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February 19, 2021

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Attn: Margaret Schwartz Jeffrey Gabor Jeanne Bennett Mary Mast

Re: Longboard Pharmaceuticals, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted January 29, 2021
CIK No. 0001832168

## Ladies and Gentlemen:

On behalf of Longboard Pharmaceuticals, Inc. (the "Company"), we are responding to the comment (the "Comment") of the staff (the "Staff") of the Securities and Exchange Commission contained in its letter, dated February 11, 2021, relating to the above referenced confidential Amendment No. 1 to Draft Registration Statement on Form S-1. In response to the Comment, the Company has revised its disclosure on page 99 of its Registration Statement on Form S-1 (the "Registration Statement"), which has been publicly filed via EDGAR on the date of this response letter. The Company respectfully advises the Staff that the studies shown in the comparison on page 99 of the Registration Statement are in vitro preclinical studies, and has disclosed additional details regarding the studies describing the protocol and how the results were measured.

The Company respectfully requests the Staff's assistance in completing the review of the Registration Statement as soon as possible. Please advise us if we can provide any further information or assistance to facilitate your review. Please contact me at (858) 550-6070, Charles S. Kim of Cooley LLP at (858) 550-6049, or Asa M. Henin of Cooley LLP at (858) 550-6104 with any questions or further comments regarding our response to the Comment.

Sincerely,

/s/ Steven M. Przesmicki

Steven M. Przesmicki Cooley LLP

cc: Kevin R. Lind, Longboard Pharmaceuticals, Inc. Brandi L. Roberts, Longboard Pharmaceuticals, Inc. Charles S. Kim, Cooley LLP Asa M. Henin, Cooley LLP Cheston J. Larson, Latham & Watkins LLP Matthew T. Bush, Latham & Watkins LLP Chris C. Geissinger, Latham & Watkins LLP

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