
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

SCHEDULE 13D

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

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)

January 11, 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.

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.	Names of Reporting Persons. Northpond Ventures, LP	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) OO	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of shares beneficially owned by each reporting person with:	7.	Sole Voting Power 0
	8.	Shared Voting Power 2,831,520
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,831,520
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,831,520	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 10.0%(1)	
14.	Type of Reporting Person (See Instructions) PN	

(1) Based on 28,263,963 shares of Common Stock upon the closing of the Issuer's initial public offering, as provided in the Issuers Rule 424(b)(4) prospectus filed with the Securities and Exchange Commission on January 10, 2022.

1.	Names of Reporting Persons. Northpond Ventures GP, LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) OO	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of shares beneficially owned by each reporting person with:	7.	Sole Voting Power 0
	8.	Shared Voting Power 2,831,520
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 2,831,520
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,831,520	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 10.0%(1)	
14.	Type of Reporting Person (See Instructions) OO	

(1) Based on 28,263,963 shares of Common Stock upon the closing of the Issuer's initial public offering, as provided in the Issuers Rule 424(b)(4) prospectus filed with the Securities and Exchange Commission on January 10, 2022.

1.	Names of Reporting Persons. Northpond Ventures II, LP	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) OO	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of shares beneficially owned by each reporting person with:	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,382,978
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,382,978
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,382,978	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 4.9%(1)	
14.	Type of Reporting Person (See Instructions) PN	

(1) Based on 28,263,963 shares of Common Stock upon the closing of the Issuer's initial public offering, as provided in the Issuers Rule 424(b)(4) prospectus filed with the Securities and Exchange Commission on January 10, 2022.

1.	Names of Reporting Persons. Northpond Ventures II GP, LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) OO	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of shares beneficially owned by each reporting person with:	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,382,978
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,382,978
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,382,978	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 4.9%(1)	
14.	Type of Reporting Person (See Instructions) OO	

- (1) Based on 28,263,963 shares of Common Stock upon the closing of the Issuer's initial public offering, as provided in the Issuers Rule 424(b)(4) prospectus filed with the Securities and Exchange Commission on January 10, 2022.

1.	Names of Reporting Persons. Michael P. Rubin	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) OO	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization United States	
Number of shares beneficially owned by each reporting person with:	7.	Sole Voting Power 0
	8.	Shared Voting Power 4,214,498
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 4,214,498
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 4,214,498	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 14.9%(1)	
14.	Type of Reporting Person (See Instructions) IN	

(1) Based on 28,263,963 shares of Common Stock upon the closing of the Issuer's initial public offering, as provided in the Issuers Rule 424(b)(4) prospectus filed with the Securities and Exchange Commission on January 10, 2022.

Item 1. Security and Issuer

This 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"). The principal executive offices of the Issuer are located at 1 Broadway, 7th Floor, Suite 07-300, Cambridge, MA 02142.

Item 2. Identity and Background

This Schedule 13D is being filed jointly by Northpond Ventures, LP ("Northpond LP"), Northpond Ventures GP, LLC ("Northpond GP"), Northpond Ventures II, LP ("Northpond II LP"), Northpond Ventures II GP, LLC ("Northpond II GP") and Michael P. Rubin (collectively, the "Reporting Persons"). The Reporting Persons have entered into an agreement of joint filing, a copy of which is attached hereto as Exhibit A.

Northpond LP, Northpond GP, Northpond II LP and Northpond II GP are each organized under the laws of the State of Delaware. Mr. Rubin is a citizen of the United States.

The business address of each of the Reporting Persons is 7500 Old Georgetown Road, Suite 850, Bethesda, MD, 20814. The principal business of the Reporting Persons is the venture capital investment business.

None of the Reporting Persons has, during the past five years, been convicted of any criminal proceeding (excluding traffic violations or similar misdemeanors), nor been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

In September 2020 and May 2021, Northpond LP purchased an aggregate of 7,852,375 shares of Series A Preferred Stock ("Series A Preferred Stock") of the Issuer at an aggregate purchase price of approximately \$20.0 million.

