AS CONFIDENTIALLY SUBMITTED TO THE SECURITIES AND EXCHANGE COMMISSION ON AUGUST 15, 2022. THIS DRAFT REGISTRATION STATEMENT HAS NOT BEEN PUBLICLY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION AND ALL INFORMATION HEREIN REMAINS CONFIDENTIAL

Registration No. 333-

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## Amendment No. 1 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

(State or other Jurisdiction of Incorporation or Organization)

(Primary Standard Industrial Classification Code Number) 84-4786155 (I.R.S. Employer

Identification No.)

323 Ellington Blvd, Unit 317 Gaithersburg, MD 20878 Tel. (240) 658-6710

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Vininder Singh Chief Executive Officer Bullfrog AI Holdings, Inc. 325 Ellington Blvd., Unit 317 Gaithersburg, MD 20878 Tel: (240) 658-6710

(Name, address, including 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 Ross David Carmel, Esq. Jeffrey P. Wolford, Esq. Carmel, Milazzo & Feil LLP 55 West 39<sup>th</sup> Street New York, NY 10018 Telephone: (212) 658-0458 Facsimile: (646) 838-1314

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. 🗵

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  $\Box$ 

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  $\Box$ 

Indicate by a check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.:

Large Accelerated Filer  $\Box$ Non-Accelerated Filer  $\boxtimes$  Accelerated Filer  $\Box$ Smaller Reporting Company  $\boxtimes$ Emerging Growth Company  $\boxtimes$ 

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

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.

## EXPLANATORY NOTE

This Registration Statement contains two forms of prospectuses: one to be used in connection with the initial public offering of up to 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 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 , 2022

Shares of Common Stock

## BULLFROG AI HOLDINGS, Inc.

This is a firm commitment initial public offering of shares of common stock of Bullfrog AI Holdings, Inc. (the "Company", "we", "us", "our"). No public market currently exists for our shares. We anticipate that the initial public offering price of our shares will be \$ per share.

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 "BFAI." No assurance can be given that our application will be approved. The consummation of this offering is conditioned on obtaining Nasdaq approval.

Upon the completion of this offering, Mr. Vininder Singh, our Chief Executive Officer and a director, will beneficially own approximately [\*]% of the Company's common stock (approximately [\*]% if the over-allotment option is exercised) and we will be a "controlled company" within the meaning of the listing rules of The Nasdaq Stock Market LLC.

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 registration statement of which this prospectus forms a part also relates to the registration for resale of an aggregate of [ ] 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 common stock.

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 Share	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 acquire up to an additional 15% of the total number of securities sold in this offering, and each of the components thereof, separately or on one or more occasion, solely for the purpose of cover over-allotments.

, 2022.

## WALLACHBETH CAPITAL LLC

## VIEWTRADE SECURITIES, INC.

The date of this prospectus is , 2022

## TABLE OF CONTENTS

PROSPECTUS SUMMARY	1
<u>THE OFFERING</u>	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
CAPITALIZATION	23
DILUTION	24
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	28
DESCRIPTION OF BUSINESS	32
MANAGEMENT	48
EXECUTIVE COMPENSATION	50
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS	51
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	53
DESCRIPTION OF CAPITAL STOCK	54
SHARES ELIGIBLE FOR FUTURE SALE	56
UNDERWRITING	57
DETERMINATION OF OFFERING PRICE	61
EXPERTS	61
LEGAL MATTERS	61
WHERE YOU CAN FIND ADDITIONAL INFORMATION	62
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 common stock, 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 are an artificial intelligence-driven biotechnology company 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.

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 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.

We believe bfLEAP<sup>TM</sup> 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 mitigate risk and 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.

1

• 3. Clinical Development - Advanced/multivariate analysis of PhI 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 and increase the odds-of-success 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 bfLEAP™ 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. 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 mitigate risk in developing a drug or 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:

## **Contract Services**

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

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.

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.

## 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.

## **Controlled Company**

Upon the completion of this offering, Mr. Vininder Singh, our Chief Executive Officer and a director will beneficially own approximately [\*]% of the Company's common stock (approximately [\*]% if the over-allotment option is exercised) and we will be a "controlled company" within the meaning of the listing rules of The Nasdaq Stock Market LLC.

As long as our officers and directors, either individually or in the aggregate, own at least 50% of the voting power of our Company, we are a "controlled company" as defined under Nasdaq Marketplace Rules.

For so as we are a controlled company under that definition, we are permitted to rely on certain exemptions from corporate governance rules, including:

• an exemption from the rule that a majority of our board of directors must be independent directors;

• an exemption from the rule that the compensation of our chief executive officer must be determined or recommended solely by independent directors; and

• an exemption from the rule that our director nominees must be selected or recommended solely by independent directors.

Although we do not intend to rely on the "controlled company" exemption under the Nasdaq listing rules, we could elect to rely on this exemption in the future. If we elect to rely on the "controlled company" exemption, a majority of the members of our board of directors might not be independent directors and our nominating and corporate governance and compensation committees might not consist entirely of independent directors.

As a result, you will not have the same protection afforded to shareholders of companies that are subject to these corporate governance requirements.

#### **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.

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 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

#### **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.

#### **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 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."

Common Stock offered by us	shares
Common Stock outstanding before this offering:	shares
Common Stock to be outstanding immediately after this offering:	shares(1)
Offering Price	\$ per share

Option to purchase additional We have granted the underwriters an option, exercisable within 45 days after the closing of the offering to acquire up to an additional 15% of the total number of securities to be sold in this offering, and each of the components thereof, separately on one or more occasion, solely for the purpose of covering over-allotments.

6

Use of proceeds:	We expect to receive approximately \$ in net proceeds from the sale of our shares offered by us in this offering (approximately \$ 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 from this offering to [*].			
	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 common stock 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 common stock.			
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 "BFAI". No assurance can be given that our application will be approved. 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 57.]			
(1) Based on [ ] shares	of common stock issued and outstanding as of [ ], 2022.			
Unless otherwise indicated,	the information in this prospectus assumes:			
$\Box$ A public offering price of \$	per share of common stock;			
$\Box$ No exercise by the underwr	iter of its option to purchase additional shares of common stock to cover over-allotments, if any;			
$\Box$ No exercise of the underwrite	ter's warrants;			
□shares of common sto	bek sold in this offering; and			
<ul> <li>Outstanding warrants to put</li> </ul>	rchase [ ] shares of common stock at \$[ ] per share which expire on [ ].			
	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 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**

For the year ended	For the year ende	
December 31, 2021	December 31, 2020	

Revenues		\$	-	\$ -
Net income (loss)		\$	(585,840)	\$ (341,690)
Net income (loss) per share		\$	(0.02)	\$ (0.01)
Weighted average number of shares			26,145,503	24,803,210
Balance Sheet Data				
		Dec	As of ember 31, 2021	 Pro Forma as Adjusted for December 31, 2021
Cash		\$	10,014	\$ 5,019
Total assets		\$	10,014	\$ 5,019
Total liabilities		\$	1,019,121	\$ 545,537
Total stockholder's equity (deficit)		\$	(1,009,107)	\$ (540,518)
	7			

## **RISK FACTORS**

An investment in our common stock is highly speculative and involves a high degree of risk. In determining whether to purchase the Company's common stock, 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 complexity of our technology and] 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.

## 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 for 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 its drug ca

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 extensively outsource our clinical trial activities and usually perform only a small portion of the start-up activities in-house.

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 productsts. 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;

- 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 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. There can be no assurance that these agreements will adequately protect our 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 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, 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 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 Common Stock and this Offering

## 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. 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.

#### An active trading market for our common stock 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. An active trading market for shares of our common stock 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 at an attractive price, or at

all. The price for our common stock 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 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.

### 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 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 outstanding shares of common stock. Of these shares, assuming no shares are purchased in this offering by our existing stockholders, 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 twelve-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 shares will be eligible for sale in the public market. In addition, upon issuance, the shares reserved for future issuance under our 2022 Equity Incentive Plan]will 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 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.

#### Investors in this offering will pay a higher price than the book value of our common stock.

If you purchase our common stock in this offering, you will pay more for your shares than the amounts paid by our existing stockholder for its shares. You will incur immediate and substantial dilution of \$\_\_\_\_\_ per share, representing the difference between our pro forma net tangible book value per share after giving effect to this offering and the initial public offering price of \$\_\_\_\_\_ per share. In the past, we issued restricted stock at prices significantly below the initial public offering price.

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.

When our common stock is 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, our common stock 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 from Nasdaq may materially impair our stockholders' ability to buy and sell our common stock and could have an adverse effect on the market price of, and the efficiency of the trading market for, our common stock. In addition, the delisting of our common stock 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 nonconvertible 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.

## As a "controlled company" under the rules of the Nasdaq Capital Market, we may choose to exempt our company from certain corporate governance requirements that

#### could have an adverse effect on our public shareholders.

Upon the completion of this offering, Mr. Vininder Singh, our Chief Executive Officer and a director will beneficially own approximately [\*]% of the Company's common stock (approximately [\*]% if the over-allotment option is exercised) and we will be a "controlled company" within the meaning of the listing rules of The Nasdaq Stock Market LLC.

As long as our officers and directors, either individually or in the aggregate, own at least 50% of the voting power of our Company, we are a "controlled company" as defined under Nasdaq Marketplace Rules.

For so as we are a controlled company under that definition, we are permitted to rely on certain exemptions from corporate governance rules, including:

- an exemption from the rule that a majority of our board of directors must be independent directors;
- an exemption from the rule that the compensation of our chief executive officer must be determined or recommended solely by independent directors; and
- an exemption from the rule that our director nominees must be selected or recommended solely by independent directors.

Although we do not intend to rely on the "controlled company" exemption under the Nasdaq listing rules, we could elect to rely on this exemption in the future. If we elect to rely on the "controlled company" exemption, a majority of the members of our board of directors might not be independent directors and our nominating and corporate governance and compensation committees might not consist entirely of independent directors.

As a result, you will not have the same protection afforded to shareholders of companies that are subject to these corporate governance requirements.

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," "predict," "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 \$, or approximately \$if the underwriters exercise their option to purchase additional shares in full, assuming an initial public offering price of \$ per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses of approximately \$ , in the aggregate.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ \_\_\_\_\_ per share of common stock would increase (decrease) the net proceeds to us by approximately \$ \_\_\_\_\_, 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 \$\_\_\_\_\_, 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 to build out our leadership, technical and commercial teams, fund our clinical trials, invest in research and development, including in our

technology, and for working capital and general corporate purposes. We intend to use the proceeds to establish an appropriate control environment to support SEC reporting compliance, initiate a focused sales and market program to expand our client base for our contract service business, begin seeking to appropriate large Pharma development partners for our in-house programs as well as collaborations with Pharma related to collaborators' own in-house development programs. We also anticipate utilizing approximately 1/3 of the proceeds to initiate development activities on the newly licensed drug programs. Our objective is to initiate regulatory and preclinical activities resulting in Investigational New Drug Applications for our Mebendazole and siRNA programs as well as the initiation of clinical activity with Mebendazole in at least one indication. Additionally, we anticipate that we will continue to work internally and with JHU-APL on platform enhancements.

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 57.

## 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 and cash equivalents as of December 31, 2021:

- on an actual basis;
- on an adjusted basis after giving effect to the sale of shares of our common stock in this offering at an assumed initial offering price of \$ per share.

23

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 December 31, 2021 (Unaudited)		
		Actual	Pro forma <sup>(1)</sup>
Cash	\$	10,014	
Debt	\$	1,019,121	
Stockholders' equity:			
Preferred stock, par value \$0.001 per share, 10,000,000 shares authorized, 0 outstanding			
Common stock, par value \$0.001 per share, 100,000,000 shares authorized, 27,259,547 shares outstanding		272	
Additional paid-in capital	\$	587,189	
Accumulated deficits	(\$	1,596,568)	
Total stockholder's equity (deficit)	(\$	1,009,107)	
Total capitalization	\$	10,014	

(1) Includes [\*] shares of common stock that are issuable upon automatic conversion of Convertible Bridge Notes outstanding upon the completion of the IPO.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ \_\_\_\_\_ per share of common stock would increase (decrease) the net proceeds to us by approximately \$ \_\_\_\_\_, 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 \$\_\_\_\_\_, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions. The pro forma information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

If the underwriters exercise their option to purchase additional shares in full, pro forma cash, additional paid-in capital, total stockholders' (deficit) equity, total capitalization and shares of common stock outstanding as of June 30, 2021 would be  $\$ ,  $\$ , and  $\$  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 [\_\_\_\_] shares of common stock at an exercise price of \$[\_] per share, with terms expiring [\_\_\_\_] through [\_\_\_\_];
- [Options to purchase [\_\_\_\_] shares of common stock at a weighted average exercise price of \$[\_\_\_] per share]; and
- Warrants to purchase [ ] shares of common stock at an exercise price of \$2.50 per share, with terms expiring [ ] through [ ];
- [Options to purchase [\_\_\_\_\_] shares of common stock at a weighted average exercise price of \$[\_\_\_] per share]; and

## DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma net tangible book value per share of our common stock immediately after this offering. The net tangible book value of our common stock as of December 31, 2021 was \$10,014, or \$0.00 per share. Net tangible book value per share represents our total tangible assets (which excludes deferred offering costs, which were \$\_\_\_\_\_\_ at December 31, 2021 less our total liabilities , divided by the number of shares of outstanding common stock (after adjusting for the stock split of the shares of existing stockholders).

After giving effect to the receipt of the net proceeds from our sale of \_\_\_\_\_\_ shares of common stock in this offering, at an assumed initial public offering price of \$ per share after deducting the estimated underwriting discounts and commissions and estimated offering expenses, our pro forma net tangible book value as of December 31, 2021 would have been approximately \$ or \$ per share. This amount represents an immediate increase in pro forma net tangible book value of \$\_\_\_ per share to our existing

stockholders and an immediate dilution of \$\_\_\_\_ per share to new investors participating in this offering.

We determine dilution per share to investors participating in this offering by subtracting pro forma 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:

Assumed initial public offering price per share	\$
Net tangible book value per share as of December 31, 2021	\$ [ ]
Increase per share to existing stockholders attributable to investors in this offering	 
Pro forma net tangible book value per share, to give effect to this offering	
Dilution in net tangible book value per share to new investors in this offering	\$

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$\_\_\_\_\_ per share would increase (decrease) the pro forma net tangible book value by \$\_\_\_\_\_ per share and increase (decrease) the dilution per share to new investors by \$\_\_\_\_\_ per share, assuming the number of shares of common stock offered by us, ass 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 \$\_\_\_\_\_, or \$\_\_\_\_ per share and decrease (increase) he dilution per share to new investors participating in this offering by \$\_\_\_\_\_ per share, assuming that the assumed initial public offering price of \$\_\_\_\_\_ 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  $\_$  per share 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  $\_$  per share, and the dilution in pro forma net tangible book value per share to investors in this offering would be approximately  $\_$  per share.

The table below summarizes as of December 31, 2021, 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 \$ per share, before deducting underwriting discounts and commissions and estimated offering expenses.

	Shares P	urchased	Total Con	sideration	Average Price Per
	Number	Percent	Amount	Percent	Share
Existing stockholders					
New investors					
Total					

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 \_\_% 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 \_\_\_\_, or \_\_\_% 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  $\_$  per share of common stock would increase (decrease) total consideration paid by new investors by  $\_$ , 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  $\_$ , 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 [\_\_\_\_\_] shares of common stock at an exercise price of \$[] per share, with terms expiring [\_\_\_\_\_] through [\_\_\_\_];
- [Options to purchase [\_\_\_\_] shares of common stock at a weighted average exercise price of \$[\_\_\_] per share]; and
- [Convertible notes, if any].

## DESCRIPTION OF CAPITAL STOCK

## General

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.00001 per share, and 10,000,000 shares of preferred stock, par value \$0.00001 per share.

## **Common Stock**

## Common stock outstanding

As of May 27, 2022, there were 26,473,975 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

As of May 27, 2022, there are no shares of preferred stock issued and outstanding. Under the terms of our certificate of incorporation, our Board of Directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our Board of Directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our Board of Directors to issue preferred stock and determination its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock.

#### Warrants

As of May 27, 2022, the Company had 5,183,097 warrants issued and outstanding, each exercisable for one share of common stock at an average exercise price of \$0.38 per share.

#### Convertible Bridge Notes and Warrants

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 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 Notes and Warrants to a related party in early April on the same terms.

As of July 19, 2022, the Company had approximately \$1.11M 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 110% 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.

27

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 on the Nasdaq Capital Market under the symbol "BFAI." 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 digital biopharmaceutical company focused specifically on advanced Artificial Intelligence / Machine Learning (AI/ML) analysis of complex data in the development 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).

-		n
4	2	ð

BullFrog AI Holdings has secured an 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. Our objective is to utilize our platform 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  $bfLEAP^{TM}$  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.

In October of 2021 and in April 2022, 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 License Agreement, the Company granted JHU an equity stake in the Company of approximately five (5%), 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 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. Minimum annual payments are set to be \$20,000 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 candidate for drug rescue. In certain circumstances, we intend to conduct late-stage clinical trials with rescued therapeutic assets, in these cases there will be a requirement for a drug supply and regulatory services to conduct clinical trials. 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 (GMP) 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. Over the next two years, the Company expects to spend approximately \$4.0 million on clinical trials and \$1.0 million on R&D to enable future clinical tria

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 involves acquiring the rights to drugs, using our bfLEAP technology to design a precision medicine trial, conduct the trial, 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.

The second part of our 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.

#### **Results of Operations**

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 \$212,000 in 2020.

## 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 [], the Company sold convertible bridge notes to two unrelated parties and received net proceeds of approximately \$88,000.

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 \$193,000 in salaries and approximately \$150,000 on professional services while expended 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.

Through 2021, the Company has an accumulated deficit of approximately \$1,600,000 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.

In April 2022, the Company received net proceeds of approximately \$875,000 from the sale of convertible promissory notes and warrants. The Company continues to seek additional capital to expand and fund operations into the planned IPO which is targeted for this summer.

## **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 2021, we do anticipate generating our first revenues in mid 2022 from our services related to the strategic relationship with a leading NGO. 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. We expect this will change in 2022 as we initiate development activities directed towards initiating clinical activities.

## **Research and Development Costs and Expenses**

Research and development costs and expenses consist primarily of 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 clinical research and development activities directed at our licensed drug development programs describes in this filing, 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. 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 \$1,600,000 as a result of these activities including the licensing costs for bfLEAP<sup>TM</sup>. Our 2021

Statement of Operation reflect approximately \$555,000 in operating expenses in 2021 versus approximately \$260,000 in 2020. 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. 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 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 BullFrog AI Holdings, Inc'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.

2	1	
	Т	

## **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: 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 drug is to:

- acquire the rights to the failed drug from a biopharmaceutical industry company or university,
- use the proprietary bfLEAP™ 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 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 mid 2022 from our services related to the strategic relationship with a leading NGO.

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. 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 mitigate risk in developing a drug or 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 provides the customer with an analysis of large complex data sets using our proprietary Artificial Intelligence / Machine Learning platform called bfLEAPTM. 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	Description	Current Market
bfLEAP™ – AI/ML platform for analysis of preclinical and/or clinical data	AI/ML analytics platform derived from technology developed at Johns Hopkins University Applied Physics Laboratory and licensed by the Company.	Biotechnology and pharmaceutical companies and other organizations.
siRNA	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.
Mebendazole	Improved formulation of Mebendazole developed at Johns Hopkins University and licensed by the Company	Glioblastoma

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.

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  $\beta$ 2-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 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).

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 Strategy**

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 is currently collaborating with 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.

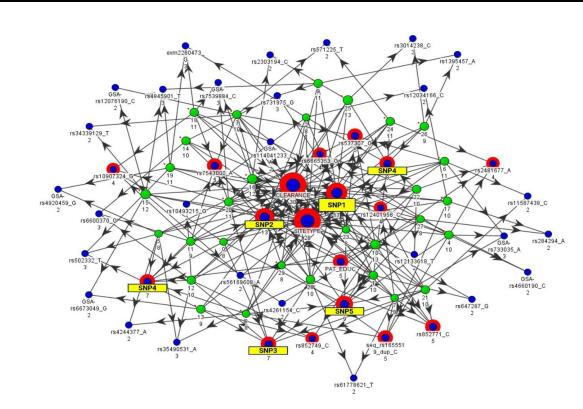
Going forward, the Company will continue to evolve the platform and either develop or acquire new capabilities and technologies. These development efforts may be in house or in collaboration with an existing or new technology partners. The Company plans on hiring talent in data science and software development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

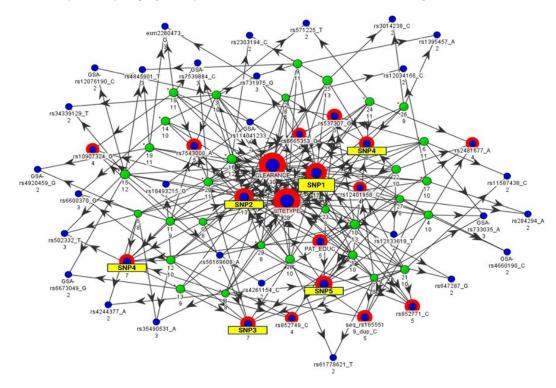
unknown relationships between individual genetic variants and negative patient symptoms. The genetic loci identified represent potential druggable targets, as well as potential stratifying criteria for future clinical trials in schizophrenia.

