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**Jennifer Ziolkowski**  
**Chief Financial Officer**  
**JZiolkowski@vigilneuro.com**  
**Direct: 617.680.0167**

August 31, 2023

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

Attention: Jenn Do and Daniel Gordon

**Re: Vigil Neuroscience, Inc.**  
**Form 10-K for the fiscal year ended December 31, 2022**  
**Filed March 21, 2023**  
**File No. 001-41200**

Dear Jenn Do and Daniel Gordon:

We are writing in response to the comment letter (the “Letter”) of the Staff (the “Staff”) of the Securities and Exchange Commission (the “Commission”), dated August 25, 2023, to Jennifer Ziolkowski, Chief Financial Officer of Vigil Neuroscience, Inc. (the “Company”), related to the above referenced filing made by the Company. The Staff requested a response within ten business days of the Letter. This response is timely submitted.

For your convenience, the Staff’s comments are reproduced below in italics, followed by the Company’s responses.

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Form 10-K for the fiscal year Ended December 31, 2022

Controls and Procedures, page 112

- Please confirm that in your future periodic filings, beginning with your September 30, 2023 Form 10-Q, you will clearly disclose your conclusion regarding the effectiveness of your disclosure controls and procedures pursuant to Item 307 of Regulation S-K. Please confirm that your disclosure controls and procedures were effective for the past two quarters.*

Response:

The Company respectfully acknowledges the Staff’s comment. The Company confirms that it will enhance its disclosures in the Controls and Procedures section in its future filings with the Commission, commencing with the Company’s upcoming Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2023, by providing the Company’s conclusion regarding the effectiveness of the Company’s disclosure controls and procedures pursuant to Item 307 of Regulation S-K. The Company also confirms that the Company’s disclosure controls and procedures were effective at a reasonable assurance level for the past two fiscal quarters that ended on March 31, 2023 and June 30, 2023, respectively.

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If you have any questions relating to the foregoing, please do not hesitate to contact Gabriela Morales-Rivera of Goodwin Procter LLP at (617) 570-1329.

Sincerely,

/s/ Jennifer Ziolkowski

Jennifer Ziolkowski  
Chief Financial Officer  
Vigil Neuroscience, Inc.

cc: Ivana Magovčević-Liebisch, *Vigil Neuroscience, Inc.*  
Christopher Verni, *Vigil Neuroscience, Inc.*  
Kingsley L. Taft, *Goodwin Procter LLP*  
Gabriela Morales-Rivera, *Goodwin Procter LLP*