## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### **SCHEDULE 13D**

Under the Securities Exchange Act of 1934 (Amendment No. 1)\*

# Vigil Neuroscience, Inc.

(Name of Issuer)

Common stock, par value \$0.0001 per share (Title of Class of Securities)

> 92673K108 (CUSIP Number)

Paul Hodgdon c/o Northpond Ventures, LLC 7500 Old Georgetown Road, Suite 850 Bethesda, MD 20814 240-800-1200 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

November 10, 2022

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.  $\Box$ 

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1.	Name	s of R	eporting Persons.		
	North	pond V	Ventures, LP		
2.	Check	the A	ppropriate Box if a Member of a Group (See Instructions)		
	(a) 🗆	(	b) 🗆		
3.	SEC U	Jse Or	ly		
4.	Source of Funds (See Instructions)				
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5.	Check	if Dis	visclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)		
6.	Citize	nship	or Place of Organization		
	Delaware				
		7.	Sole Voting Power		
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			2,831,520		
11.	Aggre	gate A	mount Beneficially Owned by Each Reporting Person		
	2,831,	520			
12.	Check	if the	Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)		
13.	Percer	nt of C	lass Represented by Amount in Row (11)		
	8.0%(				
14.	Туре с	of Rep	orting Person (See Instructions)		
	PN				

1.	Name	s of R	eporting Persons.
	North	pond V	Ventures GP, LLC
2.	Check (a) □		ppropriate Box if a Member of a Group (See Instructions) b) □
3.	SEC U	Jse Or	ly
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11.	Aggre	gate A	mount Beneficially Owned by Each Reporting Person
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12.	Check	if the	Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
13.		nt of C	lass Represented by Amount in Row (11)
	8.0%(	1)	
14.			orting Person (See Instructions)
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1.	Name	s of R	eporting Persons.
	North	oond V	Ventures II, LP
2.	Check	the A	ppropriate Box if a Member of a Group (See Instructions)
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3.	SEC U	Jse Or	ly
4.	Source	e of Fi	unds (See Instructions)
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12.			Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
13.		nt of C	Class Represented by Amount in Row (11)
	3.9%(	1)	
14.			orting Person (See Instructions)
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1.	Name	s of R	eporting Persons.
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3.	SEC U	Jse Or	lly
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	3.9%(		
14.	Туре с	of Rep	orting Person (See Instructions)
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1.	Name	s of Re	eporting Persons.		
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2.			ppropriate Box if a Member of a Group (See Instructions)		
	(a) 🗆	(	b) 🗆		
3.	. SEC Use Only				
4.	Source of Funds (See Instructions)				
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13.	Dercer	nt of C	Class Represented by Amount in Row (11)		
13.	i eicel	n 01 C	ass represented by Annount in Row (11)		
14.	11.8%		orting Person (See Instructions)		
14.	Type of	ы кер	orung rerson (see instructions)		
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This Amendment No. 1 to Schedule 13D relates to the Common Stock, par value \$0.0001 per share (the "Common Stock"), of Vigil Neuroscience, Inc., a Delaware corporation (the "Issuer"), and amends the initial statement on Schedule 13D filed by the Reporting Persons on January 19, 2022 (the "Initial Statement"). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Initial Statement.

This Amendment No. 1 to Schedule 13D is being filed solely due to a change in the aggregate number of shares of Common Stock outstanding and not due to any transaction by the Reporting Persons.

#### Item 5. Interest in Securities of the Issuer

Item 5 of the Initial Statement is hereby amended and restated as follows:

The information contained in rows 7, 8, 9, 10, 11 and 13 on each of the cover pages of this Schedule 13D and the information set forth or incorporated in Items 2, 3 and 6 is incorporated by reference in its entirety into this Item 5.

(a) and (b)

Percentages set forth in this Schedule 13D were calculated based on 35,581,091 shares of Common Stock outstanding as of October 31, 2022 as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 10, 2022.

As of the date hereof, Northpond LP owns directly (and therefore is deemed the beneficial owner of) 2,831,520 shares of Common Stock, which represents approximately 8.0% of the number of shares of Common Stock outstanding. Northpond LP has the shared power to vote, or direct the voting of, and the shared power to dispose of, or direct the disposition of, the Common Stock held by it.

As the general partner of Northpond LP, Northpond GP may be deemed to be the indirect beneficial owner of the 2,831,520 shares of Common Stock beneficially owned by Northpond LP, which represents approximately 8.0% of the number of shares of Common Stock outstanding. Northpond GP has the shared power to vote, or direct the voting of, and the shared power to dispose of, or direct the disposition of, the Common Stock held by Northpond LP.

As of the date hereof, Northpond II LP owns directly (and therefore is deemed the beneficial owner of) 1,382,978 shares of Common Stock, which represents approximately 3.9% of the number of shares of Common Stock outstanding. Northpond II LP has the shared power to vote, or direct the voting of, and the shared power to dispose of, or direct the disposition of, the Common Stock held by it.

As the general partner of Northpond II LP, Northpond II GP may be deemed to be the indirect beneficial owner of the 1,382,978 shares of Common Stock beneficially owned by Northpond II LP, which represents approximately 3.9% of the number of shares of Common Stock outstanding. Northpond II GP has the shared power to vote, or direct the voting of, and the shared power to dispose of, or direct the disposition of, the Common Stock held by Northpond II LP.

Mr. Rubin is the sole managing member of each of Northpond GP and Northpond II GP. As a result of the foregoing relationships, Mr. Rubin may be deemed to be the indirect beneficial owner of the 4,214,498 Common Stock beneficially owned by Northpond LP and Northpond II LP, which represents approximately 11.8% of the number of shares of Common Stock outstanding. Mr. Rubin has the shared power to vote, or direct the voting of, and the shared power to dispose of, or direct the disposition of, the Common Stock held by Northpond LP and Northpond II LP.

Each Reporting Person disclaims beneficial ownership of the securities reported herein except to the extent of his or its pecuniary interest therein.

(c) None of the Reporting Persons have effected any transaction with respect to the Common Stock during the past 60 days.

(d) Except as set forth in this Schedule 13D, no person, other than the Reporting Persons, has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Common Stock referred to in this Item 5. The limited partners of Northpond LP and Northpond II LP have the right to receive from Northpond LP and Northpond II LP, respectively, dividends that it receives from, or the proceeds that it receives from the sale of, the Common Stock referred to in this Item 5.

(e) Not applicable.

#### Signatures

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Dated: December 16, 2022

#### Northpond Ventures, LP

By: Northpond Ventures GP, LLC, its general partner

By: /s/ Patrick Smerkers

Name: Patrick Smerkers Title: Chief Financial Officer

#### Northpond Ventures GP, LLC

By: /s/ Patrick Smerkers Name: Patrick Smerkers Title: Chief Financial Officer

Northpond Ventures II, LP

By: Northpond Ventures II GP, LLC, its general partner

By: /s/ Patrick Smerkers

Name: Patrick Smerkers Title: Chief Financial Officer

#### Northpond Ventures II GP, LLC

By: /s/ Patrick Smerkers Name: Patrick Smerkers Title: Chief Financial Officer

By: /s/ Michael P. Rubin Name: Michael P. Rubin