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

DIVISION OF
CORPORATION FINANCE

March 27, 2019

Yujiro Hata
President and Chief Executive Officer
IDEAYA Biosciences, Inc.
7000 Shoreline Court, Suite 350
South San Francisco, California 94080

Re: IDEAYA Biosciences, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted March 15, 2019
CIK No. 0001676725

Dear Mr. Hata:

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. 1 to Draft Registration Statement on Form S-1 submitted March 15, 2019

Prospectus Summary
Overview, page 1

1. We note your response to prior comment 2. Please delete your reference to "first-in-class" throughout your registration statement as it implies the product candidate's approval.

2. We note your response to prior comment 3. Please further revise your pipeline tables to include columns for each stage of further development for your product candidates, including all phases of clinical trials.

3. We note you now include a research pipeline table that includes four discovery phase programs and a product candidate pipeline that includes one discovery phase program. As

your narrative disclosure only briefly discusses these programs, and they are not otherwise discussed in the Summary section, please explain to us why you believe these programs are sufficiently material to your business to be included in the prospectus summary with equal prominence as your other product candidates.

Use of Proceeds, page 74

4. Please expand your disclosure to state the approximate amount of proceeds intended to be used for each purpose identified in the bullet points, including activities related to the Phase 1/2 clinical trial for IDE196 in solid tumors with GNAQ/GNA11 mutations, the preclinical evaluation and initiation of the Phase 1 clinical trials for IDE196 in NSCLC patients, and the preclinical evaluation of MAT2A through initiation of and interim data from a Phase 1 clinical trial.

You may contact Jorge Bonilla at 202-551-3414 or Mark Rakip at 202-551-3573 if you have questions regarding comments on the financial statements and related matters. Please contact Liz Walsh at 202-551-3696 or Christopher Edwards at 202-551-6761 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Mark Roeder