

May 27, 2022

VIA EDGARUnited States Securities and Exchange Commission
Division of Corporation Finance
Office of Life Sciences
100 F Street N.E.
Washington, D.C. 20549
Attention: Al Pavot
Terence O'Brien**Re: Pliant Therapeutics, Inc.**
Comments to Form 10-K for the year ended December 31, 2021
Filed March 1, 2022
File No. 001-39303

Ladies and Gentlemen:

On behalf of our client Pliant Therapeutics, Inc. (the "**Company**"), we submit this letter in response to the comment received from the Staff (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") by letter dated May 17, 2022 relating to the Company's Annual Report on Form 10-K for the year ended December 31, 2021 (the "**2021 Form 10-K**"). The Company is concurrently filing Amendment No. 2 to the 2021 Form 10-K ("**Amendment No. 2**"), which includes changes in response to the Staff's comment.

Form 10-K filed March 1, 2022
Item 9A, page 135

1. *Please file the audit report on internal controls as required by Item 308(b) of Regulation S-K.*

In the process of filing the 2021 Form 10-K, Deloitte & Touche LLP's audit report on the Company's internal control over financial reporting was inadvertently omitted. Part II, Item 9A of the 2021 Form 10-K is being amended and restated to include the audit report of Deloitte & Touche LLP and is concurrently being filed with the Commission as Amendment No. 2.

Sidley Austin (CA) LLP is a Delaware limited liability partnership doing business as Sidley Austin LLP and practicing in affiliation with other Sidley Austin partnerships.

We thank you in advance for your consideration of the foregoing. Please contact me at 415.772.1207 with any questions or further comments regarding the response to the Staff's comment.

Sincerely,

/s/ Carlton Fleming
Carlton Fleming

Cc: Bernard Coulie, Pliant Therapeutics, Inc.
Keith Cummings, Pliant Therapeutics, Inc.
Mike Ouimette, Pliant Therapeutics, Inc.
Sharon Flanagan, Sidley Austin LLP