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

DIVISION OF
CORPORATION FINANCE

March 26, 2020

Bernard Coulie, M.D., Ph.D.
Chief Executive Officer
Pliant Therapeutics, Inc.
260 Littlefield Avenue
South San Francisco, CA 94080

Re: Pliant Therapeutics, Inc.
Amendment No. 3 to
Draft Registration Statement on Form S-1
Submitted March 16, 2020
CIK No. 0001746473

Dear Dr. Coulie:

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. 3 to Draft Registration Statement on Form S-1

Prospectus Summary, page 1

1. We note that you added up to three early stage targets for various unidentified indications to your pipeline table. We also note that the only other discussion of these targets in the prospectus is limited to the terms of your agreement with Novartis for a three year research program. As such, please tell us why you believe it is appropriate to include these unidentified research program targets in your pipeline table or remove them from the table.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Overview, page 80

2. In the second paragraph you disclose that you expect to receive $33.0 million in research and development funding and are eligible to receive development, regulatory and commercial milestones of up to $416.0 million under your Collaboration and License Agreement with Novartis. Please reconcile for us the following apparent discrepancies with other disclosures in your filing and revise your disclosures accordingly:
   - In the penultimate paragraph on page F-19 in Note 6 you disclose that the transaction price at inception of this agreement includes only $19.6 million of variable consideration in the form of research and development funding when it appears that you expect to receive $33.0 million.
   - In the sixth paragraph on page 140 in Business you disclose the existence of up to $200.0 million in development and commercialization milestones for the licensed products and up to $68.0 million for the research targets. This disclosure is silent on regulatory milestones and it is unclear whether such milestones represent the apparent $148.0 million difference.

Item 15. Recent Sales of Unregistered Securities
(b) Grants and Exercises of Stock Options and Restricted Stock, page II-3

3. You disclose the granting of 14,181,083 stock options and 4,055,136 shares of restricted stock since January 1, 2017. It appears that the 14.2 million amount disclosed as stock option grants may include your restricted grants. In this regard it appears that when subtracting the option grants as disclosed on page F-28 from the 14.2 million amount the exact number of restricted share grants remains. If so, please revise your disclosure to clarify that the 14.2 million amount includes restricted stock grants. If not, please revise your subsequent events disclosure to include the option grants in 2020 and ensure you address those grants in your response to prior comment 4 from our June 6, 2019 letter.

You may contact Mark Brunhofer at 202-551-3638 or Sharon Blume at 202-551-3474 if you have questions regarding comments on the financial statements and related matters. Please contact Julia Griffith at 202-551-3267 or Justin Dobbie at 202-551-3469 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences