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

DIVISION OF
CORPORATION FINANCE

February 22, 2021

Christopher Gibson, Ph.D.
Chief Executive Officer
Recursion Pharmaceuticals, Inc.
41 S Rio Grande Street
Salt Lake City, UT 84101

Re: Recursion Pharmaceuticals, Inc.
Draft Registration Statement on Form S-1
Submitted January 26, 2021
CIK No. 0001601830

Dear Dr. Gibson:

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

Overview, page 1

1. We note your disclosure here and throughout the prospectus that you use your technology to "rapidly accelerate" programs, that your strategy is to "rapidly advance" your Notable Products through development and potential regulatory submission, that wet-lab biology and *in silico* tools "accelerates" your drug discovery process, that you "identify low-viability programs earlier in the research cycle," "spend less per program" because of your approach, and "advance programs more quickly from program start to the clinic" compared to industry averages, and that you "expect to continue accelerating the pace of program additions in the future." Please balance this disclosure and similar disclosure throughout the prospectus to clarify that the process of clinical development is

inherently uncertain and that there can be no guarantee that you will achieve similar development timelines with your future product candidates. Please also revise this disclosure and similar disclosure throughout the prospectus to remove any implication that you will be successful in obtaining regulatory approval or commercializing your product candidates in a rapid or accelerated manner as such statements are speculative.

Prospectus Summary, page 1

2. We note the use of the term "rescue" in this section and throughout the prospectus. To the extent that you are using this term to imply that the use of your proprietary technology on data from previous trials performed by other parties has resolved issues relating to safety and/or efficacy and will ultimately lead to the approval of your product candidates, please revise your registration statement to eliminate the use of this term. You may disclose that administration of a product candidate was well tolerated or resulted in no serious adverse events and provide a discussion of prior trial results. However, it is not appropriate to imply that the use of your proprietary technology on data from previous trials performed by other parties has resolved issues relating to safety and/or efficacy and will ultimately lead to the approval of your product candidates. If you choose to say that the product candidates were well tolerated in previous clinical trials or that there were no serious adverse events or discuss prior clinical results, please clarify that prior results are not necessarily predictive of the outcome of future trials. If you are intending to assign a different meaning to the term "rescue" than discussed above, please make that clear throughout the prospectus.

The Recursion OS, page 5

3. We note your disclosure that your core dataset is based on images of cells, that you use cell morphology to understand how a diseased cell responds to drugs and that your PhenoMap tooling enables you to explore inferred biological and chemical relations in order to "deconvolve" mechanisms of action. We also note that that the two programs based on your inferential search approach are in the discovery stage. Please briefly indicate how your inferential search programs allow you to "deconvolve" mechanisms of action, provide a definition of that term, and discuss any material efforts you would need to take in order to further understand the mechanism of action of any drug candidate before you would proceed to clinical trials with that candidate. In this regard, we note your disclosure on page 177 under "Predicting the Mechanism of Action" that further understanding the mechanism by which compounds are operating is traditionally the "Achilles heel" of phenotypic drug discovery and your disclosure under "Orthogonomics" on page 163 that other data modalities such as transcriptomics and proteomics can be highly complementary to phenomics but that both of those approaches are "orders of magnitude" more expensive compared to phenomics. Given this disclosure, please ensure that your prospectus summary briefly indicates the material challenges that your inferential search approach presents to moving drug candidates into clinical trials, including any challenges to obtaining IND approval if the mechanism of action is not

understood, and that your prospectus summary presents balanced disclosure in this regard.

Brute-Force Search Programs, page 7

4. Please remove the references on page 8 and throughout the prospectus to the potential for certain of your lead molecules to be first-in-disease. This disclosure suggests that your product candidates will be effective and will be approved before any other product candidate for these indications, which is not appropriate given the current stage of development. You may state that there are currently no approved therapies for these indications, if true.

Our Pipeline, page 7

5. Please revise your pipeline table to include a column for Phase 3. Please also provide only one column for the discovery phase. The length of the line within the discovery phase will visually demonstrate whether the product candidate is early-stage or late-stage in the discovery process, and a textual discussion of the program is a more appropriate place to make distinctions regarding different segments within a particular phase. We note that you have five programs for which you have yet to select a compound that will be the focus of further development. Please explain to us why each of those programs is sufficiently material to your business to warrant inclusion in your pipeline table or revise your table as appropriate.

Inferential Search Programs, page 9

6. We note that you have included a separate table depicting 25 additional programs. We also note that your filing only includes a discussion of the two programs in this table that are in the preclinical phase, which implies that the other programs are not sufficiently material to your operations to warrant discussion. Please delete the references to these other programs from the Prospectus Summary.

Our Partnerships, page 10

7. Please remove the references throughout your prospectus to potential "first-in-class" or "best-in-class" product candidates as these descriptions imply an expectation of regulatory approval and are inappropriate given the length of time and uncertainty with respect to securing marketing approval.

Risk Factors, page 22

8. Given the length of your risk factor section, please revise to comply with Regulation S-K Item 105 by relocating risks that could generically apply to any registrant or offering to the end of the section under the caption "General Risk Factors."

Our amended and restated bylaws that will become effective upon the closing of this offering, page 88

9. Please revise this risk factor to disclose that there is also a risk that your exclusive forum provision may result in increased costs for investors to bring a claim.

Use of Proceeds, page 96

10. Please disclose how far you expect the proceeds from the offering to allow you to proceed in the development of each of your programs. We note your disclosure that you intend to paydown debt with some of the proceeds of this offering. Please disclose the interest rate and maturity of such indebtedness. If the indebtedness to be discharged was incurred within one year, describe the use of the proceeds of such indebtedness other than short-term borrowings used for working capital. See Instruction 4 to Rule 504 of Regulation S-K.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 106

11. Tell us and revise to clarify the extent to which you track your research and development expense by program or product candidate. If available, provide a breakdown of your research and development expenses by program or product candidate, as well as a breakdown of research and development expenses by nature of expense.

Critical Accounting Policies and Use of Estimates
Determination of Fair Value of Common Stock, page 120

12. 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.

Business
FreshCuts, page 157

13. We note your disclosure in Table 3 that FreshCuts exceeds state-of-the-art vendor library design algorithms. Please explain what makes the vendor algorithms "state-of-the-art" and how you determined that FreshCuts exceeds them. Please also tell us why you believe this disclosure is material to an understanding of your business.

REC-4881: Familial Adenomatous Polyposis
Clinical, page 189

14. Please provide the basis for your statement that REC-4881 demonstrated a favorable ocular safety profile compared to approved drugs in this class.

Patents, page 222

15. Please revise to disclose the material foreign jurisdictions where you own or license patents or pending patent applications.

Compound IP, page 223

16. Please revise to disclose the type of patent protection that you have (composition of matter, use or process).

Bayer, page 240

17. We note your disclosure that you have not entered into any lead series or development candidate license agreements with Bayer yet and that you would receive an option exercise fee, with the potential to receive further development and commercial milestones of more than $100 million as well as tiered royalties under each such license agreement. To the extent that these terms have already been set forth in the current agreement, please revise to disclose the amount of the option exercise fee, the maximum aggregate development and commercial milestones that you would be eligible to receive for each development candidate, the royalty range and the royalty term. Please also revise to disclose the termination provisions of the current agreement and when the term of the current agreement ends.

Sanofi-Genzyme, page 241

18. Please revise to disclose the payment provisions under the agreement such as the aggregate amounts paid or received to date, the termination provisions and the term of the agreement. Please also disclose how you would be compensated if Sanofi-Genzyme exercises its option to develop any products.

General

19. In the letter from the CEO, we note your statement on page 4 that you are "leaders in this space." Please explain to us the basis for this claim; we note that your most advanced product candidates have completed Phase 1 clinical trials and that you have not yet obtained regulatory approval for a product candidate. Please substantiate your claims here that you have "one of the largest proprietary biological datasets on earth" and "one of the largest, broadest and deepest pipelines of any technology-enabled drug discovery company," and your claims on page 143 that you have "one of the largest biological and chemical datasets" and on page 146 that you have curated "one of the most comprehensive

KCE libraries in the world."

20. A registration statement is not intended to serve as marketing materials. Therefore, the prominence of the graphics on certain pages leading up to the letter from the co-founder and CEO and in Figures 14-16, 18-23, 31-35 and 75-77 is not appropriate because the graphics neither provide nor enhance relevant and meaningful disclosure that investors can use to make an informed investment decision. In particular, the second page of graphics before the CEO letter repeats information already contained in the Prospectus Summary and Business sections. Please remove these graphics accordingly.

21. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under 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 Eric Atallah at 202-551-3663 or Kevin Vaugh at 202-551-3494 if you have questions regarding comments on the financial statements and related matters. Please contact Ada Sarmento at 202-551-3798 or Tim Buchmiller at 202-551-3635 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Philip H. Oettinger, Esq.