICENSED KNOW-HOW, solely in connection with SUBLICENSES of the LICENSED PATENTS and solely to the extent needed to practice the LICENSED PATENTS and subject to the limitations provided by this AGREEMENT.

- 2.3. Affiliate Rights and Obligations. The LICENSED RIGHTS granted herein extend to AFFILIATES, except that AFFILIATES may not grant SUBLICENSES without LICENSORS' written consent. An AFFILIATE that exercises rights under this AGREEMENT shall automatically be bound by all terms and conditions of this AGREEMENT, including but not limited to indemnity and insurance provisions and the obligation to pay ROYALTIES. All obligations, acts or omissions by an AFFILIATE shall be considered obligations, acts or omissions of LICENSEE, which is, and shall remain, liable for them.
- Sublicense Notification. LICENSEE shall provide a complete and unredacted copy of each SUBLICENSE to LICENSORS (through JHU) within thirty (30) days of execution. Each SUBLICENSE shall (i) expressly reference this AGREEMENT and declare void and unenforceable against LICENSORS any terms contrary to this AGREEMENT; (ii) prohibit sublicensing by the SUBLICENSEE; (iii) expressly incorporate the Articles (inclusive of subsections) of this AGREEMENT numbered 4, 5, 6, 7, 8, 9, 10, 11, and 12 for the benefit of LICENSORS; and (iv) acknowledge LICENSORS as a third party beneficiaries of the SUBLICENSE having the right to audit and enforce its terms and (v) expressly require SUBLICENSEE to provide LICENSEE diligence reports on an annual basis for the express purpose of providing those SUBLICENSEE diligence reports to LICENSORS (through JHU). In addition, each SUBLICENSE shall provide for its own immediate termination or expiration upon termination or expiration of this AGREEMENT, unless LICENSEE's entire right and interest in such SUBLICENSE (including all rights to receive ROYALTIES and other payments) is assigned in writing to LICENSORS with JHU's consent, which shall not be unreasonably withheld or delayed. Failure to comply with the requirements of this Section 2.4 shall cause any purported SUBLICENSE to be void.
- 2.5. Retained Research and Publication Rights. LICENSORS retain the unrestricted right, on behalf of themselves, and each of their respective faculty and staff and non-profit academic or research institutions to whom JHU and/or IOCB extends such rights, to practice and use, either jointly or individually, any LICENSED RIGHTS described in <a href="Exhibit A-1">Exhibit A-1</a> for any research or non-profit purpose, including sponsored research and collaborations with commercial entities and assessment and treatment of patients at Johns Hopkins Health System/JHU institutions. In addition, the right of JHU and/or IOCB's faculty and staff to publish all information concerning what is described in <a href="Exhibit A-1">Exhibit A-1</a> shall not be restricted by this AGREEMENT.
- 2.6. Government Rights. LICENSED PATENTS arising from research funded in whole

or part by the United States government are subject to the Bayh Dole Act and its implementing regulations (35 U.S.C. §§ 200-204, 37 CFR Part 401) (collectively, "Bayh Dole Obligations"), including requirements to take effective steps in a reasonable time to achieve practical application of the LICENSED PATENTS in the FIELD OF USE and to assure LICENSED PRODUCTS sold or produced in the United States be "manufactured substantially in the United States." LICENSEE shall comply with, and cooperate with, JHU in assuring compliance with the Bayh Dole Obligations. JHU's obligations under Title 35 Sections 200-204 of the United States Code include the grant of an irrevocable, non-exclusive, nontransferable, royalty-free worldwide license to LICENSED PATENTS by JHU to the United States government, and a statement of United States government patent rights on all LICENSED PATENTS. All determinations of federal research funding involvement will be made solely by JHU, and JHU's determination shall be honored by LICENSEE.

#### 2.7. Humanitarian Rights and Obligations.

- 2.7.1. The parties will cooperate such that essential medicines developed under this AGREEMENT can be made available in LEAST DEVELOPED COUNTRIES. LICENSORS agree to consider reasonable requests of LICENSEE for a commensurate reduction of payment obligations to LICENSORS to facilitate the availability of LICENSED PRODUCTS in such countries.
- 2.7.2. Provided JHU first consults with LICENSEE, pursuant to this Section 2.7.2, LICENSORS retain the right to grant rights to manufacture, use, distribute, sell and import the LICENSED RIGHTS described in Exhibit A-1 to a QUALIFIED HUMANITARIAN ORGANIZATION for HUMANITARIAN PURPOSES, provided that any such grant shall expressly prohibit the manufacture, use, distribution, sale or importation of any LICENSED PRODUCT in a country other than a LEAST DEVELOPED COUNTRY. Prior to granting such rights, LICENSORS (through JHU) will notify LICENSEE, and LICENSEE shall have the first right to grant such rights to such QUALIFIED HUMANITARIAN ORGANIZATION.
- 2.8. Commercial Development Sublicenses. In the event LICENSEE is unable or unwilling to develop a LICENSED PRODUCT for an unserved market, use, indication or territory, upon JHU's written request and LICENSEE'S failure to provide LICENSORS (through JHU) with a reasonable development plan for such unserved market, use, indication, or territory within ninety (90) days of such written request, LICENSEE shall negotiate with one or more potential sublicensees identified by LICENSORS to authorize development of such product. LICENSEE shall not, however, be obligated to enter into a sublicense that poses a material risk to the successful development and commercialization of LICENSED PRODUCTS by LICENSEE.
- 2.9. Exclusions. Nothing in this AGREEMENT imposes obligations on LICENSORS or grant rights in any LICENSORS technology, intellectual property or other assets except as expressly identified in this AGREEMENT. Except as specifically provided

in this AGREEMENT, LICENSORS do not have any obligation to provide to LICENSEE any know how, inventions, data, materials, or assistance.

## 3. DILIGENCE AND DILIGENCE REPORTS

- 3.1. Milestones. LICENSEE shall achieve the MILESTONES set forth in Exhibit A-3 and shall notify LICENSORS of the achievement of each MILESTONE within thirty (30) days of achieving them.
- 3.2. Extension of Diligence Milestone. Prior to missing a MILESTONE, LICENSEE may request, in writing, an extension of the period for achieving a diligence MILESTONE set forth in Exhibit A-3 (each a MILESTONE) by up to six months. LICENSORS (through JHU) will grant the requested extension provided (i) LICENSEE has diligently pursued achievement of the MILESTONE; and (ii) LICENSEE remits the milestone payment amount within thirty (30) days of achievement of the delayed MILESTONE. The extension of a MILESTONE shall automatically extend the deadline for subsequent MILESTONES of Exhibit A-3 respecting the same subject matter by like amount. LICENSEE may seek extensions for MILESTONES no more than twice during the term of this AGREEMENT.
- 3.3. Diligence Reports. Annually, on or before March 1 of each year, LICENSEE shall submit a Diligence Report for the prior calendar year to LICENSORS substantially in the form attached as <a href="mailto:Exhibit D">Exhibit D</a> and in sufficient detail to facilitate JHU's compliance with its Bayh Dole Obligations. Reports may be submitted electronically to JHU via <a href="mailto:JHTVReports@JHU.edu">JHTVReports@JHU.edu</a> and for IOCB to martin.fusek@uochb.cas.cz.

### 4. FEES, ROYALTIES, AND MILESTONES CONSIDERATION

- 4.1. Licensee's Obligation to Pay Fees, Royalties and Other Payments. As partial consideration for the rights granted by LICENSORS under this AGREEMENT, LICENSEE shall pay to LICENSORS (through JHU) all ROYALTIES, fees, PAST PATENT COSTS, PATENT COSTS, SUBLICENSE NON-ROYALTY CONSIDERATION, and other payments LICENSED PARTIES are required to pay LICENSORS under this AGREEMENT. SALES, actions, or omissions by any LICENSED PARTY are deemed to be SALES, actions, or omissions of LICENSEE.
- 4.2. Upfront License Fee. LICENSEE shall pay to LICENSORS (through JHU) a nonrefundable UPFRONT LICENSE FEE as specified in <a href="Exhibit A-2">Exhibit A-2</a> within thirty (30) days of the EXECUTION DATE. The UPFRONT LICENSE FEE paid by LICENSEE to LICENSORS shall not be credited towards any other payments LICENSEE is required to pay LICENSORS under this AGREEMENT.
- 4.3. Patent Costs. LICENSEE shall reimburse LICENSORS (through JHU) for all PAST PATENT COSTS specified in Exhibit A-2 according to the time schedule specified in Exhibit A-2. PATENT COSTS will be invoiced to LICENSEE on a rolling basis as processed by LICENSORS or LICENSORS' patent counsel and are due and payable within thirty (30) days of receipt by LICENSEE.
- 4.4. Minimum Annual Royalty. By January 1 of each calendar year, LICENSEE shall pay LICENSORS (through JHU) the MINIMUM ANNUAL ROYALTY ("MAR") specified in <a href="Exhibit A-2">Exhibit A-2</a>. MAR payments are non-refundable and will be credited against ROYALTIES incurred by LICENSEE for the calendar year in which the MAR

- was due. No MAR credits will be applied to ROYALTIES incurred in prior or subsequent calendar years.
- 4.5. Royalties on Licensed Products and Reports. Within forty-five (45) days of the end of each calendar quarter following FIRST COMMERCIAL SALE, LICENSEE shall pay ROYALTIES in accordance with Exhibit A-2 and submit the electronic Excel Quarterly SALES & ROYALTY Report set forth in Exhibit C. ROYALTIES shall be paid on all SALES, use or manufacture of LICENSED PRODUCTS in the LICENSED TERRITORY by all LICENSED PARTIES.
- 4.6. Milestone Payments. Within thirty (30) days of achieving a MILESTONE, LICENSEE shall pay the related milestone payment to LICENSORS (through JHU) as specified in <u>Exhibit A-3</u>.
- 4.7. Patent Expiration and Royalty Adjustments.
  - 4.7.1. Expiration of Valid Claims. Upon expiration of all VALID CLAIMS, LICENSEE's ROYALTY obligation shall be reduced by 50% until the obligation to pay royalties ends pursuant to Section 4.8 of this Agreement.
  - 4.7.2. Royalty Stacking. In the event LICENSEE pays royalties on one or more third party patents ("OTHER ROYALTIES") as a requirement to make, use or sell an active component or active ingredient in a LICENSED PRODUCT, then the LICENSEE may deduct 50% of the amount paid for such OTHER ROYALTY from the ROYALTIES owed to JHU under this AGREEMENT. At no time, however, may the effective ROYALTY rate applicable to a LICENSED PRODUCT that requires OTHER ROYALTIES be less than 50% of the applicable ROYALTY rate as set forth in Exhibit A-2. No deduction under this Section 4.9.2 shall be made for OTHER ROYALTIES paid to an AFFILIATE, division, or corporation sharing a common business location or any corporate officer with LICENSEE or to any SUBLICENSEE.
- 4.8. Royalty Duration. LICENSEE's obligation to pay ROYALTIES on SALES of each LICENSED PRODUCT shall remain in effect for the longer of (i) 10 years from date of FIRST COMMERCIAL SALE, or (ii) the expiration of all VALID CLAIMS, and thereafter LICENSEE shall no longer be obligated to pay ROYALTIES in connection with the SALES of each LICENSED PRODUCT.
  - 4.8.1. International Licensed Products. The duration of the LICENSEE's obligation to pay ROYALTIES shall be determined on a country-by-country basis from the date of FIRST COMMERCIAL SALE to the date of expiration of all VALID CLAIMS.
- 4.9. Sublicense Non-Royalty Consideration. LICENSEE shall pay to JHU the SUBLICENSE NON-ROYALTY CONSIDERATION as stated on <u>Exhibit A-2</u> within sixty (60) days of receipt of SUBLICENSE NON-ROYALTY CONSIDERATION by LICENSEE.
- **4.10. Assignment Fee.** LICENSEE shall pay to JHU an assignment fee as provided for in Exhibit A-4 within sixty (60) days of receipt of assignment consideration from its assignee.