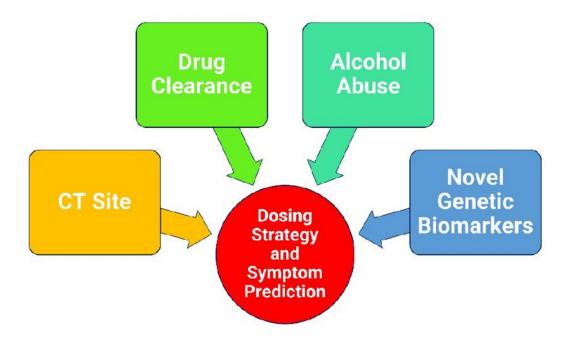
We performed another analysis on the data using our new advanced clustering algorithms bfLEAP 2.0 but focused on one particular drug named Olanzapine. Our bfLEAP<sup>TM</sup> 2.0 analytical results identified previously unknown, multi-dimensional associations among newly identified genetic variants,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



## FIGURE 1 – bfLEAP<sup>TM</sup> 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 provide a starting point for deeper physiological and molecular studies.

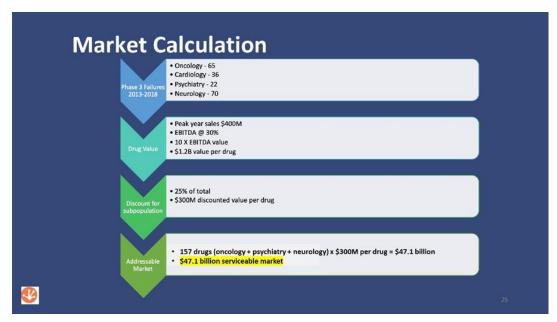
35

#### 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, 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.



## Market – AI in the Pharmaceutical Industry



BullFrog is poised to impact multiple high-growth application areas



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

36

## **Intellectual Property**

## Patents

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

Application or Registration #	Title	Description	File Date	Grant Date	Country	Status	Expiration Dates
Patent Application No. 14/797,553; US Patent No. 10,146,801	Apparatus and Method For Distributed Graph Processing	A method for distributed graph processing is provided including receiving ingest data from at least one data source, generating, using processing circuitry, a data map comprising a graph of edges between a plurality of data vertices of the ingest data, determining at least two nodes of a cluster, and storing a portion of the ingest data and a portion of the data map at the at least two nodes.	July 13, 2015	December 4, 2018	USA		
U.S. Patent Application No. 15/725,335; US Patent No. 10,936,965	Method and Apparatus For Analysis and Classification of High Dimensional Data Sets	A method executable via operation of configured processing circuitry may include constructing a mutual information graph for categorical data with respect to observed attributes of a plurality of entities described in terms of respective ones of the observed attributes by the categorical data, determining a clique tree correlating attributes having at least a threshold level of mutual dependence among the observed attributes, and determining a normality rating for an entity relative to the plurality of entities based on the clique tree.	October 5, 2017	March 2, 2021	USA		
U.S. Patent Application No. 62/489,486; US Patent No. 10,839,256	Method and Apparatus For Clustering, Analysis, and Classification of High Dimensional Data Sets	A n apparatus includes processing circuitry configured to execute instructions that, when executed, cause the apparatus to initialize a mixture model having a number of clusters including categorical data, iteratively update cluster assignments, evaluate cluster quality based on categorical density of the clusters, and prune clusters that have low categorical density, and determine an optimal mixture model based on the pruned clusters.	April 25, 2017	November 17, 2020	USA		
U.S. Provisional Patent Application No. 63,067,893	Random Subspace Mixture Model	-	August 20, 2020	-	USA		
U.S. Patent Application No. 63/212,186, 2021, entitled	Random Subspace Mixture Model		June 18, 2021		USA		

Title / Invention	Country	Status	Patent Number	Claims
Apparatus and method for distributed graph processing	US	GRANTED	10,146,801	Apparatus and Method
Method and Apparatus for Analysis and Classification of High Dimensional Data Sets	US	GRANTED	10,936,965	Apparatus and Method
Method and Apparatus for Clustering, Analysis, and Classification of High Dimensional Data Sets	US	GRANTED	10,839,256	Apparatus and Method

Johns Hopkins University Licensed Intellectual Property:

Title	Serial Number	File Date	Application Type	Country	Status	Patent Number	Expiration Date	Assignee
An Improved Formulation of Mebendazole and Drug Combination to Improve Anti- cancer Activity	62/112,706	06 Feb 2015	Provisional	US	Expired			The Johns Hopkins University
An Improved Formulation of Mebendazole and Drug Combination to Improve Anti- cancer Activity MEBENDAZOLE	PCT/US2016/016968	08 Feb 2016	РСТ	PCT - Parent	Expired		11 Aug 2016	The Johns Hopkins University
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	253854	08 Feb 2016	РСТ	Israel	GRANTED	253854	08 Feb 2036	The Johns Hopkins University
TUMORS 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	РСТ	India	GRANTED	352734	08 Feb 2036	The Johns Hopkins University
Mebendazole Polymorph For Treatment And Prevention Of Tumors	2017-541687	08 Feb 2016	РСТ	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
				38				

Title / Invention	Country	Status	Patent Number	Claims
Apparatus and method for distributed graph processing	US	GRANTED	10,146,801	Apparatus and Method
Method and Apparatus for Analysis and Classification of High Dimensional Data Sets	US	GRANTED	10,936,965	Apparatus and Method
Method and Apparatus for Clustering, Analysis, and Classification of High Dimensional Data Sets	US	GRANTED	10,839,256	Apparatus and Method

George Washington University Licensed Intellectual Property:

Title	Serial Number	File Date	Application Type	Country	Status	Assignee
Inhibition of SPTBN1 to treat Obesity/NASH and Obesity/NASH- driven cancer	63/113,745	11/13/2020	Provisional	US	Converted to PCT	George Washington University
Inhibition of SPTBN1 to treat Obesity/NASH and Obesity/NASH- driven cancer	63/147,141	2/8/2021	Provisional	US	Converted to PCT	George Washington University
Inhibition of SPTBN1 to treat Obesity/NASH and Obesity/NASH- driven cancer	PCT/US2021/059245	11/12/2021	РСТ	WO	Filed	George Washington University

Title	Country	Status	Patent #	Expiration Date
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

39

## John Hopkins University Applied Physics Lab Licensed Intellectual Property:

Title	Serial Number	File Date	Country	Status	Assignee
Apparatus and Method for Distributed Graph Processing	U.S. Patent 10,146,801	7/13/2015	US	Granted	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	The Johns Hopkins University
Generalized Low Entropy Mixture Model	U.S. Patent 10,839,256	4/2/2018	US	Granted	The Johns Hopkins University

## Licenses

We hold the following licenses related to our intellectual property:

Licensor	Licensee	<b>Description of Rights Granted</b>	<b>Termination Date</b>
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	
Johns Hopkins University	BullFrog AI Holdings	development 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, royaltybearing 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 a five (5%) percent equity stake in the Company, which was diluted following subsequent priced financings. 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 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. 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  $\beta$ 2-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 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, 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 \$100 m the first \$20M in sales revenue, \$2M in the first year cumulative sales revenue exceeds \$100M, \$10M in the first year cumulative sales revenue exceeds \$100M, \$10M in the first year cumulative sales revenue exceeds \$100M, \$10M in the first year cumulative sales revenue exceeds \$100M, \$10M in the first year cumulative sales revenue exceeds \$100M, \$10M in the first year cumulative sales revenue exceeds \$100M, \$10M in the

#### 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.

<sup>40</sup> 

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.

41

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.

Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future. If the 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.

42

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 facility or 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.

43

## 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 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 does 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. Have applicant has provided a Paragraph IV certification, the NDA applicant has patent 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.

### 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.

### 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 thirdparty 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 May 15, 2021, the Company has 1 full-time employee and 9 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.

46

## 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	52	Chief Executive Officer and Director
Dane Saglio	64	Chief Financial Officer
Non-Executive Directors:		
Don Elsey*	[*]	Director, Chair Audit Committee
William Enright*	[*]	Director and Chair of Compensation Committee
Jason Hanson*	[*]	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 4 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 joined the board in [\_\_\_\_\_]. 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.

47

In addition to Vaccitech, Bill sits on the Board of Gravitas Therapeutics, Inc. and on a Business Advisory Board for Creatv 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 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 functions and helped build the pre-eminent pipeline of pre

## **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.

#### **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	Salaı (\$)	у	Boi (S	nus S)	Sto Awa (\$	rds	Opt Awa (S	tion ards S)	Other pensation (\$)	Cor	Total npensation (\$)
Vininder Singh Chief Executive Officer and Director	2021 2020	\$116,0 \$118,0		\$	-	\$	-	\$	-	\$ -	\$	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.

#### 49

## **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 not be subject to the Company's proposed reverse split, 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, which amount will not be subject to the Company's proposed reverse split to be conducted prior to this Offering.

## **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

50

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 ai6% 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 the Investor, with a principal balance of \$99,900 at 9% interest. This agreement was amended in May 2022. 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 issued Warrants to purchase 115,185 shares at an exercise price of \$2.50, 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.

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.

## **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.

## 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 May 19, 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 May 19, 2022, pursuant to the exercise of options or warrants, are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage of ownership is based on 35,473,129 shares of common stock outstanding on May 19, 2022.

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 Offering	Percentage of Common Stock After Offering <sup>(1)</sup>
Directors and Officers:	Denencially Owned	ontring	Stock Hiter Offering
Vininder Singh Chief Executive Officer and Director	19,197,125	72.51%	54.12%
Dane Saglio			
Chief Financial Officer	400,000	1.51%	1.13%
All officers and directors ([ ] persons)	20,397,925	71.89%	55.25%
Beneficial owners of more than 5%			
Tivoli Trust	5,368,551	19.53%	15.04%
Gerald Newman	1,817,786	6.43%	[ ]
Green Tree Financial	1,461,536	5.24%	[ ]

(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) shares of common stock sold in this offering.

52

## DESCRIPTION OF CAPITAL STOCK

#### General

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.00001 per share, and 10,000,000 shares of preferred stock, par value \$0.00001 per share.

#### **Common Stock**

Common stock outstanding

As of May 30, 2022, there were 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.