In August 2021, Northpond II LP purchased an aggregate of 2,850,790 shares of Series B Preferred Stock ("Series B Preferred Stock") of the Issuer at an aggregate purchase price of approximately \$10.0 million.

The funds used by Northpond LP to purchase the shares of Series A Preferred Stock came from the capital contributions of Northpond LP's limited partners.

The funds used by Northpond II LP to purchase the shares of Series B Preferred Stock came from the capital contributions of Northpond II LP's limited partners.

Reverse Stock Split

The Issuer's board of directors approved a one-for-2.7732 reverse stock split of its issued and outstanding common stock and preferred stock effective as of December 30, 2021. Immediately following the reverse stock split, the total number of shares of Series A Preferred Stock held by Northpond LP was 2,831,520, the total number of shares of Series B Preferred Stock held by Northpond II LP was 1,027,978.

The Automatic Conversion

In connection with the Issuer's initial public offering, all shares of the Issuer's Series A Preferred Stock and Series B Preferred Stock were automatically converted into an equal number of shares of Common Stock.

In connection with the Issuer's initial public offering, Northpond II LP acquired 355,000 shares of Common Stock at a purchase price of \$14.00 per share for approximately \$5.0 million. The funds used by Northpond II LP to purchase the shares of Common Stock came from the capital contributions of Northpond II LP's limited partners.

Item 4. Purpose of Transaction

The information set forth in or incorporated by reference in Item 6 of this Schedule 13D is incorporated by reference in its entirety into this Item 4.

Northpond LP purchased the shares of Series A Preferred Stock of the Issuer and Northpond II LP purchased the shares Series B Preferred Stock of the Issuer and shares of Common Stock of the Issuer in the initial public offering for investment purposes.

Shaan C. Ghandi, a Director at Northpond Ventures LLC, an affiliate of the Reporting Persons, was appointed to the board of directors of the Issuer by Northpond LP pursuant to the Investors' Rights Agreement (defined below).

Each of the Reporting Persons intends to review the performance of their investment in the Issuer from time to time. Depending on various factors, including the business, prospects and financial position of the Issuer, the current and anticipated future price levels of the Common Stock and currency exchange rates, the conditions in the securities markets and general economic and industry conditions, as well as the other investment opportunities available to them, each of the Reporting Persons will take such actions with respect to their investment in the Issuer as they deem appropriate in light of the circumstances existing from time to time, including without limitation, engaging in communications with management and the board of directors of the Issuer, engaging in discussions with stockholders of the Issuer or other third parties about the Issuer and the Reporting Persons' investment. Each of the Reporting Persons may purchase additional equity in the Issuer or may, and hereby reserve the right to, dispose of some or all of their holdings in the open market, in public offerings, in privately negotiated transactions or in other transactions, including swaps and other derivative transactions.

Other than as described above, none of the Reporting Persons has any plans or proposals that relate to or would result in any of the actions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D (although each Reporting Person reserves the right to develop such plans).

Item 5. Interest in Securities of the Issuer

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 28,263,963 shares of Common Stock upon the closing of the Issuer's initial public offering, as provided in the Issuer's Rule 424(b)(4) prospectus filed with the Securities and Exchange Commission on January 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 10.0% 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 10.0% 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 4.9% 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 4.9% 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 14.9% 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) Except as set forth in this Schedule 13D, 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.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

The information set forth or incorporated in Items 3, 4 and 5 are incorporated by reference in its entirety into this Item 6.

Investors' Rights Agreement

Northpond LP, and Northpond II LP and certain other holders of the Issuer's Common Stock are party to an Amended and Restated Investors' Rights Agreement with the Issuer (the "Investors' Rights Agreement"), which provides that Northpond LP and certain other investors with the right to demand that the Issuer file a registration statement or request that their shares of the Issuer's capital stock be covered by a registration statement that the Issuer otherwise files, in each case as described below.

Demand Registration Rights

Beginning six months after the completion of the initial public offering, certain holders of the Issuer's common stock, including those issuable upon the conversion of shares of the Issuer's preferred stock upon closing of the initial public offering, will be entitled to demand registration rights. Under the terms of the investors' rights agreement, the Issuer will be required, upon the written request of a majority of holders of the registrable securities then outstanding that would result in an aggregate offering price of at least \$10 million, to file a registration statement on Form S-1 with respect to at least 40% of the registrable securities then outstanding and to use commercially reasonable efforts to effect the registration of all or a portion of these shares for public resale.