NDH - JHU Agreement A41090

5

- 4.11. Currency. All payments by LICENSEE to JHU shall be made in U.S. Dollars. Computation of conversion to U.S. Dollars from foreign currency transactions shall be made on a quarterly basis using the exchange rate quoted by United States Federal Reserve Bank for the last business day of the calendar quarter for which payment is due.
- 4.12. Non-U.S. Taxes. LICENSEE shall pay all non-U.S. taxes imposed on all amounts payable by LICENSEE under this AGREEMENT. Such tax payments are not deductible from any payments due to JHU.
- 4.13. Invoicing by JHU. Payments shall be due in accordance with this AGREEMENT, and JHU shall invoice LICENSEE for all amounts due to LICENSORS and such invoices may be sent to LICENSEE in electronic form via e-mail sent to the e-mail address supplied by LICENSEE from time to time, and will be deemed received by LICENSEE upon transmission. For clarity, (a) all amounts payable by LICENSEE under this AGREEMENT are owed jointly to the LICENSORS (e.g., if a Milestone is achieved requiring a \$1,000,000 Milestone payment by LICENSEE, only one Milestone payment of \$1,000,000 is owed jointly to the LICENSORS and the LICENSORS are responsible for allocating that payment amongst themselves), (b) the obligation of LICENSEE to make a payment to LICENSORS shall be deemed fulfilled upon receipt of the due amount by JHU, and (c) JHU shall forward to IOCB the appropriate amount of such payment due to IOCB in accordance with the IIAs and any other agreement between the LICENSORS.
- 4.15. Payment Methods. All payments to LICENSORS (through JHU) shall be made either by check or wire transfer, in accordance with the payment instructions set forth in <u>Exhibit A-2</u> as may be updated from time to time.
- 4.16. Interest. Payments not received when due shall bear interest at the rate of six percent (6%) per annum (compounded monthly) from the date due until paid in full.
- 4.17. One Royalty. In the event that a LICENSED PRODUCT is also deemed to be a "LICENSED PRODUCT" as defined in the Exclusive License Agreement entered into by and between JHU and LICENSEE dated as of February 22, 2022 (the "JHU LICENSE"), LICENSEE shall immediately provide notice to JHU and IOCB. In such event, JHU, IOCB, and LICENSEE shall negotiate in good faith to find a reasonable compromise to reduce the royalty burden on LICENSEE.

## 5. ROYALTY REPORTS AND ACCOUNTING

5.1. Royalty Reports. Beginning with the FIRST COMMERCIAL SALE of a LICENSED PRODUCT, LICENSEE shall thereafter submit to LICENSORS (through JHU) a Quarterly Sales and Royalty Report thirty (30) days after the end of each calendar quarter (even if there are no sales during that quarter), along with royalty payment

- under Section 4.6. LICENSEE agrees to submit an electronic Excel royalty report using the electronic royalty report template provided by JHU. This report will be in the form of <a href="Exhibit C">Exhibit C</a> and will state the number, description, and aggregate SALES of LICENSED PRODUCTS during the completed calendar quarter. All indicated columns shall be populated as they pertain to the completed calendar quarter with adjustments and unusual occurrences documented.
- Accounting and Audit Rights. Each LICENSED PARTY shall maintain complete and accurate books and records, for no less than seven years, relating to the rights and obligations under this AGREEMENT and any amounts payable to LICENSORS. Such books and records shall include information sufficient to permit LICENSORS to confirm the accuracy and completeness of any payments and reports delivered to LICENSORS and compliance in all other respects with this AGREEMENT. Upon 14 days' notice, a LICENSED PARTY shall make such books and records available for inspection by LICENSORS (through JHU) or their designee (provided that such designee has signed a confidentiality agreement with terms consistent with those in Article 6 of this Agreement) during normal business hours, to verify any reports, accuracy and completeness of payments and/or compliance with this AGREEMENT. In the event the inspections show an underpayment to LICENSORS of 5% or more for any quarter during the period examined, LÎCENSEE shall bear the full cost of the inspection, which shall be due and payable (along with past due ROYALTY, ROYALTY shortfall and other payment amounts plus interest per Section 4.16 from the date that such payments should have been made to LICENSORS) within thirty (30) days of receiving notice from JHU of the inspection results. LICENSORS may exercise this inspection right not more than annually, unless prior inspections show consistent underpayment of 10% or more (in which case LICENSORS may conduct follow up inspections at their discretion). The foregoing inspection right of LICENSORS and LICENSEE obligations shall survive for seven (7) years following termination or expiration of this AGREEMENT.
- 5.3. Statute of Limitations. Notwithstanding any applicable statute of limitation, LICENSEE agrees that it shall pay LICENSORS (through JHU) for any underpayments revealed by an inspection for a period of seven (7) years prior to the inspection.
- 5.4. Final Royalty Report and Payment. Within ninety (90) days of termination of this AGREEMENT, each LICENSED PARTY shall submit a final written Sales and Royalty Report and pay all outstanding amounts due under this AGREEMENT.

## 6. CONFIDENTIAL INFORMATION

6.1. Term of Confidentiality. During the term of this AGREEMENT and for a period of seven (7) years thereafter, the parties agree that all CONFIDENTIAL INFORMATION disclosed by a party shall be maintained in confidence by the receiving party and shall not be disclosed by the receiving party to any third party unless agreed to in writing by the disclosing party or compelled by a court of competent jurisdiction; nor shall any such CONFIDENTIAL INFORMATION be used by the receiving party for any purposes other than those contemplated by this AGREEMENT. Notwithstanding the foregoing, confidentiality obligations stated in

- this Article 6 in respect of Confidential Information related to LICENSED PATENTS, LICENSED KNOW-HOW and LICENSED DATA, shall remain in force during the Term and thereafter until the later of either (i) a period of ten (10) years, or (ii) the expiration of the last VALID CLAIM in any LICENSED PATENT.
- 6.2. Standard for Confidentiality. Each party shall maintain the security of CONFIDENTIAL INFORMATION it receives from the other party by employing reasonable safeguards that are no less secure than those used to protect its own confidential records.
- 6.3. Permitted Disclosures. These obligations respecting CONFIDENTIAL INFORMATION do not preclude disclosures about this AGREEMENT and amounts paid by LICENSED PARTIES as part of the publication of this AGREEMENT in the Register of Contracts pursuant to Section 12.16 of this AGREEMENT, routinely prepared summary documents or financial reports, nor do they impede or impair LICENSORS' exercise of retained research and publication rights pursuant to Section 2.5, provided that LICENSORS not disclose LICENSEE's CONFIDENTIAL INFORMATION in such publications. These obligations respecting CONFIDENTIAL INFORMATION do not preclude disclosures about this AGREEMENT as part of LICENSEE's registration statements and other filings with the United States Securities and Exchange Commission.
- 6.4. Upon termination of this AGREEMENT or at a Disclosing Party's request for any reason at any time, the Receiving Party shall:
  - i. immediately cease using all the Disclosing Party's Confidential Information disclosed hereunder; and
  - ii. promptly, at the Disclosing Party's instruction, return or destroy all of the Disclosing Party's Confidential Information disclosed hereunder, including any copies, extracts, summaries or derivative works of such Confidential Information, and upon request certify in writing to the Disclosing Party the completion of such return and/or destruction; provided, however, that the Receiving Party may retain one copy solely for legal archival purposes and such copy shall continue to be kept strictly confidential in accordance with the terms of this Article 6.
- 6.5. The Disclosing Party assumes no liability for injury, loss or damage arising from, and makes no representation in connection with, the use of any Confidential Information by the Receiving Party, except in cases of negligence or willful misconduct on the part of the Disclosing Party.

# 7. DISCLAIMERS, LIABILITY LIMITATION

7.1. DISCLAIMER. LICENSORS MAKE NO WARRANTIES UNDER THIS AGREEMENT. ALL TANGIBLE AND INTANGIBLE MATTER, INTELLECTUAL PROPERTY, TECHNOLOGY, RIGHTS, DATA, KNOW-HOW, AND MATERIALS ("DELIVERABLES") LICENSED, GRANTED, OR PROVIDED BY LICENSORS ARE "AS IS." LICENSORS MAKE NO REPRESENTATIONS WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, AS TO ANY MATTER INCLUDING WARRANTY OF FITNESS FOR

- PARTICULAR PURPOSE, MERCHANTABILITY, USEFULNESS, TITLE, NONINFRINGEMENT, VALIDITY, ENFORCEABILITY, USE, UTILITY, SCOPE, OR SUCCESFUL OPERATION OF DELIVERABLES.
- 7.2. LIMITS OF LIABILITY. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES, SUCH AS LOSS OF PROFITS OR INABILITY TO USE DELIVERABLES, HOWEVER ARISING, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Under no circumstances shall LICENSORS be liable for damages in excess amounts received by LICENSORS under this AGREEMENT during the 12 months prior to the event giving rise to the claim for damages.

### 8. INDEMNITY AND INSURANCE

- 8.1. Indemnification. LICENSEE and each applicable LICENSED PARTY (each an "Indemnitor" and collectively "Indemnitors") shall protect, defend, and indemnify the INDEMNITEES from and against any claims, losses, or damages of third parties (i) allegedly arising from or related in any way to any act or omission of an Indemnitor performing or exercising rights granted under this AGREEMENT, or (ii) allegedly caused by or arising in any way from LICENSED PRODUCTS. Indemnitors shall pay to defend the INDEMNITEES against any claim subject to this Section 8.1 with counsel reasonably acceptable to LICENSORS, and shall pay and/or hold the INDEMNITEES harmless as against any judgments, fees, expenses, or other costs arising from or incidental to any such lawsuit, claim, demand or other action, whether or not any INDEMNITEE is named as a party defendant in any such lawsuit and whether or not the INDEMNITEES are alleged to be negligent or otherwise responsible for any injuries to persons or property.
  - 8.1.1. Exclusions. The LICENSED PARTY Indemnification obligation as stated herein excludes: (i) claims arising solely from the practice by LICENSORS of their retained rights under Section 2.5 of this AGREEMENT; and (ii) claims arising solely from the negligent use or administration by an INDEMNITEE of a LICENSED PRODUCT (but any related claim of product liability or Indemnitor negligence shall remain subject to Indemnification).
  - 8.1.2. Notice, Cooperation, and Participation. LICENSORS or a an INDEMNITEE shall provide LICENSEE with prompt notice of any claims subject to indemnification, and will provide reasonable cooperation in the investigation and defense of such claims. LICENSORS shall have the right to participate in the defense of any claim with counsel of its choice and at its own expense. LICENSORS shall have the right to approve any settlement against LICENSORS or that imposes any liability or obligation on LICENSORS, such approval not to be unreasonably withheld. LICENSORS shall not be entitled to indemnification if it concludes any settlement or compromise of a claim without the prior written consent of LICENSEE, which consent shall not be unreasonably withheld, delayed, or conditioned.
- 8.2. Insurance. LICENSEE shall, continuing throughout the term of this AGREEMENT and for a period of three years thereafter, obtain and maintain, in full force and effect and at LICENSEE's sole cost and expense, the insurance coverage as set forth in

Exhibit E. LICENSEE shall provide written proof of such insurance coverage to LICENSORS within 30 days of EXECUTION DATE or initial coverage, whichever is later, and each renewal thereof. This AGREEMENT and the licenses granted herein shall immediately and automatically terminate in the event LICENSEE or a LICENSED PARTY (as applicable) fails to obtain the required insurance or if the insurance lapses or is cancelled.

