

BullFrog AI Holdings, Inc.
325 Ellington Blvd., Unit 317
Gaithersburg, MD 20878

November 28, 2022

Tyler Howes
Division of Corporation Finance
Office of Life Sciences
Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549

Re: BullFrog AI Holdings, Inc.
Amendment No.1 to Draft Registration Statement on Form S-1
Submitted November 7, 2022
File No. 333-267951

Dear Mr. Howes:

On behalf of BullFrog AI Holdings, Inc. (the "Company"), this letter responds to comments provided by the staff of the Division of Corporation Finance, Office of Life Sciences (the "Staff") of the Securities and Exchange Commission (the "Commission") to the undersigned on November 15, 2022 regarding Amendment No.1 ("Amendment No. 1") to the Registration Statement on Form S-1 (the "Registration Statement"), which was submitted to the Commission on November 7, 2022. Please note that we have also filed the requested exhibits (Exhibit #'s 10.5, 10.6 and 10.7). The Company has not yet used any investor presentation.

Concurrent with the submission of this letter, the Company is filing via EDGAR Amendment No. 2 to the Registration Statement ("Amendment No. 2"), which reflects the Company's responses to the comments received by the Staff and certain updated information.. For your convenience, we have set forth below the comment of your letter followed by the Company's response thereto.

Amendment No. 1 to Registration Statement on Form S-1

Use of Proceeds, page 23

1. *We note your revised disclosure in response to prior comment 5 and reissue in part. Please further revise your Use of Proceeds section to state how far in the development process you estimate the proceeds from this offering will enable you to reach for both our Mebendazole and siRNA drug programs. Please also disclose the dollar amount you intend to allocate to each program separately. With reference the last sentence of Item 504 of Regulation S-K, please also revise the risk factor disclosure on page 17 to indicate that you have no current specific plan for a significant portion of the offering proceeds and highlight this point in the Summary risk factor disclosures on page 3..*

Response: The Company respectfully acknowledges the Staff's comment and has revised the Use of Proceeds section to state how far in the development process the Company estimates the proceeds from this offering will enable it to reach for both the Mebendazole and siRNA drug programs. In addition, we have revised the risk factor on page 17 in Amendment No. 2 to indicate that the Company has no current specific plan for a significant portion of the offering proceeds.

Please do not hesitate to contact our counsel Arthur Marcus at (212) 930-9700 with any questions or comments regarding this correspondence. Thank you.

Sincerely,

/s/ Vininder Singh

Chief Executive Officer

cc Arthur Marcus, Esq.
