



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

March 10, 2022

Ken Song, M.D.  
President and Chief Executive Officer  
RayzeBio, Inc.  
5505 Morehouse Drive, Suite 300  
San Diego, CA 92121

**Re: RayzeBio, Inc.**  
**Draft Registration Statement on Form S-1**  
**Submitted February 11, 2022**  
**CIK No. 0001825367**

Dear Mr. Song:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1 submitted February 11, 2022

Leveraging our development ecosystem to build a sustainable enterprise of value creation, page 3

1. We note your disclosure that your "lead clinical drug candidate, RYZ101 for GEP-NET patients in which clinical data from one center supports potential efficacy and safety of Ac225 DOTATE." Please revise this statement to eliminate conclusions or predictions that your lead clinical drug candidate is safe and effective as determinations of safety and efficacy are solely within the authority of the FDA.

Our programs, page 3

2. We note your disclosure that you have "applied [y]our parallel discovery engine to build a diverse portfolio of potential TRP drug candidates that spans discovery to early clinical

stage." Given that you currently have one drug candidate, RYZ101, which is currently in Phase 1 clinical trials for one indication and in the pre-clinical stage for another indication, please explain how your portfolio of potential drug candidates can be described as "diverse."

We intend to seek orphan drug designation for RYZ 101...., page 34

3. We note your disclosure that you intend to seek orphan drug designation for RYZ101 for the treatment of GEP-NET patients that have progressive disease following treatment with Lu177 SSA therapy. Please clarify whether, in your estimation, obtaining orphan drug status will be required for you to achieve profitability. If so, please revise your risk factor disclosure accordingly.

We may be unable to obtain a sufficient supply of radioisotopes to support clinical development or manufacturing at commercial scale, page 49

4. We note your disclosure that one of your suppliers of Ac225 is located in Russia. Please describe the impact of Russia's invasion of Ukraine on your business, including the impact of any restrictions on trade between the United States and Russia.

Our amended and restated certificate of incorporation that will be effective upon the closing of this offering will designate..., page 80

5. Please disclose here and on page 194 that your exclusive forum provision may raise questions of enforceability because it does not afford concurrent jurisdiction provided by Section 22 of the Securities Act. Please also disclose that such an exclusive forum provision may increase the cost for an investor to bring a claim against you.

Management's discussion and analysis of financial condition and results of operation  
Stock-based compensation expense, page 107

6. Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the initial public offering and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features. Please discuss with the staff how to submit your response.

Intellectual Property, page 131

7. Please clarify the types of patent protection you have applied for (i.e., composition of matter, use, or process).

General

8. Please provide us with copies of all written communications, as defined in Rule 405 under

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the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

You may contact Gary Newberry at 202-551-3761 or Kevin Vaughn at 202-551-3494 if you have questions regarding comments on the financial statements and related matters. Please contact Joshua Gorsky at 202-551-7836 or Celeste Murphy at 202-551-3257 with any other questions.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences