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

DIVISION OF
CORPORATION FINANCE

November 4, 2022

Howard Berman, Ph.D.
Chief Executive Officer
Coya Therapeutics, Inc.
5850 San Felipe St. Suite 500
Houston, TX 77057

Re: Coya Therapeutics, Inc.
Amendment No. 2 to
Draft Registration Statement on Form S-1
Submitted October 28, 2022
CIK No. 0001835022

Dear Howard Berman:

We have reviewed your amended 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.

Amendment No. 2 to Draft Registration Statement on Form S-1 submitted October 28, 2022

Prospectus Summary, page 1

1. We note your revised disclosure in response to prior comment 1, which we reissue in part. With respect to the second study that you disclose was conducted in the third quarter of 2022 for COYA 201 in a humanized *in vitro* model of liver inflammation and fibrosis, please disclose whether the primary endpoints of this second study were met or whether this study is ongoing. As appropriate, please also expand your disclose under "COYA 201" starting on page 74 to provide the material information regarding the results of this second study.

We rely on third parties to manufacture our product candidates..., page 34

2. We note your revised disclosure on page 34 in response to prior comment 3 that you have entered into a binding term sheet with a third party supplier for the supply of the fusion protein for your COYA 302 product candidate. Please clarify whether you rely on a single-source supplier or a limited number of third parties who supply the fusion protein and if so, please identify such principal supplier or manufacturer. Refer to Item 101(h)(4)(v) of Regulation S-K.

Our Pipeline, page 67

3. We note your revised pipeline table on page 3 in response to prior comment 2, which we reissue in part. Please also revise your pipeline table on page 67 to include a separate column for the Phase 3 trial.

COYA 302, page 71

4. We note your response to prior comment 5. Please revise your disclosure on page 72 to clarify, if true, that the preclinical trials conducted by Dr. Appel were not powered for statistical significance.

COYA 101, page 76

5. We note your response to prior comment 7, which we reissue in part. For the Phase 1 study of your COYA 101 product candidate, please clarify whether this study was powered to show statistical significance. If the Phase 1 study was powered for statistical significance, please provide p-values for the results. Please also provide the p-values for the data shown in the table on page 79.

You may contact Tara Harkins at 202-551-3639 or Kevin Kuhar at 202-551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Jane Park at 202-551-7439 or Tim Buchmiller at 202-551-3635 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Steven M. Skolnick, Esq.