## **Preferred Stock**

As of May 30, 2022, there are no shares of preferred stock issued and outstanding. Under the terms of our certificate of incorporation, our Board of Directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our Board of Directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our Board of Directors to issue preferred stock and determination its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock.

#### Warrants

As of May 30, 2022, the Company had 5,183,097 warrants issued and outstanding, each exercisable for one share of common stock at an average exercise price of \$0.38 per share.

#### 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.

54

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 on the Nasdaq Capital Market under the symbol "BFAI." 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.

## 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 57. 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, 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.

## 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 shares of common stock listed next to its name in the following table:

Underwriter	Number of Shares
WallachBeth Capital LLC	
Total	

The underwriters are committed to purchase all the shares of common stock 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.

56

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 shares, 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 within 45 days after the closing of the offering, to acquire up to additional shares (15% of the shares sold in this offering) from us to cover over-allotments, if any. If the underwriters exercise all or part of this option, it will purchase shares covered by the option at the public offering price per share that appears on the cover page of this prospectus, less the underwriting discount. If this option is exercised in full, the total offering price to the public will be \$ and the total net proceeds, before expenses, to us will be \$

#### **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.

		Iotal Without Over- Allotment	I otal With Over- Allotment
	Per Share	Option	Option
Public offering price	\$	\$	\$
Underwriting discount (7.5%)	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

T-4-1

T-4-1

The underwriters propose to offer the shares offered by us to the public at the public offering price per share 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 share. If all of the shares offered by us are not sold at the public offering price per share, 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 \$125,000 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 \$\_\_\_\_\_. 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 10% of the shares of common stock sold in this offering at an exercise price that is equal to 120% 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.

#### **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 offered in the offering on the Nasdaq Capital Market under the symbol "BFAI." 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.

58

## 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 by either exercising its overallotment 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.

## 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. The initial public offering price will be negotiated between the underwriters and us. In determining the initial public offering price of our common stock, 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 that the shares 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.

## 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. Each of these statements is qualified in all respects by this reference.

The SEC maintains a website, which is located at <u>www.sec.gov</u>, 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.

61

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

#### 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

		ecember 31 2021	December 31 2020		
ASSETS					
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

	D	ecember 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	253,378	70,61
Payroll and salary-related party	203,033	189,45
Stock based compensation	98,951	87,12
TOTAL OPERATING EXPENSES	555,362	260,06
(LOSS) FROM OPERATIONS	(555,362)	(260,06
OTHER INCOME (EXPENSE):		
Interest expense, net	(40,395)	(11,76
Gain on debt forgiveness	9,917	17,27
TOTAL OTHER INCOME (EXPENSE)	(30,478)	(81,62
NET (LOSS)	(585,840)	(341,69
NET (LOSS) PER COMMON SHARE:		
Basic and diluted	6 (0.02)	\$ (0.0
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:		
Basic and diluted	26,145,603	24,803,21

The accompanying notes are an integral part of these financial statements

F-4

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

			Additional Paid in	Subscription	Accumulated		
	Shares	A	mount	Capital	Receivables	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)			-	<u> </u>		(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)			-			(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)						(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
Amorization of debt discount		12,665		-
Imputed Interest		4,539		-
Changes in operating assets and liabilities:				
Accounts payable		(25,853)		60,126
Accrued expenses		27,384		-
Accrued expenses-related party		85,666		-
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		-		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	0	10.014	¢	5.010
Cash, end of period	\$	10,014	\$	5,019
SUPPLEMENTAL CASH FLOW INFORMATION:				
Cash paid for interest	\$	-	\$	-
Cash paid for taxes	\$	-	\$	-
SUPPLEMENTAL DISCLOSURE of NON-CASH ACTIVITY:				
	\$	13.661	\$	_
Warrant issued with convertible notes		- ,		-
Shares issued to settle Accrued Severence	\$	-	\$	37,730
Common stocks issued for services	\$	20	\$	

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, 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.

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  $bfLEAP^{TM}$  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  $bfLEAP^{TM}$  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.

## 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.

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, 2019 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 agreements and contracts to perform pilot studies by applying the following steps: (1) identifying the contract with a customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to each performance obligation in the contract; (5) recognize

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.

#### 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 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

#### 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-	1	1

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 beginning after December 15, 2021 including interim periods within those 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 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.

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 February 9, 2022. 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 a6% 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, 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 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.

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	
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	2,579	0.48
Granted	-	-	-
Exercised	-	-	-
Forfeited	-	-	-
Expired	-	-	-
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:

	Decemb	er 31, 2021
Fair Value of Common Stock on measurement date	\$	0.044
Risk free interest rate	Fr	om 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.

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.

## 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:		
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 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.

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 license 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 long-term safety and acceptable toxicity of the drug with adjuvant temozolomide in this population.

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

Shares 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 , 2022

Shares of Common Stock

BULLFROG AI HOLDINGS, Inc.

shares of common stock issuable upon the conversion of currently outstanding Convertible Bridge Notes at a conversion price that reflects a 20% discount from the initial public offering price; and (ii) shares of common stock issuable upon the exercise of the currently outstanding Noteholder Warrants at an exercise price of [110]% of the initial public offering price.