8.3. Survival. The foregoing indemnification obligations shall survive termination or expiration of this AGREEMENT, and shall not be subject to any limitation of liability set forth in this AGREEMENT.

#### 9. PATENTS

- 9.1. Title and Authority. LICENSORS shall retain and hold title to all patents and patent applications included in the PATENT RIGHTS. LICENSORS retain all decision-making authority with respect to patent filing and prosecution of the PATENT RIGHTS, subject to LICENSEE's rights in Sections 9.2 and 9.3 of this Agreement.
- Domestic Filing and Prosecution. LICENSORS shall have sole control over the selection of counsel, filing, prosecution, maintenance and management of all issued patents and pending and future patent applications in the United States that are subject to this AGREEMENT. LICENSORS, at LICENSEE's expense, shall have the right to file, prosecute and maintain all patents and patent applications included in the PATENT RIGHTS. LICENSORS shall request its patent counsel to timely copy LICENSEE on all official actions and written correspondence with any patent office and to afford LICENSEE an opportunity to comment on prosecution matters. LICENSEE may elect to abandon its participation in, and rights to, a patent application or issued patent filed in the United States, provided that LICENSEE notifies LICENSORS in writing at least ninety (90) days before any due date for any pending Office Action or matter or any maintenance fee due date in the case of an issued patent. Such election shall not relieve LICENSEE of the obligation to reimburse LICENSORS for PATENT COSTS and PAST PATENT COSTS associated with such application that were incurred before LICENSORS received actual notice of LICENSEE's abandonment. Thereafter, LICENSORS may file, prosecute, and/or maintain such patent applications or patents at their own expense and for their own benefit and any PATENT RIGHTS granted on such applications or patents shall be excluded from the LICENSED PATENTS. Failure to provide such notification may be considered by LICENSORS to be LICENSEE's authorization to proceed at LICENSEE's expense.
- 9.3. Foreign Filing and Prosecution. Upon LICENSEE's written request and at LICENSEE's expense, LICENSORS will file and prosecute PATENT RIGHTS in one or more foreign jurisdiction. LICENSORS or its designee shall have sole control over the selection of counsel, filing, prosecution, maintenance and management of all foreign issued patents and pending and future patent applications that are subject to this AGREEMENT. Upon written notification to LICENSORS and its patent counsel at least ninety (90) days in advance of any filing, response, or fee deadline, LICENSEE may elect to abandon its participation in, and rights to, a patent application filed in a foreign jurisdiction. Such election shall not relieve LICENSEE

of the obligation to reimburse LICENSORS for PATENT COSTS and PAST PATENT COSTS associated with such application that were incurred before LICENSORS received actual notice of LICENSEE's abandonment. Thereafter, LICENSORS may file, prosecute, and/or maintain such foreign patent applications or patents at their own expense and for their own benefit and any PATENT RIGHTS granted on such applications or patents shall be excluded from the LICENSED PATENTS.

9.4. Common Interest. All non-public information exchanged between LICENSORS and the LICENSED PARTIES or their respective counsel regarding preparation, filing, prosecution, and maintenance of the PATENT RIGHTS shall be deemed CONFIDENTIAL INFORMATION. In addition, the parties acknowledge and agree that, with respect to such preparation, filing, prosecution and maintenance of the PATENT RIGHTS, the interests of the parties are to obtain the strongest patent protection possible, and as such, are aligned and are legal in nature. The parties agree and acknowledge that they have not waived, and nothing in this AGREEMENT constitutes a waiver of, any legal privilege concerning the PATENT RIGHTS or the CONFIDENTIAL INFORMATION, including privilege under the common interest doctrine and similar or related doctrines.

### 9.5. INFRINGEMENT.

- 9.5.1. Notification of Infringement by third party. Each party will promptly notify the other in writing in the event it discovers, receives notice of, or otherwise reasonably suspects infringement by a third party.
- Suits for Infringement. LICENSEE shall have the first right, at its own expense, to initiate and prosecute an infringement action against one or more third parties to enforce the LICENSED PATENTS in the FIELD OF USE in the LICENSED TERRITORY, provided that LICENSEE: (i) notifies LICENSORS at least ninety (90) days in advance of any such suit; (ii) does not file said action without the prior written consent of LICENSORS; and (iii) carefully considers the views of LICENSORS and the public interest in making its decision whether or not to file suit. LICENSEE: (i) shall not initiate an infringement action in the absence of a good faith belief in the infringement, validity and enforceability of the asserted claims after reasonable investigation, (ii) shall at all times keep LICENSORS informed as to the status of the action and shall consult with LICENSORS throughout the action; and (iii) shall at all times carefully consider the views of LICENSORS with respect to any infringement action, including, for example, choice of litigation counsel, venue, and litigation strategy. LICENSEE shall pay to LICENSORS 20% of any monetary award, settlement or recovery, net of all reasonable LICENSEE and LICENSORS attorneys' fees and out-of-pocket costs and expenses paid to third parties by LICENSEE and/or LICENSORS in connection with each suit or settlement.
- 9.5.3. Party Communications. All communications concerning a suit or potential suit against a third party between LICENSORS and LICENSEE shall be treated as CONFIDENTIAL INFORMATION and are agreed to be subject to

all available privileges and protections including the joint defense privilege and common interest privilege. Settlement or other voluntary final disposition of the suit may not be concluded without the prior written consent of LICENSORS. LICENSORS shall reasonably cooperate in any such litigation at LICENSEE's expense.

- LICENSORS' Secondary Right to Enforce. LICENSEE understands and agrees that LICENSORS have no obligation to bring suit against third parties for infringement of the LICENSED PATENTS. In the event LICENSEE does not initiate an infringement action within ninety (90) days after its discovery of or receiving notification of alleged infringement, LICENSORS may initiate and prosecute such infringement action in its sole discretion and on its own behalf. LICENSEE shall reasonably cooperate in such litigation at LICENSORS' request, including as a co-plaintiff, and agrees to provide any evidence, witnesses or other support of litigation as needed at its own expense. Upon initiation of an infringement action by LICENSORS, LICENSORS shall have the sole right to seek resolution of the alleged infringement through litigation, settlement agreement or otherwise. After the ninety day period of discovery/notice has elapsed, LICENSEE shall not be permitted to transfer its rights or sublicense the LICENSED PATENTS or otherwise reach an agreement with any suspected infringer that would impact LICENSORS' action in any way. Any recovery from LICENSORS' action shall be for LICENSORS' sole benefit and account. All communications concerning a suit or potential suit against a third party between LICENSORS and LICENSEE shall be treated as CONFIDENTIAL INFORMATION and are agreed to be subject to all available privileges and protections including the joint defense privilege and common interest privilege.
- 9.6. Third Party Invalidity Actions. LICENSEE shall defend at LICENSEE's expense any declaratory judgment or other action brought by a third party naming LICENSEE and/or LICENSORS as a defendant and alleging invalidity of any of the PATENT RIGHTS unless such action is brought as a counterclaim to a suit against the third party initiated by LICENSORS pursuant to LICENSORS' secondary right to enforce. LICENSORS may, in its sole discretion and at its own expense, assume control of the defense of any third party action naming any of the LICENSORS as a defendant, in which case LICENSEE shall cooperate fully with LICENSORS in such defense at its own expense.
- 9.7. Waiver of Invalidity Claims. LICENSEE, on behalf of itself, AFFILIATEs, and SUBLICENSEEs, understands and agrees that transfer of LICENSED RIGHTS under this AGREEMENT will confer substantial benefits to them, even in the absence of one of more VALID CLAIMS. Such benefits include "early mover" advantage. In addition, LICENSEE on behalf of itself, AFFILIATEs, and SUBLICENSEEs understands and agrees that the consideration paid for LICENSED RIGHTS reflects the nature and risks of early-stage technology, and the consideration required for a license to later stage technology would be significantly higher. Accordingly, each LICENSED PARTY agrees that it shall not initiate any action or proceeding to invalidate PATENT RIGHTS and hereby waives any rights they may have to do so.

- 9.8. Patent Challenges. Notwithstanding the foregoing, if a LICENSED PARTY initiates an action or proceeding challenging the validity or scope of PATENT RIGHTS or that a LICENSED PRODUCT practices the PATENT RIGHTS, the following shall apply:
  - (a) LICENSORS may terminate this AGREEMENT upon written notice to LICENSEE and/or the LICENSED PARTY.
  - (b) No payments or reports required by this AGREEMENT shall be suspended or delayed during any challenge to PATENT RIGHTS and no such payments shall be subject to refund or recoupment for any reason.
  - (c) Not less than ninety (90) days prior to initiating any challenge to a PATENT RIGHTS, the party challenging PATENT RIGHTS (the "Challenging Party") shall provide written notice of the expected challenge to LICENSORS which shall include a clear statement of the factual and legal basis for the challenge, and an identification of all prior art, documents, products or other matter the Challenging Party believes to provide a basis for such challenge.
  - (d) If such action or proceeding determines that at least one claim of the PATENT RIGHTS is a VALID CLAIM or practiced by a LICENSED PRODUCT, LICENSEE and the Challenging Party shall, thereafter, pay to LICENSORS (through JHU) three times all payment amounts which LICENSEE and Challenging Party would otherwise be required to be paid under this AGREEMENT, other than PATENT COSTS. LICENSEE shall not be obligated to pay increased charges if it is not a party to the challenge to PATENT RIGHTS, has not assisted or facilitated the challenge, and has fully cooperated with LICENSORS in the defense of such challenge. Notwithstanding the immediately preceding sentence, pursuant to Section 2.3 of this AGREEMENT, LICENSEE shall be liable for the payments of increased charges by any AFFILIATE and SUBLICENSEE who is a Challenging Party.
- 9.9. Marking. All LICENSED PRODUCTS shall be marked with the number of the applicable licensed patent(s) in accordance with each country's patent laws.

#### 10. DISPUTES

- 10.1. Governing Law, Jurisdiction and Venue. This AGREEMENT shall be construed, and legal relations between the parties shall be determined, in accordance with the laws of the State of Maryland applicable to contracts executed and wholly to be performed within the State of Maryland without giving effect to the principles of conflicts of laws. Any disputes between the parties to the AGREEMENT shall be brought in the state or federal courts located in Baltimore, Maryland. Both parties hereby waive their right to a jury trial and consent to jurisdiction in such courts with respect to any disputes between them.
- 10.2. Resolution. The parties shall attempt in good faith to resolve all disputes through means other than litigation, such as mediation, arbitration, or structured negotiations. Each party agrees that, prior to initiating litigation, it will confer with other party about alternatives to litigation that may enable them to resolve the dispute fairly and

efficiently.

# 11. TERM AND TERMINATION

- 11.1. Term. The term of this AGREEMENT shall commence on the EFFECTIVE DATE and shall continue until the date of expiration of the last to expire patent included within PATENT RIGHTS, or if no patents issue, then for 20 years from the EFFECTIVE DATE. LICENSEE shall not make, use, sell, import, export or offer for sale any LICENSED PRODUCTS after termination (but not expiration) of this AGREEMENT
- 11.2. Licensee Termination for Convenience. LICENSEE may terminate this AGREEMENT upon ninety (90) days' advance written notice.
- 11.3. LICENSORS Termination for Cause. LICENSORS may terminate this AGREEMENT upon thirty (30) days' written notice to LICENSEE in the event of any material breach hereof, provided that LICENSEE does not cure such breach prior to expiration of such thirty (30) day period. LICENSORS may terminate this AGREEMENT immediately upon written notice to LICENSEE in the event of a material breach that is incapable of cure. A material breach may include:
  - (a) LICENSEE's delinquency with respect to payment or reporting;
  - (b) Failure to timely achieve a MILESTONE specified in <u>Exhibit A-3</u> or otherwise failing to diligently develop, commercialize, and sell LICENSED PRODUCTS throughout the term of this AGREEMENT;
  - Non-compliance with record keeping or audit obligations as stated in Articles 3 and 5 of this AGREEMENT;
  - (d) Voluntary bankruptcy or insolvency of LICENSEE.
  - (e) Non-compliance with LICENSEE'S insurance obligations.
  - (f) Non-compliance with LICENSEE'S obligations pursuant to Section 2.4 of this AGREEMENT in relation to SUBLICENSES, upon thirty (30) days' written notice to LICENSEE in the event of such non-compliance, provided that LICENSEE does not cure such non-compliance prior to expiration of such thirty (30) day period.
- 11.4. Licensee Obligations Upon Termination or Expiration. Upon expiration or termination of this AGREEMENT for any reason, LICENSEE shall remit payment to LICENSORS (through JHU) for all amounts due or incurred prior to the effective date of termination, and any non-cancellable expenses (such as PATENT COSTS) undertaken prior to termination.
- 11.5. Effect of Termination. Upon termination of this AGREEMENT pursuant to 11.2 or 11.3, all rights and licenses granted by LICENSORS to LICENSEE under this AGREEMENT shall terminate and all rights in, to, and under the LICENSED RIGHTS will revert to LICENSORS.

# 12. MISCELLANEOUS

12.1. Use of Name. LICENSEE may not use the name, trademarks, logos, or trade dress of the Institute of Organic Chemistry and Biochemistry of the Academy of Sciences of

the Czech Republic, v.v.i. or of The Johns Hopkins University, The Johns Hopkins Health System, and any of their constituent parts, such as JHU, Johns Hopkins, Hopkins, the Johns Hopkins Hospital, Johns Hopkins Medicine or any contraction thereof (collectively, "The LICENSORS NAMES") or the name of INNOVATORS in any advertising, promotional literature, Web sites, electronic media applications, sales literature, fundraising documents, or press releases and other print or electronic communications without prior written consent from an authorized representative of LICENSORS. Any request to make use of The LICENSORS NAMES shall be made at least thirty (30) business days' in advance of any proposed use and may be made by written request through JHTV and IOCB. LICENSORS shall have the right to list LICENSEE and display the logotype or symbol of LICENSEE on LICENSORS' websites, social media pages, and other online as well as offline presentations, and on LICENSORS publications as a licensee of LICENSORS technology.

- 12.2. Independent Parties. Nothing in this AGREEMENT shall be construed to create any agency, employment, partnership, joint venture or similar relationship between the parties other than that of a licensor/licensee. Neither party shall have any right or authority whatsoever to incur any liability or obligation (express or implied) or otherwise act in any manner in the name or on the behalf of the other, or to make any promise, warranty or representation binding on the other.
- 12.3. Notice of Claim. Each party shall give the other party or its representative prompt notice of any suit or action filed, or of any claim made against them arising out of the performance of this AGREEMENT.
- 12.4. No Assignment. Neither party may assign this AGREEMENT, in whole or in part, without the prior written consent of the other party. Notwithstanding the foregoing, LICENSEE may assign this AGREEMENT in accordance with the terms and transfer fee requirements set forth in <a href="Exhibit A-4">Exhibit A-4</a>.
- 12.5. Notices. Any notice under any of the provisions of this AGREEMENT shall be deemed given when deposited in the mail, postage prepaid, registered or certified first class mail or by nationally-recognized private mail carrier and addressed to the applicable party at the address stated below, or such other address as such party shall specify for itself by like notice to other party. Transmission of notice by electronic mail is insufficient to meet the requirements of this provision.

#### If to JHU

Executive Director Johns Hopkins Technology Ventures 1812 Ashland Avenue, Suite 110 Baltimore, Maryland 21205

#### If to IOCB:

Ústav organické chemie a biochemie AV ČR, v. v. i. Director Flemingovo nám. 542/2 160 00 Praha 6 Czech Republic

#### If to LICENSEE:

BullFrog AI Holdings, Inc. 325 Ellington Blvd., #317, Gaithersburg, MD 20878

LICENSEE contacts by agreement function:

Legal: Vin Singh, MS, MBA

vin@bullfrogai.com

Patent: Thomas Hazel, PhD

thomas@bullfrogai.com

Licensing: Thomas Hazel, PhD

thomas@bullfrogai.com Vin Singh, MS, MBA

vin@bullfrogai.com

Insurance: Vin Singh, MS, MBA

vin@bullfrogai.com

Reporting: Vin Singh, MS, MBA

vin@bullfrogai.com

- 12.6. Export Control. Certain of the LICENSED RIGHTS may be subject to United States laws and regulations (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979) controlling the export of technical data, computer software, laboratory prototypes, and other commodities. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances that such transfers shall not be made to certain foreign countries without prior approval of such agency. LICENSEE or the applicable LICENSED PARTY shall fully comply with such export control laws. LICENSORS make no representation respecting the requirements for such a license, or that, if required, that such a license will be issued.
- 12.7. Successors and Assigns. This AGREEMENT shall bind and inure to the benefit of the successors and permitted assigns of the parties.
- 12.8. No Waivers; Severability. No waiver of any breach of any provision of this AGREEMENT shall constitute a waiver of any other breach of the same or other provision of this AGREEMENT, and no waiver shall be effective unless made in writing and signed by the party waiving. Any provision of this AGREEMENT prohibited by or unenforceable under any applicable law of any jurisdiction shall as to such jurisdiction be deemed ineffective and deleted without affecting any other provision of this AGREEMENT, which shall be interpreted so as to most fully achieve the intentions of the parties.
- 12.9. Entire Agreement. This AGREEMENT supersedes all previous agreements and understandings relating to its subject matter, whether oral or in a writing, and constitutes the entire agreement of the parties and shall not be amended or altered in any respect except in a writing executed by the parties.
- 12.10. No Agency. LICENSEE agrees that no representation or statement by any LICENSORS employee shall be deemed to be a statement or representation by

- LICENSORS, and that LICENSEE was not induced to enter this AGREEMENT based upon any statement or representation of LICENSORS, or any employee of LICENSORS. LICENSORS are not responsible for any publications, experiments or results reported by any LICENSORS employee prior to, or after, the EFFECTIVE DATE, including those reported by any of the INNOVATORS.
- 12.11. Binding Agreement. Exchange of this AGREEMENT in draft or final form between the parties shall not be considered a binding offer, and this AGREEMENT shall not be deemed final or binding on either party until the final AGREEMENT has been signed by both parties.
- 12.12. Delays or Omissions. Except as expressly provided by this AGREEMENT, no delay or omission to exercise any right, power or remedy accruing to any party, shall impair any such right, power or remedy to such party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or in any similar breach or default be deemed a waiver of any other prior or subsequent breach or default. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this AGREEMENT, or any waiver on the part of any party of any provisions or conditions of this AGREEMENT, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies either under this AGREEMENT or by law or otherwise afforded to any party, shall be cumulative and not alternative.
- 12.13. Survival. All representations, warranties, covenants and agreements made in this AGREEMENT and which by their express terms or by implication are to be performed or continue to apply after the execution and/or termination of this AGREEMENT or are prospective in nature shall survive such expiration and/or termination. In addition, and for avoidance of doubt, the following articles shall survive any termination or expiration: Articles 5, 6, 7, 8, 9, 10, and 11.
- 12.14. No Third-Party Beneficiaries. Nothing in this AGREEMENT shall be construed as giving any person, firm, corporation or other entity, other than the parties and their successors and permitted assigns, any right, remedy or claim under or in respect of this AGREEMENT or any provision hereof.
- **12.15. Headings.** Article headings are for convenient reference and are not a part of this AGREEMENT. All referenced Exhibits are part of this AGREEMENT.
- 12.16. Contracts Register. The parties acknowledge that this Agreement is subject to obligatory publication under the Czech Act No. 340/2015 Coll., on Special Conditions of Effect of certain Contracts, Publication of these Contracts and on the Register of Contracts (Act on the Register of Contracts). The parties have agreed that prior to disclosure of this Agreement, any and all provisions of this Agreement and appendices hereto designated by the parties as business secrets prior to the signing of this Agreement shall be redacted (blackened); pursuant thereto, the parties hereby designate the following provisions of this Agreement and appendices as business secret. IOCB undertakes to redact (blacken) such provisions prior to disclosure: C14956 and the content of all Exhibits and Attachments attached hereto. The obligatory disclosure of this Agreement pursuant to the Act on the Register of Contracts shall be made by IOCB.

IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be executed in three counterparts, each of which shall be deemed to constitute an original, effective as of EFFECTIVE DATE. The undersigned verify that they have the authority to bind to this AGREEMENT the party on behalf of which they are executing.

This AGREEMENT includes the following Exhibits:

Exhibit A: Financial Terms

Exhibit A-1: LICENSED RIGHTS, FIELD OF USE, and LICENSED TERRITORY

Exhibit A-2: PATENT COSTS, Fees, ROYALTIES, and Payment Terms

Exhibit A-3: MILESTONES

Exhibit A-4: Permitted Assignment

Exhibit A-6: Table of LICENSED PATENTS

Exhibit A-7:

Exhibit B: Definition of Terms

Exhibit C. Quarterly Sales & Royalty Report Form

Exhibit D: Diligence and Annual Report Form

Exhibit E: Insurance

Exhibit F: LICENSED DATA and LICENSED KNOW-HOW

Johns Hopkins University	BullFrog AI Holdings, Inc.
By: Stukouch'	Ву:
Name: Steven L. Kousouris	Name: Vin Singh, MS, MBA
Title: Executive Director, JHTV	Title: Founder & CEO
Date: 10/3/2022	Date: 9/26/22
Institute of Organic Chemistry and	
Biochemistry of the Czech Academy of	
Sciences  By: An Annhi	
Name: Jan Konvalinka	
Title: Director	
Date: 17 OCTUBER 2017	

NDH – JHU Agreement A41090

18

# Exhibit A (A-1, A-2, A-3, A-4, A-5, A-6, A-7)

# Exhibit A-1: LICENSED RIGHTS, FIELD OF USE, and LICENSED TERRITORY

	JHU TECH ID #C14956 – "Mebendazole Prodrugs with Enhanced Solubility and Oral Bioavailability"
JHU TECH ID, CASE TITLE, and INVENTORS	INVENTORS: Gregory Riggins (JHU), Barbara Slusher (JHU), Rana Rais (JHU), Pavel Majer (IOCB), Tomas Tichy (IOCB), Jan Vavra
	(IOCB), Andrej Jancarik (IOCB), and Lukas Tenora (IOCB)
LICENSED PATENTS	SEE PATENT TABLE BELOW (EXHIBIT A-6)
LICENSED KNOW- HOW	SEE REFERENCE LIST BELOW FOR BOTH KNOW-HOW AND DATA (EXHIBIT F)
LICENSED DATA	SEE REFERENCE LIST BELOW FOR BOTH KNOW-HOW AND DATA (EXHIBIT F)
FIELD OF USE	Treatment of any human or animal disease, disorder, or condition
LICENSED TERRITORY	WORLDWIDE

Exhibit A-2
PATENT COSTS, Fees, ROYALTIES, and Payment Terms

UPFRONT	One hundred thousand US Dollars (USD \$100,000), payable as listed
LICENSE FEE	below:
	<ul> <li>(a) Twenty five (25) thousand US Dollars (USD \$25,000) upon execution of this AGREEMENT, in partial consideration (due within 30 days of the EFFECTIVE DATE); and</li> <li>(b) Seventy five (75) thousand US Dollars (USD \$75,000) upon the earlier of (i) completion of BullFrog AI IPO, (ii) \$10 million USD financing, or (iii) within nine (9) months of the EFFECTIVE DATE.</li> </ul>
	LICENSEE will notify LICENSORS no more than fifteen days following completion of (b) (i) or (b)(ii).
PAST PATENT COSTS	\$33,265.31 payable as follows:  (a) \$11,619.08 within thirty (30) days of invoice after the Effective Date
	(b) \$11,646.23 within four (4) months of the Effective Date (c) \$10,000.00 within ten (10) months of the Effective Date
	**LICENSEE acknowledges that the listed costs are an ESTIMATE
	ONLY and that the total historical patent costs shall be adjusted as
	filing costs are invoiced to JHU.**
MINIMUM ANNUAL	Due by January 1 of each calendar year:
ROYALTY	1 <sup>st</sup> year: USD \$0,000 due 1/1/2024
("MAR")	2 <sup>nd</sup> year: USD \$0,000 due 1/1/2025
	3 <sup>rd</sup> year: USD \$0,000 due 1/1/2026 4 <sup>th</sup> year: USD \$5,000 due 1/1/2027
	4 <sup>th</sup> year: USD \$5,000 due 1/1/2027 5 <sup>th</sup> year: USD \$10,000 due 1/1/2025
	6 <sup>th</sup> year: USD \$20,000 due 1/1/2026
	7 <sup>th</sup> year: USD \$30,000 due 1/1/2027
	8th year, etc.: USD \$50,000 due 1/1/2028 (until FIRST
	COMMERCIAL SALE)
	Upon FIRST COMMERCIAL SALE of a LICENSED PRODUCT the
	MAR shall be: \$150,000 due on January 1 in the year after the FIRST
ROYALTY	COMMERCIAL SALE.
	4% on LICENSED PRODUCTS
SUBLICENSE NON BOYALTY	The percent of all consideration, as outlined below, received by
NON-ROYALTY CONSIDERATION	LICENSEE from a SUBLICENSEE in exchange for grant of
CONSIDERATION	SUBLICENSE rights under this AGREEMENT, but excluding (i) any consideration received by LICENSEE for ROYALTIES on

SUBLICENSEES will be treated as if LICENSEE made the SALE), and (ii) any payment of PAST PATENT COSTS or PATENT COSTS made by SUBLICENSEE to LICENSEE.

- a) 25% Prior to dosing of the first patient in the first Phase II Clinical Trial
- b) 20% After dosing of the first patient in the first Phase II Clinical Trial, but prior to dosing of a first patient in a Phase III or REGISTRATIONAL CLINICAL TRIAL
  c) 15% after dosing of the first patient in a Phase III or REGISTRATIONAL CLINICAL TRIAL

# **Payment Instructions**

Checks are to be made payable to the "Johns Hopkins University." All check payments from LICENSEE to LICENSORS shall be sent to:

Executive Director
Johns Hopkins Technology Ventures
The Johns Hopkins University
1812 Ashland Avenue, Suite 110
Baltimore, MD 21205
Attention: JHU AGREEMENT No. A41090

or such other addresses which JHU may designate in writing from time to time.

Wire transfers may be made through:

# DOMESTIC ACH & WIRE

Johns Hopkins University – JHTV M&T Bank 1 M&T Plaza Buffalo, NY 14203 ABA #022000046 Account number: 9864226981 Type of account: depository CTX format is preferred; CCD+ is also accepted Attention: JHU AGREEMENT A41090

# INTERNATIONAL FED WIRE

Johns Hopkins University – JHTV M&T Bank 1 M&T Plaza Buffalo, NY 14203 ABA #022000046 Account number: 9864226981 Type of account: depository CHIPS ABA number: N/A IBAN number: N/A Attention: JHU AGREEMENT A41090

LICENSEE shall be responsible for any and all costs associated with wire transfers.

NDH - JHU Agreement A41090

22

# Exhibit A-3 MILESTONES

All milestone payment fees are denoted in United States dollars (USD), unless otherwise noted

Date or Deadline	Description of MILESTONE	Milestone Payment Fee
Within 6 months of EFFECTIVE DATE	Financing of \$10M in LICENSEE	NO FEE
None	Vione Upon issuance of a first patent in the US	
None	Upon issuance of a first patent in Europe	\$25,000
Within 6 months of EFFECTIVE DATE	Submission of Development Plan to LICENSORS/JHTV	NO FEE
Within 36 months of EFFECTIVE DATE	Submission of IND for each LICENSED PRODUCT	\$50,000
Within 72 months of EFFECTIVE DATE	Upon COMPLETION of a phase I clinical trial for each LICENSED PRODUCT	\$250,000
Within 108 months of EFFECTIVE DATE	Upon COMPLETION of a phase II clinical trial for each LICENSED PRODUCT	\$500,000
None	Upon dosing of a first patient in a phase III clinical trial for each LICENSED PRODUCT	\$750,000
None	MARKET APPROVAL for each LICENSED PRODUCT – US (FDA)	\$750,000
None	MARKET APPROVAL for each LICENSED PRODUCT – outside of US	\$500,000
None	FIRST COMMERCIAL SALE for the first LICENSED PRODUCT	NO FEE
None	First twenty (20) million dollars (USD \$20,000,000) NET SALES REVENUE of a LICENSED PRODUCT in the United States	\$1,000,000
None First year cumulative NET SALES REVENUI of a LICENSED PRODUCT exceeds \$100M		\$2,000,000
Vone	First year cumulative NET SALES REVENUE of a LICENSED PRODUCT exceeds \$500M	\$10,000,000
None	First year cumulative NET SALES REVENUE of a LICENSED PRODUCT exceeds \$1000M (i.e., \$1B)	\$20,000,000

- a) Pursuant to Section 3.1 of the AGREEMENT, milestone payment fees set forth in the above table shall be payable within thirty (30) days of each LICENSED PRODUCT achieving such MILESTONE.
- b) In the event that a Phase I, II and/or Phase III clinical trial is conducted at JHU, LICENSEE is excused from making the accrued related milestone payments fees to LICENSORS

(through JHU) until the earlier of, a clinical trial milestone is met where such sites include at least two (2) sites other than JHU or IOCB or the milestone for the receipt of regulatory approval from the FDA (or marketing approval from a foreign equivalent of the FDA) ("MARKET APPROVAL") is met. Under such circumstance, LICENSEE agrees that it will pay the accrued Phase I, II and/or Phase III milestone payments fees upon completion and when it submits milestone payment fee to LICENSORS (through JHU) for MARKET APPROVAL. Further, in the event that a Phase I and/or Phase II and/or Phase III clinical trial is not required for MARKET APPROVAL, LICENSEE agrees that it will pay the accrued Phase I and/or Phase III and/or Phase III milestone payment fees otherwise due under Phase I through Phase III milestones when it submits milestone payment fee to LICENSORS for MARKET APPROVAL.

c) The milestones described above shall be deemed achieved if the objectives are met by LICENSEE or any SUBLICENSEE. Any amounts payable by LICENSEE hereunder may be assigned to, and payable by, a SUBLICENSEE.

# Exhibit A-4

# Permitted Assignment

- LICENSEE may assign this AGREEMENT as part of a sale or merger of substantially all of LICENSEE's business or assets, regardless of whether such a sale occurs through an asset sale, stock sale, merger or other combination, provided:
  - (a) LICENSEE provides written notice to LICENSORS at least thirty (30) days in advance of such assignment;
  - (b) The assignee agrees, in a writing delivered to LICENSORS, to be bound by all provisions of this AGREEMENT; and
  - (c) LICENSEE remits an assignment fee to LICENSORS (through JHU) equal to the greater of
    - twice the MAR applicable to the year when the assignment will be completed; OR
    - ii. one hundred thousand US dollars (USD \$100,000)

NDH - JHU Agreement A41090

25

# Exhibit A-6

# Table of LICENSED PATENTS

JHU ID	Title	Serial Number	File Date	Application Type	Country	Status
P14956-01	Mebendazole Prodrugs with Enhanced Solubility and Oral Bioavailability	62/627,810	2/8/2018	Provisional	US	Expired
P14956-02	Mebendazole Prodrugs with Enhanced Solubility and Oral Bioavailability	PCT/US2019/017291	2/8/2019	PCT	PCT-Parent	Expired
P14956-03	Mebendazole Prodrugs with Enhanced Solubility and Oral Bioavailability	16/967,924	8/6/2020	PCT	US	
P14956-04	MEBENDAZOLE PRODRUGS WITH ENHANCED SOLUBILITY AND ORAL BIOAVAILABILITY	2019216757	2/8/2019	PCT	Aus	
P14956-05	MEBENDAZOLE PRODRUGS WITH ENHANCED SOLUBILITY AND ORAL BIOAVAILABILITY	19751700.6	2/8/2019	PCT	ЕРО	
P14956-06	MEBENDAZOLE PRODRUGS WITH ENHANCED SOLUBILITY AND ORAL BIOAVAILABILITY	3,090,691	2/8/2019	PCT	Canada	

#### Exhibit B

#### **DEFINITIONS**

"AFFILIATE" means any corporation, licensee, partnership, joint venture or other entity, which controls, is controlled by or is under common control with LICENSEE, as evidenced by the direct or indirect ownership of at least 50% of voting rights governing the entity or the contractual power to control such rights.

"COMBINATION PRODUCT" means a collection or group of products sold together (such as in a kit or package) that contains (i) a LICENSED PRODUCT and (ii) one or more other functional products ("Other Products") that has been sold separately for use without the LICENSED PRODUCT and which is not essential to the use or practice of the LICENSED PRODUCT. For example, a diagnostic panel comprising a LICENSED PRODUCT and an independent diagnostic biomarker.

"COMPLETION" of a clinical trial milestone means receipt by the LICENSEE of TOP-LINE data for that trial.

"CONFIDENTIAL INFORMATION" means information disclosed by a party (the "Disclosing Party") to the other party (the "Receiving Party") in connection with performance of this AGREEMENT that (i) concern the LICENSED RIGHTS and has been maintained by the Disclosing Party as nonpublic or proprietary information, and (ii) is marked Confidential or otherwise expressly designated as Confidential. To be deemed CONFIDENTIAL INFORMATION, oral disclosures must (i) concern the LICENSED RIGHTS, have been maintained by the Disclosing Party as nonpublic or proprietary information, and be described in writing as confidential by the Disclosing Party within fourteen (14) days of disclosure to the Receiving Party. CONFIDENTIAL INFORMATION does not include information that (a) was already in the Receiving Party's possession before the disclosure by the Disclosing Party; (b) has been published or is later published, unless such publication is a breach of this AGREEMENT; (c) is received by the Receiving Party from a third party not under an obligation of confidentiality; or (d) is independently developed by the Receiving Party's employees who did not have access to CONFIDENTIAL INFORMATION.

"DISCOVERED PRODUCT" means a product, material, or service that is identified, selected or determined to have utility in whole or in part by the use of a LICENSED PRODUCT, including the use of a screening method or assay covered by the LICENSED RIGHTS.

"EXECUTION DATE" means the date that the last party to sign executes this AGREEMENT.

"FIELD OF USE" is defined in Exhibit A-1.

"FIRST COMMERCIAL SALE" means the first transfer by a LICENSEE to a third party for value of a LICENSED PRODUCT, with the exemption of materials transferred for use in a clinical trial at a nominal cost to the recipient.

"HUMANITARIAN PURPOSE" means practice of LICENSED RIGHTS in the prevention or treatment of disease in humans by or on behalf of any QUALIFIED HUMANITARIAN ORGANIZATION (including, for clarity, practice of LICENSED RIGHTS by contractors, manufactures or distributors acting for or on behalf of such QUALIFIED HUMANITARIAN ORGANIZATIONs on a fee-for-service, fee-for-product or charitable basis): (i) to manufacture

LICENSED PRODUCTS anywhere in the world for the sole and express purposes of distribution and use of such LICENSED PRODUCTS in one or more LEAST DEVELOPED COUNTRIES, and (ii) to sell or otherwise distribute LICENSED PRODUCTS for use solely in one or more LEAST DEVELOPED COUNTRIES; provided, however, that sales and distribution of LICENSED PRODUCTS shall not be deemed made for humanitarian purposes unless products are distributed at locally-affordable prices.

"INNOVATORS" means the individuals who invented, authored, or created the LICENSED RIGHTS as identified in in <a href="Exhibit A-1">Exhibit A-1</a>.

"INDEMNITEES" means IOCB, JHU, The Johns Hopkins Hospital, The Johns Hopkins Health System Corporation, and their affiliated entities, their present and former trustees, officers, INNOVATORS, agents, faculty, employees and students.

"LEAST DEVELOPED COUNTRY" means those jurisdictions so defined by the United Nations Country Classification in the most recent United Nations' publication "Statistical Annex."

"LICENSED DATA" means the data specified in <u>Exhibit A-1</u> that exists as of the <u>EFFECTIVE</u> DATE of this AGREEMENT.

"LICENSED KNOW-HOW" means the know-how described in Exhibit A-1 that exists as of the EFFECTIVE DATE of this AGREEMENT.

"LICENSED PARTIES" means LICENSEE, AFFILIATE, and/or SUBLICENSEE (as applicable).

"LICENSED PATENTS" means the patents and patent applications listed on Exhibit A-1, and includes any foreign patent applications sharing the same disclosure, and any divisional, continuation, or reexamination applications of the listed patents or applications, and every patent that issues or reissues from such applications.

"LICENSED PRODUCT" means any service, process, method, material, compositions, drug, or other product that (i) comprises, constitutes, or embodies the LICENSED RIGHTS, (ii) requires use or practice of the LICENSED RIGHTS by LICENSED PARTIES or their customers, or (iii) is a DISCOVERED PRODUCT.

"LICENSED RIGHTS" means all rights respecting LICENSED PATENTS, LICENSED DATA, and LICENSED KNOW-HOW granted to LICENSEE in Article 2 of this AGREEMENT.

"LICENSED TERRITORY" means the territory specified in Exhibit A.-1.

"MILESTONE" means a diligence milestone or event specified in Exhibit A-3.

"NET SALES REVENUE" means and includes the gross value of everything of value received by LICENSED PARTIES as consideration for the SALE of LICENSED PRODUCTS or COMBINATION PRODUCTS, including the fair market value of equity, intangible rights, services and other things of value directly provided in return for SALES except for SUBLICENSEE NON-ROYALTY CONSIDERATION, as that term is defined in <a href="Exhibit A-2">Exhibit A-2</a> of this AGREEMENT.

NET SALES REVENUE generated from COMBINATION PRODUCTS shall be determined with the formula: COMBINATION PRODUCT NET SALES REVENUE = NET SALES REVENUE\*C/(C+D), where C is the total gross invoice price of the LICENSED PRODUCT when sold separately and D is the total gross invoice price of the Other Product(s) when sold separately. In the event that no such separate sales are made of the LICENSED PRODUCT or Other Product in such COMBINATION PRODUCT during the royalty paying period in question,

NET SALES REVENUE, for the purposes of determining ROYALTY payments shall be calculated using the above formula where C is the commercial value of the LICENSED PRODUCT sold separately and D is the commercial value of the Other Product(s) active ingredients or components sold separately. Any such estimates shall be determined using criteria to be mutually agreed upon by the parties. Such estimates shall be reported to LICENSORS with the reports to be provided pursuant to Section 5.1 hereof. The term "Other Products" does not include solvent, diluents, excipients, buffers or the like used in formulating a product.

NET SALES REVENUE excludes the following items, provided they are separately invoiced to and paid by a purchaser of LICENSED PRODUCTS and thereafter paid or remitted by a LICENSED PARTY:

- import, export, excise and sales taxes, and custom duties;
- shipping charges and transportation from the place of manufacture to the customer's premises or point of installation;
- cash, trade or quantity discounts actually granted to end users;
- patient assistance and co-pay programs;
- sales rebates actually paid or credited to end users including managed care rebates and chargebacks; and
- allowances or credits to end users because of rejections or returns.

For clarity, NET SALES REVENUE shall not include SALES between LICENSED PARTY and its AFFILIATES or SUBLICENSES for the purpose of subsequent resale to a third party, but shall include SALES by AFFILIATES or SUBLICENSEES to Third Parties. In the event that the LICENSED PRODUCT is consumed, depleted or exhausted by the AFFILIATE or SUBLICENSEE, then such use shall be deemed a SALE.

"PATENT COSTS" means all costs of prosecuting and maintaining any LICENSED PATENT, including reasonable attorneys' fees and expenses, and fees for patent filing(s), maintenance, annuities, translation, and defense against claims of infringement or invalidity, including fees and costs incurred in administrative proceedings or disputes pursuant to the America Invents Act of 2011 (such as an Inter Partes Review, Post Grant Review or Derivation Proceedings before the U.S. Patent Trial and Appeal Board), incurred by LICENSORS. PATENT COSTS excludes PAST PATENT COSTS.

"PAST PATENT COSTS" means all PATENT COSTS that are incurred by LICENSORS prior to the EXECUTION DATE of this AGREEMENT and are able to be billed to LICENSEE on the EXECUTION DATE. For the avoidance of doubt, those PATENT COSTS incurred before the EXECUTION DATE but not available for billing until after the EXECUTION DATE will be billed as PATENT COSTS.

"PATENT RIGHTS" means the rights granted to LICENSEE in respect of the LICENSED PATENTS (and subject to the rights reserved or maintained by LICENSORS).

"QUALIFIED HUMANITARIAN ORGANIZATION" means any governmental agency, non-governmental agency or other not-for-profit organization that has as one of its bona fide missions to address the public health needs of underserved populations on a not-for-profit basis. For clarity, QUALIFIED HUMANITARIAN ORGANIZATIONS do not include non-governmental agencies

and not-for-profit organizations that are formed or established for the benefit of any for-profit entity.

"REGISTRATIONAL CLINICAL TRIAL" means, with respect to a given Product, either: (a) a Phase III Clinical Trial with such Product; or (b) a Phase IIb Clinical Trial that, at the time of commencement, is expected to be the basis for initial Regulatory Approval of such Product.

"ROYALTIES" means payments owed to LICENSORS in consideration of the rights granted to LICENSED PARTIES under this AGREEMENT that are determined as a percentage of NET SALES REVENUE as explicitly set forth in <a href="Exhibit A-2">Exhibit A-2</a> of this AGREEMENT.

"SALE" means a sale, license, lease, performance, transfer, delivery, contract to provide, or other disposition or conveyance for value of a LICENSED PRODUCT.

"SUBLICENSE" means an agreement in which LICENSEE (i) grants or otherwise transfers any of the LICENSED RIGHTS, (ii) agrees not to assert or seek a legal remedy for the practice of LICENSED RIGHTS, or (iii) creates an obligation to grant, assign or transfer any LICENSED RIGHTS to any other entity (other than an AFFILIATE).

"SUBLICENSEE" means any person or entity to which LICENSEE has granted a SUBLICENSE under this AGREEMENT.

"SUBLICENSE NON-ROYALTY CONSIDERATION" is defined in  $\underline{\text{Exhibit A-2}}$  of this AGREEMENT.

"TOP-LINE DATA" means, with respect to a clinical study, a summary of patient demographic data, data for the primary endpoint, and safety data derived from the unblinded, locked clinical trial database.

"VALID CLAIM" means (i) any claim of an issued and unexpired patent within the LICENSED PATENTS that has not been (a) conclusively revoked or held unenforceable, unpatentable or invalid by a competent court or tribunal and which is unappealable or unappealed in the time allowed for appeal, and (b) irrevocably disclaimed, cancelled, withdrawn or abandoned or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise; or (ii) a pending claim of a pending patent application within the LICENSED PATENTS.

# Exhibit C

Quarterly Sales and Royalty Report

#### LICENSEE LETTERHEAD

QUARTERLY SALES & ROYALTY REPORT FOR LICENSE AGREEMENT BETWEEN THE JOHNS HOPKINS UNIVERSITY AND LICENSEE NAME

JHU Agreeme	at No.:_AXX	0000			,	Effective Date						
JHU Technolo	gy Case No	s::_CXXXXX	:			(please includ	e all JHU licensed	cases)				
Period:	From		То		]	Calendar Qu	rarter:		1			
TOTAL ROYA	LTIES DUE	FOR THIS PE	ERIOD:	: -	]				•			
If the licenses gra	nted in the Agr	eement cover se	everal product/serv	ice lines, please	prepare a	separate summary	report for each L	ICENSED PRODU	CT/LICEN:	SED SERV	ICF line	
								l prepare a separate re			TOL IIIC	
Report Type:			nsed Service Summ						yany chart.			
(Please indicate)	Trademark of	Licensed Produ	uct or Licensed Serv	rice Summary F	leport (Spe	cife which, prepar	e chart for both a	s appropriate)				
			ti-Licensed Service									
Mandatory Pr	ovisions:											
Product ID	Product Name	JHU Case Nos.	First Commercial Sale Date	Country	Units Sold	Gross Sales	*Less Allowances	Any Apportionment taken	Net Sales	Royalty Rate	Conversion Rate (to USD)	Period Royalty Amount (USD)
					-	-			0.00		1.0000	0.00
									0.00		1.0000	0.00
-									0.00	_	1.0000	0.00
									0.00		1,0000	0.00
TOTAL					0.00	0.00	0.00	cted royalty payment a	0.00			0.00
Certification:	O sumber i:	s needed on .	JHTY invoice:		t forth abo		Order No.:	ts all of the reporting r	equirements ;	set forth in th	e Agreement.	
Fitle:				_								
Date:				_								
Contact Inform	eton:											
elephone No.												
mail:												

NDH - JHU Agreement A41090

31

# Exhibit D

# Diligence and Annual Report

LICENSEE Name:
JHU Agreement Number:A41090
JHU Reference Number(s) C14956,,,
Reporting Period: From To
A description of progress by LICENSED PARTIES toward commercialization of LICENSED PRODUCTS, including work completed, key scientific discoveries, summary of work-in-progress, current schedule of anticipated events or MILESTONES, market plans (if any), significant corporate transactions and documents sufficient to evidence each.
A description and documentation of all FDA or other governmental filings and/or approvals regarding any LICENSED PRODUCT or LICENSED RIGHTS.
Certificate of Insurance or other evidence of insurance
is attached
Identification of all LICENSED PARTIES (AFFILIATE and SUBLICENSEE):
NONEList attached with description of rights exercised.
SUBLICENSE(s) entered during the year:
NONE (copy of each SUBLICENSE attached)
A description of any Material Event (e.g., change of control, name change or other significant change related to this AGREEMENT or LICENSEE:
NONE
Details:

# SEND DILIGENCE AND ANNUAL DILIGENCE REPORT TO:

<u>Via mail or private mail carrier:</u> <u>Via email (Preferred):</u>

Johns Hopkins Technology Ventures Expect Auto-Reply
The Johns Hopkins University No Auto-Reply?

1812 Ashland Avenue, Suite 110 Contact:

Baltimore, MD 21205 Marlene Moore at

Telephone for overnight courier: 410-614-0300 <u>mmoore26@jhmi.edu</u> or 410-614-0300

Interested in reporting via our Licensee Reporting Portal? Contact us at  $\underline{JHTVReports@JHU.edu}$  to request details about this reporting option.

NDH - JHU Agreement A41090

33

#### Exhibit E

#### **Required Insurance Coverages**

- Assumption of Liability. LICENSEE hereby assumes full liability for any and all lawsuits, claims, demands, judgments, costs, fees (including attorney's fees), expenses, injuries or losses arising from or relating to its use of the LICENSED PRODUCTS.
- 2. Insurance. LICENSEE will obtain and maintain Comprehensive General Liability Insurance with a reputable and financially secure insurance carrier acceptable to LICENSORS. Prior to initial human testing or FIRST COMMERCIAL SALE of any LICENSED PRODUCT, LICENSEE will obtain and maintain in addition to the Comprehensive General Liability Insurance, Product Liability Insurance with a reputable and financially secure insurance carrier acceptable to LICENSORS, to cover any liability arising from or relating to the LICENSED PRODUCTS. The insurance policy shall provide minimum coverage in the amounts and subject to the provisions below.
- General. LICENSEE shall obtain and maintain, in full force and effect and at LICENSEE's sole cost and expense insurance policies providing:
  - a) Commercial general liability insurance (including coverage and any necessary endorsements for products /completed operations as well as for clinical trials if any such trials are to be performed by or on behalf of LICENSEE) which provides, for each annual policy period, coverage of no less than the minimum limits specified below for injury, death and property damage resulting from each occurrence during the policy period; and
  - b) If required by law, worker's compensation insurance.
- 4. Initial Policy Limits. The commercial general liability and products liability coverages shall have the following minimum limits:
  - a) Commercial general liability: one million dollars (\$1,000,000) each occurrence, two million dollars (\$2,000,000) general aggregate. LICENSEE shall have thirty (30) days following the Effective Date to obtain such coverage.
  - b) Products liability: From the date immediately prior to initial human testing or first Commercial SALE: \$5,000,000 per claim and \$10,000,000 in the aggregate.
  - c) LICENSORS may periodically evaluate the adequacy of the minimum coverage of insurance and coverage limits specified in this AGREEMENT. LICENSORS reserve the right to require LICENSEE to adjust the insurance coverage by modifying the types of required coverages, the limits and/or financial rating and/or the method of financial rating of LICENSEE's insurers as such changes are required of LICENSORS by its insurance carrier. LICENSORS shall provide LICENSEE with reasonable notice, contingent on LICENSORS receiving timely notice from its insurance carrier, of any proposed modification, and, if so requested by LICENSEE, discuss any proposed modifications in good faith.
- 5. Policy Requirements. Each policy of insurance required by this AGREEMENT shall:
  - a) be issued by reputable and financially secure insurance carriers having at least an A- rating (A- rating or above by A.M. Best) and an A.M. Best Class Size of at least VIII,
  - b) list each of JHU and IOCB, its trustees, officers, employees, faculty, staff, students, agents

- and their successors, heirs and assigns as additional insureds,
- be endorsed to provide that the insurer waives all subrogation rights it has or may have against any additional insured, and
- d) be primary in respect of all additional insureds.
- 6. Evidence of Insurance. LICENSEE shall provide LICENSORS with a Certificate of Insurance from each such insurer which evidences compliance by LICENSEE with its obligations under this AGREEMENT. Upon the request of LICENSORS, LICENSEE shall provide LICENSORS with a copy of the policy, status of claims and claims history respecting any of the insurance required to be maintained by LICENSEE under this AGREEMENT. Further, LICENSEE will not cancel or fail to renew the identified insurance without giving LICENSORS at least thirty (30) days' prior written notice of such cancellation.
- 7. **Primary Coverage**. All insurance of LICENSEE will be primary coverage; other insurance of LICENSORS and LICENSORS Indemnities will be excess and noncontributory.
- 8. Clarifications. For the avoidance of doubt, the minimum insurance coverage and limits set forth in this AGREEMENT do not constitute a limitation on LICENSEE's liability or obligations to indemnify or defend JHU, IOCB and the INDEMNITEES and any other additional insured under this AGREEMENT.

# Exhibit F

# LICENSED DATA and LICENSED KNOW-HOW

# 1. LICENSED KNOW-HOW

a. Zimmermann, Sarah C., Tomáš Tichý, Jan Vávra, Ranjeet P. Dash, C. Ethan Slusher, Alexandra J. Gadiano, Ying Wu et al. "N-substituted prodrugs of mebendazole provide improved aqueous solubility and oral bioavailability in mice and dogs." Journal of medicinal chemistry 61, no. 9 (2018): 3918-3929.

# 2. LICENSED DATA

a. Mice and Dog Raw Data (unpublished from under the LICENSED KNOW-HOW)

# PLASMA DATA (MICE PO 30 MG/KG EQ.)

Time	MB	MBZ-C (nmol/ml)			from 12 (nm	ol/ml)
0	0	0	0	0	0	0
0.25	1.38	1.38	2.28	6.67	12.62	7.88
0.5	3.50	2.65	3.80	11.52	13.21	11.93
1	5.11	3.83	4.60	10.04	5.81	8.60
2	6.86	3.81	3.27	6.36	4.56	5.78
4	2.13	0.73	1.67	3.19	0.88	2.00

# BRAIN DATA (MICE PO 30 MG/KG EQ)

Time	ME	Z-C (nmo	ol/g)	MBZ	from 12 (nn	nol/g)
0	0	0	0	0	0	0
0.25	1.25	1.05	1.91	5.26	13.30	7.42
0.5	3.35	2.60	2.98	7.66	12.58	9.72
1	6.55	4.08	4.54	11.48	4.70	10.44
2	6.38	3.84	2.77	6.27	3.95	4.88
4	1.84	0.68	1.41	2.94	0.64	1.75

# DOG PLASMA (2.5 MG/KG EQ. PO)

Time	MBZ-C (	MBZ-C (nmol/ml)		rom 12 ol/ml)
0	0.0000	0.0000	0.000	0.000
0.25	0.1508	0.0154	0.146	0.000
0.5	0.2105	0.1881	0.724	0.250
1	0.1593	0.1827	0.780	0.546
2	0.1214	0.2884	0.762	0.661
4	0.0335	0.0774	0.236	0.203
8	0.0314	0.0376	0.323	0.243
24*	0*	0*	0.000	0.007
36*	0*	0*	0.000	0.000

# b. IV Data (unpublished from under the LICENSED KNOW-HOW)

# i. IV Dog

Time	MBZ-IV	MBZ-IV
0.083	1.562798	2.858353
0.25	0.690514	1.193216
0.5	0.237631	0.359207
1	0.120616	0.146884
2	0.053565	0.097301
4	0.005183	0.011457

# ii. IV Mebendazole for Paper

Time	Mebendazole	Mebendazole	Mebendazole
0.083	5.56876	5.432974	5.047787
0.25	2.724143	2.687431	2.422323
0.5	1.259677	1.630273	1.112107
1	0.644938	0.622942	0.546684
3	0.102447	0.080894	0.124288

# BULLFROG AI HOLDINGS, INC. CODE OF BUSINESS CONDUCT AND ETHICS

### 1. <u>Introduction</u>.

The Board of Directors of Bullfrog AI Holdings, Inc. (together with its subsidiaries, the "Company") has adopted this Code of Business Conduct and Ethics (the "Code") in order to:

- promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest;
- promote full, fair, accurate, timely and understandable disclosure in reports and documents that the Company files with, or submits to, the Securities and Exchange Commission (the "SEC") and in other public communications made by the Company;
- promote compliance with applicable governmental laws, rules and regulations;
- promote the protection of Company assets, including corporate opportunities and confidential information;
- promote fair dealing practices;
- deter wrongdoing; and
- ensure accountability for adherence to the Code.

No written code can possibly anticipate and address all potential situations one may face in the course of business. This Code therefore should be used as a guideline rather than as a checklist when performing your job or acting on behalf of the Company. When the law or this Code is not specific on a particular issue, the Company expects each employee to use common sense and good judgment in effecting the spirit of the law and this Code.

All directors, officers and employees are required to be familiar with the Code, comply with its provisions and report any suspected violations as described below in Section 17, *Reporting and Investigation of Violations*. The Company also expects consultants, business partners and anyone who works on the Company's behalf to share the Company's commitment to the principles articulated in this Code when providing goods and services to, or working with, the Company or acting on its behalf.

#### Honest and Ethical Conduct.

The Company's policy is to promote high standards of integrity by conducting its affairs honestly and ethically.

Each director, officer and employee must act with integrity and observe the highest ethical standards of business conduct in his or her dealings with the Company's customers, suppliers, partners, service providers, competitors, employees and anyone else with whom he or she has contact in the course of performing his or her job.

#### 3. Conflicts of Interest.

A conflict of interest occurs when an individual's private interest (or the interest of a member of his or her family) interferes, or even appears to interfere, with the interests of the Company as a whole. A conflict of interest can arise when an employee, officer or director (or a member of his or her family) takes actions or has interests that may make it difficult to perform his or her work for the Company objectively and effectively. Conflicts of interest also arise when an employee, officer or director (or a member of his or her family) receives improper personal benefits (e.g., bribes or other inducements) as a result of his or her position in the Company. These could include direct payments or gifts, payments or other compensation for favorable purchasing, employment or other decisions, outside employment or interests in a competitor, vendor or customer or the like.

Loans by the Company to, or guarantees by the Company of obligations of, employees or their family members are of special concern and could constitute improper personal benefits to the recipients of such loans or guarantees, depending on the facts and circumstances. Loans by the Company to, or guarantees by the Company of obligations of, any director or officer or their family members are expressly prohibited.

Whether or not a conflict of interest exists or will exist can be unclear. Conflicts of interest should be avoided unless specifically authorized as described herein.

Persons other than directors and executive officers who have questions about a potential conflict of interest or who become aware of an actual or potential conflict should discuss the matter with, and seek a determination and prior authorization or approval from, their supervisor, the Chief Executive Officer or Chief Financial Officer. A supervisor may not authorize or approve conflict of interest matters or make determinations as to whether a problematic conflict of interest exists without first providing the Chief Executive Officer or Chief Financial Officer with a written description of the activity and seeking the Chief Executive Officer or Chief Financial Officer's written approval. If the supervisor is himself involved in the potential or actual conflict, the matter should instead be discussed directly with the Chief Executive Officer or Chief Financial Officer.

Directors and executive officers must seek determinations and prior authorizations or approvals of potential conflicts of interest exclusively from the Audit Committee.

# 4. Compliance.

Employees, officers and directors should comply, both in letter and spirit, with all applicable laws, rules and regulations in the cities, states and countries in which the Company operates.

Although not all employees, officers and directors are expected to know the details of all applicable laws, rules and regulations, it is important to know enough to determine when to seek advice from appropriate personnel. Questions about compliance should be addressed to the Chief Executive Officer or General Counsel, if there is one.

No director, officer or employee may purchase or sell any Company securities while in possession of material nonpublic information regarding the Company, nor may any director, officer or employee purchase or sell another company's securities while in possession of material nonpublic information regarding that company. Information is "material" if a reasonable investor would consider it important in deciding whether to buy or sell a company's securities. Examples of material information may include: mergers and acquisitions, other significant transactions, financial performance, changes in executive management, and cybersecurity incidents. Information is "non-public" if it has not been broadly communicated to the investing public. It is against Company policies and illegal for any director, officer or employee to use material nonpublic information regarding the Company or any other company to:

- obtain profit for himself or herself; or
- directly or indirectly "tip" others who might make an investment decision on the basis of that information.

Your responsibilities, including restrictions on trading in the Company's securities, are described in more detail in the Company's Insider Trading Policy.

#### 5. Disclosure.

The Company's periodic reports and other documents filed with the SEC, including all financial statements and other financial information, must comply with

The integrity of the Company's financial transactions and records is critical to the operation of our business and is a key factor in maintaining the confidence and trust of our employees, security holders, and other stakeholders. Each director, officer and employee who contributes in any way to the preparation or verification of the Company's financial statements and other financial information must ensure that the Company's books, records and accounts are accurately maintained. Each director, officer and employee must cooperate fully with the Company's accounting and internal audit departments, as well as the Company's independent public accountants and counsel.

Each director, officer and employee who is involved in the Company's disclosure process must:

- be familiar with and comply with the Company's disclosure controls and procedures and its internal control over financial reporting;
- · should seek to ensure that the internal controls and procedures in your business area are in place, understood, and followed; and
- take all necessary steps to ensure that all filings with the SEC and all other public communications about the financial and business condition of the Company provide full, fair, accurate, timely and understandable disclosure.

Even if a director or officer is not directly involved in financial reporting or accounting, he or she is likely involved with financial records or reports of some kind — time sheet, invoice, or expense reports. In addition, most employees have involvement with product, marketing, or activities that can affect our reported financial condition or results. Therefore, the Company expects employees, regardless of whether they are otherwise required to be familiar with finance or accounting matters, to use all reasonable efforts to ensure that every business record or report with which they deal is accurate, complete, and reliable.

#### 6. Investor Relations, Media and Public Inquiries.

Dissemination of accurate and consistent information about the Company is important to the overall commitment of the Company to be forthright and honest in its disclosures to the public. The Company has designated specific Company personnel to address public inquiries received from the media, investors, analysts and the general public. All such inquiries should be directed to the Chief Financial Officer.

#### 7. Protection and Proper Use of Company Assets.

All directors, officers and employees should protect the Company's assets and ensure their efficient use. Theft, carelessness and waste have a direct impact on the Company's profitability and are prohibited.

All Company assets should be used only for legitimate business purposes. Any suspected incident of fraud or theft should be reported for investigation immediately.

The obligation to protect Company assets includes the Company's proprietary information. Proprietary information includes intellectual property such as trade secrets, patents, trademarks, and copyrights, as well as business and marketing plans, engineering and manufacturing ideas, designs, databases, records and any nonpublic financial data or reports. Unauthorized use or distribution of this information is prohibited and could also be illegal and result in civil or criminal penalties.

#### Corporate Opportunities.

All directors, officers and employees owe a duty to the Company to advance its interests when the opportunity arises. Directors, officers and employees are prohibited from taking for themselves personally (or for the benefit of friends or family members) opportunities that are discovered through the use of Company assets, property, information or position. Directors, officers and employees may not use Company assets, property, information or position for personal gain (including gain of friends or family members). In addition, no director, officer or employee may compete with the Company.

3

#### 9. Competition and Fair Dealing.

The Company believes in promoting competitive advantage through superior performance and service, rather than through unethical or illegal business practices. All directors, officers and employees are expected to endeavor to respect the rights of and deal fairly with the Company's customers, suppliers, competitors and employees. No person representing the Company should take unfair advantage of another through manipulation, concealment, abuse of privileged information, misrepresentation of material facts, or any other intentional unfair-dealing practices.

### 10. Privacy.

The Company is committed to protecting the confidential, proprietary, and private information of its employees, customers, partners, and others with whom the Company does business, including the financial and operational information of its customers submitted in connection with use of the Company's services. The Company respects and safeguards the private information and intellectual property entrusted to it by its employees, customers, and third parties, using it only for legitimate business purposes and in accordance with all applicable laws and governing contracts.

### 11. Participation in the Political Process.

The Company encourages its employees to actively participate in the political process. However, you may not engage in any political activities during Company time or use Company resources in furtherance of any political activity, without the approval of senior management. When expressing an individual political viewpoint or making a political contribution, you must make it very clear that you do not represent the Company, you are not acting on behalf of the Company, and you should not identify your relationship with the Company unless expressly directed and authorized by senior management to do so.

#### 12. Workplace Safety.

The Company is committed to providing a safe work environment for everyone, including employees, customers and visitors. You are required to practice safe work habits and follow all applicable safety, security and health rules and practices. Do your part by identifying, reporting and escalating safety issues that you learn of or suspect so that we can strengthen our approach to workplace safety.

#### 13. Discrimination and Harassment.

The Company values the diversity of its employees and partners. Harassment or discrimination by any employee, director, or consultant based on race, color, creed, gender, sexual orientation, gender identity, religion, national origin, disability, familial status, or any other protected status is strictly prohibited.

#### 14. Human Trafficking and Forced Labor.

The Company has zero tolerance for forced labor, human trafficking, and slavery. Employees, directors, and consultants are required to comply with applicable laws concerning equal opportunities, child labor, forced labor, human trafficking, working hours, freedom of association, and fair wages. Employees, directors, and consultants are prohibited from engaging in human trafficking and slavery and from using forced labor.

4

#### 15. Health and Safety.

The Company's expectation is that no person and no property is injured in the workplace. This means that everyone must constantly strive to achieve zero injuries and work-related illnesses. To prevent workplace injury and illness, everyone must:

- Follow all applicable safety laws and regulations.
- Comply with Company policies and the safety procedures in the Company's local facilities.
- Conduct themselves in a safe manner.
- Take all reasonable precautions when handling toxic or other unsafe materials, as well as when operating machinery and equipment.

#### 16. Confidentiality.

Directors, officers and employees should maintain the confidentiality of information entrusted to them by the Company or by its customers, suppliers or partners, except when disclosure is expressly authorized or is required or permitted by law. Confidential information includes all nonpublic information (regardless of its source) that might be of use to the Company's competitors or harmful to the Company or its customers, suppliers or partners if disclosed.

#### 17. Reporting and Investigation of Violations.

Actions prohibited by this Code involving directors or executive officers must be reported to the Board of Directors.

Actions prohibited by this Code involving anyone other than a director or executive officer must be reported to the reporting person's supervisor, the Chief Executive Officer or the Chief Financial Officer.

After receiving a report of an alleged prohibited action, the Board of Directors, the relevant supervisor, the Chief Executive Officer or the Chief Financial Officer must promptly take all appropriate actions necessary to investigate.

All reports may be made confidentiality and anonymously.

All directors, officers and employees are expected to cooperate in any internal investigation of misconduct.

#### 18. Enforcement.

The Company must ensure prompt and consistent action against violations of this Code.

If, after investigating a report of an alleged prohibited action by any other person, the relevant supervisor, the Chief Executive Officer or the Chief Financial Officer determines that a violation of this Code has occurred, the relevant supervisor, the Chief Executive Officer or the Chief Financial Officer will report such determination to the Board of Directors.

Upon receipt of a determination that there has been a violation of this Code, the Board of Directors or the General Counsel, if there is one, will take such preventative or disciplinary action as it deems appropriate, including, but not limited to, reassignment, demotion, dismissal and, in the event of criminal conduct or other serious violations of the law, notification of appropriate governmental authorities.

### 19. Waivers.

The Board of Directors (in the case of a violation by a director or executive officer) and the Chief Executive Officer of the General Counsel if there is one, (in the case of a violation by any other person) may, in its discretion, waive any violation of this Code.

Any waiver for a director or an executive officer shall be disclosed as required by SEC and NASDAQ rules.

# 20. Prohibition on Retaliation.

The Company does not tolerate acts of retaliation against any director, officer or employee who makes a good faith report of known or suspected acts of misconduct or other violations of this Code.

# <u>List of Subsidiaries of Norwegian Cruise Line Holdings Ltd.</u>

Name of Subsidiary	Jurisdiction of Incorporation or Organization	
BullFrog AI, Inc	Nevada	
BullFrog Management, LLC	Nevada	



# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the inclusion in this Registration Statement on Form S-1/A of our report dated June 10, 2022, of Bullfrog AI Holdings, Inc. relating to the audit of the financial statements for the period ended December 31, 2021 and 2020 and the reference to our firm under the caption "Experts" in the Registration Statement.

/s/ M&K CPAS, PLLC		
www.mkacpas.com Houston, Texas		
December 8, 2022		