Short-form Registration Rights

Upon the completion of the initial public offering, certain holders of the Issuer's common stock, including those issuable upon the conversion of shares of the Issuer's preferred stock upon closing of the initial public offering, are also entitled to short-form registration rights. Pursuant to the investors' rights agreement, if the Issuer is eligible to file a registration statement on Form S-3, upon the written request of at least 20% in interest of these holders to sell registrable securities at an aggregate price of at least \$3 million, the Issuer will be required to use commercially reasonable efforts to effect a registration of such shares. The Issuer is required to effect only two registrations in any twelve month period pursuant to this provision of the investor rights agreement.

Piggyback Registration Rights

Upon the completion of the initial public offering, certain holders of the Issuer's common stock, including those issuable upon the conversion of shares of the Issuer's preferred stock upon closing of the initial public offering, are entitled to piggyback registration rights. If the Issuer registers any of its securities either for its own account or for the account of other security holders, the holders of these shares are entitled to include their shares in the registration. Subject to certain exceptions contained in the investors' rights agreement, the Issuer and the underwriters may limit the number of shares included in the underwritten offering to the number of shares which the Issuer and the underwriters determine in their sole discretion will not jeopardize the success of the offering.

Indemnification

The Investors' Rights Agreement contains customary cross-indemnification provisions, under which the Issuer is obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to the Issuer, and holders of registrable securities are obligated to indemnify the Issuer for material misstatements or omissions attributable to them.

Expiration of Registration Rights

The demand registration rights and short-form registration rights granted under the Investors' Rights Agreement will terminate on the fifth anniversary of the completion of the initial public offering.

Lock-Up Agreement

On December 30, 2021, Northpond LP and Northpond II LP entered into a Lock-up Agreement (the "Lock-up Agreement") with Morgan Stanley & Co. LLC and Jefferies LLC, as representatives of the underwriters of the Issuer's initial public offering. Pursuant to the Lock-up Agreement, Northpond LP and Northpond II LP agreed, subject to certain exceptions, not to, during the period of 180 days following the date of the prospectus for the Issuer's initial public offering, (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of the Issuer's common stock beneficially owned by Northpond LP or Northpond II LP, or any other securities so owned convertible into or exercisable or exchangeable for common stock of the Issuer or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Issuer's common stock, except with the prior consent of Morgan Stanley & Co. LLC and Jefferies LLC.

The foregoing description of the Lock-up Agreement does not purport to be complete and is qualified in its entirety by reference to the Lock-up Agreement filed as Exhibit C to this Schedule 13D and incorporated herein by reference.

Item 7. Material to Be Filed as Exhibits

- A. Joint Filing Agreement by and among the Reporting Persons.
- B. Amended and Restated Investors' Rights Agreement (incorporated by reference to Exhibit 4.2 to the Issuer's Registration Statement on Form S-1 (SEC File No. 333- 261230), filed with the SEC on November 19, 2022).
- C. Lock-up Agreement by and among Northpond Ventures, LP, Northpond Ventures II, LP, Morgan Stanley & Co. LLC and Jefferies LLC, dated December 30, 2021.

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: January 19, 2021

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

Joint Filing Agreement

In accordance with Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that they are jointly filing this statement on Schedule 13D. Each of them is responsible for the timely filing of such statement and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

IN WITNESS WHEREOF, the undersigned hereby execute this Joint Filing Agreement as of the 19th day of January, 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

LOCK-UP AGREEMENT

December 30, 2021

Morgan Stanley & Co. LLC
Jefferies LLC

As Representatives of the several Underwriters

c/o Morgan Stanley & Co. LLC
1585 Broadway
New York, New York 10036

c/o Jefferies LLC
820 Madison Avenue
New York, New York 10022

Ladies and Gentlemen:

The undersigned understands that Morgan Stanley & Co. LLC and Jefferies LLC (the “**Representatives**”) propose to enter into an Underwriting Agreement (the “**Underwriting Agreement**”) with Vigil Neuroscience, Inc., a Delaware corporation (the “**Company**”), providing for the public offering (the “**Public Offering**”) by the several Underwriters, including the Representatives (the “**Underwriters**”), of shares (the “**Shares**”) of the common stock, par value \$0.0001 per share of the Company (the “**Common Stock**”).

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of each of the Representatives on behalf of the Underwriters, it will not, and will not publicly disclose an intention to, during the period commencing on the date hereof and ending 180 days after the date of the final prospectus (the “**Restricted Period**”) relating to the Public Offering (the “**Prospectus**”), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock beneficially owned (as such term is used in Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), by the undersigned or any other securities so owned convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise.

The foregoing paragraph shall not apply to:

(a) transactions (including any swap, hedge, derivative or other synthetic arrangement) or public announcements, in each case relating to shares of Common Stock or other securities acquired (i) in the Public Offering or (ii) in open market or other transactions after the completion of the Public Offering or that otherwise do not involve or relate to shares of Common Stock or other securities owned by the undersigned prior to the Public Offering, *provided* that no filing by the undersigned under Section 16(a) of the Exchange Act, or any other public announcement reporting a reduction in beneficial ownership of Common Stock below the number of shares of Common Stock or other securities that the undersigned owns immediately prior to the Public Offering, shall be required or shall be voluntarily made during the Restricted Period in connection with subsequent sales of Common Stock or other securities acquired in the Public Offering or such open market or other transactions;

(b) transfers of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock (i) as a bona fide gift or to a charitable organization or educational institution in a transfer not involving a disposition for value or (ii) if the undersigned is a corporation, partnership or other business entity, as part of a disposition, transfer or distribution without consideration to limited partners, members, affiliates, stockholders or equity holders of the undersigned, or to the estates of any of the foregoing;

(c) transfers or dispositions of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to any immediate family member of the undersigned or any trust for the direct or indirect benefit of the undersigned or an immediate family member of the undersigned, or if the undersigned is a trust, to a grantor, trustee or beneficiary of the trust (including such beneficiary's estate) of the undersigned, in each case set forth in this clause (c) in a transaction not involving a disposition for value;

(d) transfers or dispositions of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock (i) by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the undersigned upon the death of the undersigned or (ii) by operation of law pursuant to orders of a court or regulatory agency, in connection with a negotiated divorce settlement or pursuant to a qualified domestic relations order;

(e) if the undersigned is an entity, transfers, dispositions or distributions of shares of Common Stock or any security convertible into Common Stock (i) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate (within the meaning set forth in Rule 405 under the Securities Act of 1933, as amended, and including the subsidiaries of the undersigned) of the undersigned, (ii) to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the undersigned or affiliates of the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership) or (iii) to its stockholders, limited partners, general partners, members, beneficiaries or other equityholders or to the estate of any such stockholders, limited partners, general partners, members, beneficiaries or equityholders;

(f) transfers or dispositions of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to the Company (i) pursuant to any contractual arrangement in effect on the date of this agreement and described in the preliminary prospectus contained in the registration statement relating to the Public Offering at the time such registration statement became effective (the “Time of Sale Prospectus”) as well as in the Prospectus that provides for the repurchase of the undersigned’s Common Stock or other securities by the Company or (ii) in connection with the termination of the undersigned’s employment with or service to the Company; provided that such transfers or dispositions are not required to be reported with the SEC on Form 4 in accordance with Section 16 under the Exchange Act and no other public announcement shall be voluntarily made during the Restricted Period in connection with any such transfers or dispositions (other than (1) Schedule 13 filings filed with the SEC, and (2) any Form 4 or Form 5 required to be filed under the Exchange Act if the undersigned is subject to Section 16 reporting with respect to the Company under the Exchange Act and indicating by footnote disclosure or otherwise the nature of the transfer or disposition);