This prospectus relates to [ ] 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:

- [ ] 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
- [ ] shares of common stock upon exercise of currently outstanding warrants held by the Noteholders at an exercise price of [110] % of the initial public offering prices of our initial public offering (the "Noteholder Warrants")

The shares of common stock offered by the selling stockholders is defined herein as the "Noteholder Shares." For a more detailed description of the Convertible Bridge Notes and the Noteholder Warrants, see "Description of Securities—Convertible Notes and Warrants" No public market currently exists for our shares. We anticipate that the per share.

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 "BFAI." 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.

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

This prospectus relates to [ ] shares of common stock that may be sold from time to time by the

1.

Common stock offered by the selling stockholders:

	selling stockholders named in this prospectus, which includes:
	•.
Shares outstanding:	[ ] shares of common stock (or [ ] shares if the underwriters exercise the over-allotment option in full).
Use of proceeds:	We will not receive any of the proceeds from the sale of the Noteholder Shares to be offered by the selling stockholders named herein except for the exercise price paid by the Noteholders upon exercise of their warrants.
Risk Factors:	Investing in our common stock 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 common stock.
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 "BFAI". No assurance can be given that our application will be approved. The consummation of this offering is conditioned on obtaining Nasdaa approval.

The number of shares of common stock outstanding assumes the issuance by us of shares of common stock pursuant to the Public Offering Prospectus filed contemporaneously herewith and includes the following shares to be issued upon closing of the initial public offering described therein (assuming initial public offering price shown on the cover page of the Public Offering Prospectus):

[\_\_\_\_] shares of common stock issuable upon the conversion of the Convertible Bridge Notes in the principal amount of \$962,222.22 that will convert concurrent with the closing of the offering at a conversion price that reflects a 20% discount from the initial public offering;

Alt-1

## [Alternate Page for Resale Prospectus]

Unless otherwise indicated, the information in this prospectus assumes:

 $\Box$  A public offering price of  $\_$  per share of common stock;

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

□ No exercise of the underwriter's warrants;

shares of common stock sold in this offering; and

□ Outstanding warrants to purchase [ ] shares of common stock at \$[ ] per share which expire on [

#### **USE OF PROCEEDS**

We will not receive any of the proceeds from the sale of the Noteholder 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 [110] % 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.

Alt-3

#### [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 selling stockholders includes the following: (i) shares of common stock issuable upon the conversion of currently outstanding Convertible Bridge Notes at a conversion price that reflects a 20% discount from the initial public offering price; and (ii) shares of common stock issuable upon the exercise of the currently outstanding Noteholder Warrants at an exercise price of [110]% of the initial public offering price. The shares of common stock offered by the Noteholders Bridge Notes and Warrants? The Noteholders acquired the Convertible Bridge Notes and Noteholder Warrants pursuant to a private placement of securities. See "Description of Capital Stock—Convertible Notes and Warrants" for a more detailed description of the private placement, the Convertible Bridge Notes and the Noteholder Warrants.

The selling stockholders may sell some, all, or none of the Noteholder Shares. We do not know whether any selling stockholder will exercise the warrants, and upon such exercise, how long such selling stockholders will hold the Noteholder Shares before selling them, and we currently have no agreements, arrangements, or understandings with the selling stockholders regarding the sale of any of the Noteholder 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 Noteholder 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 Convertible Bridge Notes and Noteholder Warrants as of , 2022, assuming the conversion of the 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 of the 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>
Bigger Capital Fund, LP (2)				
Cavalry Investment Fund LP (3)				
Christopher Virtue Trust (4)				
Dr Barry Ginsberg				%
Indira Virtue Trust (5)				
Steve Simon				
Walleye Opportunities Master Fund Ltd. (6)				

\*Represents beneficial ownership of less than one percent.

- (1) Applicable percentage ownership after to this offering is based on shares of common stock deemed to be outstanding as of , 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) 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) 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.

- (4) 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.
- (5) 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.
- (6) 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.

#### Alt-4

## [Alternate Page for Resale Prospectus]

## PLAN OF DISTRIBUTION

We are registering the Noteholder issuable upon the conversion of the Convertible Bridge Notes and exercise of the Noteholder Warrants to permit the resale of the Noteholder 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 Noteholder Shares. However, upon any exercise of the 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 Noteholder Shares in the registration statement of which this prospectus forms a part.

The selling stockholders may sell all or a portion of the Noteholder 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 Noteholder 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 Noteholder 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-5

## [Alternate Page for Resale Prospectus]

Alt-6

## 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	¢	**
FINRA filing fee	\$	**
Legal fees and expenses	\$	**
Accounting fees and expenses	\$	**
Transfer agent and registrar fees	\$	**
Miscellaneous fees and expenses	\$	**
Total	\$	**

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-1

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?)

II-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 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 110% of the per share IPO price.

## Item 16. Exhibits and Financial Statement Schedules

The following exhibits to this registration statement included in the Index to Exhibits are incorporated by reference.

Exhibit No.	Description
1.1	Form of Underwriting Agreement**
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**
10.1	[Acquisition Agreement with Bullfrog AI, Inc.]**
10.2	License Agreement**
10.3	Advisor Agreement between the Company and Greentree Financial Group, Inc.**
10.4	Consulting Agreement between the Company and Garrett Newman**
10.5	[Employment Agreement]**
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**
107	Registration Fee Table**
	XRBL

\*\* To be filed by amendment.

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.

#### II-4

## 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 15th day of August 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	August 15, 2022
/s/ Dane Saglio	Chief Financial Officer (Principal Financial Officer)	August 15, 2022
	ІІ-5	