

May 8, 2020

VIA EDGAR AND FEDERAL EXPRESS

Office of Life Sciences
Division of Corporation Finance
United States Securities and Exchange Commission
100 F Street N.E.
Washington, D.C. 20549
Attn: Donald Field
Justin Dobbie

**Re: Pliant Therapeutics, Inc.
Amendment No. 4 to
Draft Registration Statement on Form S-1
Submitted April 10, 2020
CIK No. 0001746473**

Ladies and Gentlemen:

This letter is being submitted on behalf of Pliant Therapeutics, Inc. (the “**Company**”) in response to comments contained in the letter dated April 24, 2020 (the “**Letter**”) from the Staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) to Bernard Coulie, Chief Executive Officer of the Company, with respect to the Company’s confidential submission of Amendment No. 4 to the Draft Registration Statement on Form S-1 that was submitted on April 10, 2020. The Company is concurrently publicly filing the Registration Statement on Form S-1 (the “**Registration Statement**”), including changes in response to the Staff’s comments.

The responses set forth below have been organized in the same manner in which the Staff’s comments were organized and all page references in the Company’s responses are to the Registration Statement. Two copies of this letter and the marked Registration Statement will be provided to Donald Field of the Commission.

License Agreements**Novartis Collaboration and License Agreement, page 141**

1. *We note your disclosure in the fifth paragraph that Novartis will pay you certain specified target validation fees for each target candidate that achieves target validation and is deemed a research target. Please revise to provide a general range for such fees.*

RESPONSE: The Company respectfully acknowledges the Staff's comment and has revised the disclosure on page 151 of the Registration Statement to reflect that the specified target validation fee will be \$4.0 million for each candidate target under this agreement.

2. *We note your disclosure in the seventh paragraph that Novartis will pay you tiered royalties, on a product-by-product basis, based on annual nets sales of products at percentages ranging from high-single digits to low-double digits of the applicable licensed products. Please revise your description of the royalty rates to provide a range that does not exceed ten percent (e.g., between twenty and thirty percent).*

RESPONSE: The Company respectfully acknowledges the Staff's comment and has revised the disclosure on page 151 of the Registration Statement to reflect that the royalty amounts will be based on percentages ranging from high-single digits to the low teens.

Description of Capital Stock
Exclusive forum, page 189

3. *We note that this section discusses an exclusive forum provision in your bylaws. We also note that your certificate of incorporation filed as Exhibit 3.1 contains an exclusive forum provision which differs from the disclosure in this section. Please reconcile your exclusive forum disclosure in this section and the risk factor on page 68 with your organizational documents which will be in effect prior to the offering. Please also note that we may have additional comments once we review Exhibits 3.2 and 3.4.*

RESPONSE: The Company respectfully acknowledges the Staff's comment and advises the Staff that the disclosure in this section refers to the Company's amended and restated bylaws to be adopted in connection with the offering that will be in effect immediately prior to the completion of the offering. The Company advises the Staff that the Company's amended and restated certificate of incorporation to be adopted in connection with the offering that will be in effect immediately prior to the completion of the offering does not contain an exclusive forum provision. The Company has revised the disclosure on page 200 of the Registration Statement to reflect that the exclusive forum provision is found in such amended and restated bylaws and will also file such bylaws and its amended and restated certificate of incorporation as exhibits to the Registration Statement.

* * *

If you require additional information, please telephone the undersigned at (650) 752-3333.

Sincerely,

/s/ Deepa M. Rich

Deepa M. Rich

Enclosures:

cc: Bernard Coulie, *Pliant Therapeutics, Inc.*
Keith Cummings, *Pliant Therapeutics, Inc.*
Hans Hull, *Pliant Therapeutics, Inc.*
Sam Zucker, *Goodwin Procter LLP*
James Xu, *Goodwin Procter LLP*
Kristin VanderPas, *Cooley LLP*