

December 3, 2020

David Kirn
Chief Executive Officer
4D Molecular Therapeutics Inc.
5858 Horton Street #455
Emeryville, CA 94608

Therapeutics Inc.
Statement on Form S-1
2020

Re: 4D Molecular
Registration
Filed November 17,
File No. 333-250150

Dear Dr. Kirn:

We have reviewed your 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Registration Statement on Form S-1

Prospectus Summary
Our Therapeutic Vector Evolution Platform, page 2

1. We note your revisions in response to prior comment 4. Please revise your disclosure on pages 2 and 118 where you discuss your head-to-head comparisons with conventional AAV vectors to state, if true, that you have not conducted any clinical studies in patients comparing your targeted and evolved vectors to conventional AAV vectors. Please also revise your disclosure on pages 2 and 118 that you "expect" to demonstrate the superior capabilities of your targeted and evolved vectors and product candidates as you advance through clinical trials to remove the expectation regarding how your vectors and product candidates will perform in clinical trials as such statements are speculative.

David Kirn
FirstName LastNameDavid Kirn
4D Molecular Therapeutics Inc.
Comapany3,
December Name4D
2020 Molecular Therapeutics Inc.

December
Page 2 3, 2020 Page 2
FirstName LastName
Our Product Candidate Pipeline, page 3

2. We note the added table depicting your most advanced discovery and research programs. Additionally, we note that your filing does not include a discussion of 4D-3XX or 4D-7XX, which implies that these programs are not sufficiently material to your operations to warrant discussion. Please delete the references to these programs

from your summary.

3. We note your response to comment 7 and believe TVP and Lead Optimization should be depicted together under a column heading such as discovery or research and development. A textual discussion of the program is a more appropriate place to make the distinctions regarding different tasks within a particular phase.

Business Competition and Differentiation: AAV Gene Therapy for wet AMD and Diabetic Retinopathy, page 155

4. We note your response to prior comment 12. Please revise your statement that 4D-150 would be the only AAV gene therapy asset in wet AMD and DR that has shown superior transduction on human retinal cells ex vivo versus conventional AAV vectors such as AAV2 to clarify, if true, that your statement is based solely on in vitro studies you conducted comparing R100 to AAV2 discussed on page 138. Principal Stockholders, page 222

5. Please revise your disclosure to identify the natural person or persons who have voting and investment control of the shares held by the entities affiliated with BVF.

10. Redeemable Convertible Preferred Stock Funding Agreement with CFF (unaudited), page F-39

6. We note the \$10.0 million received from CFF is to "be used to advance the development program for 4D-710, the Company's lead product in cystic fibrosis, or any other therapeutic approved by the Program Advisory Group (PAG) to alleviate pulmonary complications of cystic fibrosis". With reference to the specific terms of the Funding Agreement, please address the need to separately classify the \$10.0 million as restricted cash. Refer to Rule 5-02.1 of Regulation S-X.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jenn Do at 202-551-3743 or Jeanne Baker at 202-551-3691 if you have

David Kirn
4D Molecular Therapeutics Inc.
December 3, 2020
Page 3

questions regarding comments on the financial statements and related matters. Please contact Ada Sarmiento at 202-551-3798 or Suzanne Hayes at 202-551-3675 with any other questions.

FirstName LastNameDavid Kirn
Company Name4D Molecular Therapeutics Inc.

Corporation Finance
December 3, 2020 Page 3
Sciences
FirstName LastName

Sincerely,
Division of
Office of Life