(g) transfers or dispositions of Common Stock or other securities to the Company in connection with the conversion of any convertible security into, or the exercise of any option or warrant for, Common Stock (including by way of “net” or “cashless” exercise or settlement solely to cover withholding tax obligations, including estimated taxes, in connection with such exercise and any transfer to the Company for the payment of taxes as a result of such exercise) in each case pursuant to any equity incentive plan, other equity award plan or warrant of the Company described in the Time of Sale Prospectus and the Prospectus and to the extent permitted by the instruments representing such options outstanding as of the date of the Prospectus; provided that (i) any such Common Stock received by the undersigned shall be subject to the terms of this agreement and (ii) no filing under Section 16 of the Exchange Act, reporting a reduction in beneficial ownership of Common Stock, or other public announcement shall be required or shall be voluntarily made during the Restricted Period (other than a filing on a Form 4 that reports such disposition under the transaction code “F” and indicates by footnote disclosure or otherwise the nature of the transfer or disposition);

(h) (i) transfers of Common Stock (or any securities convertible into or exercisable or exchangeable for Common Stock) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction approved by the Company’s board of directors the result of which is that any person (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than the Company, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of more than 50% of the total voting power of the voting stock of the Company and (ii) entry into any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of Common Stock or such other securities in connection with a transaction described in (i) above; provided that in the event that such change of control transaction is not completed, the Common Stock (or any security convertible into or exercisable or exchangeable for Common Stock) owned by the undersigned shall remain subject to the restrictions contained in this agreement;

(i) facilitating the establishment of a trading plan on behalf of a shareholder, officer or director of the Company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, *provided* that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the undersigned or the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period;

(j) pursuant to an order of a court or regulatory agency or to comply with any regulations related to the undersigned's ownership of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock, *provided* that in the case of any transfer pursuant to this subsection (j), any filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock shall state that such transfer is pursuant to an order of a court or regulatory agency or to comply with any regulations related to the ownership of Common Stock unless such a statement would be prohibited by any applicable law, regulation or order of a court or regulatory authority; or

(k) the conversion of the outstanding shares of preferred stock or warrants to acquire shares of preferred stock of the Company described in the Prospectus into shares of Common Stock of the Company; *provided* that such shares of Common Stock remain subject to the terms of this agreement;

provided that in the case of any transfer or distribution pursuant to clause (b), (c), (d) and (e), (i) each transferee, donee or distributee shall sign and deliver a lock-up agreement substantially in the form of this agreement and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of Common Stock, or any other public announcement, shall be required or shall be voluntarily made during the Restricted Period (other than (1) Schedule 13 filings filed with the SEC, and (2) in the case of a transfer or other disposition pursuant to clause (b)(ii) or (d) above, any Form 4 or Form 5 required to be filed under the Exchange Act if the undersigned is subject to Section 16 reporting with respect to the Company under the Exchange Act, and any such filing will indicate by footnote disclosure or otherwise the nature of the transfer or disposition).

For purposes of this agreement, "immediate family member" shall mean any relationship by blood, marriage, domestic partnership or adoption, not more remote than first cousin.

In addition, the undersigned agrees that, without the prior written consent of the Representatives on behalf of the Underwriters, it will not, during the Restricted Period, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock, *provided* that the foregoing provision shall not be binding on the undersigned unless and until the requisite number of holders required to waive any such rights have waived or otherwise agreed not to exercise such rights. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's shares of Common Stock except in compliance with the foregoing restrictions.

In the event that (i) the Representatives release, in full or in part, any (x) director of the Company, (y) executive officer of the Company or (z) stockholder holding five percent (5%) or more of the outstanding shares of Common Stock of the Company as of immediately prior to the Public Offering (calculated on a fully-diluted, as-converted basis and aggregating all securities held by affiliated stockholders) (each such director, executive officer or stockholder, a “**Triggering Shareholder**”) from the restrictions of any lock-up agreement similar to this agreement between such Triggering Shareholder and the Representatives in connection with the Public Offering and (ii) such release or series of releases granted to any Triggering Shareholder cumulatively relates to Common Stock or other securities of the Company in an amount or amounts having a fair market value of more than \$2,500,000 in the aggregate ((i) and (ii) together, a “**Triggering Release** “), then the undersigned shall be automatically released from the terms of this letter to the same extent, with respect to the same percentage of Company securities of the undersigned as the percentage of Company securities being released in the Triggering Release represent with respect to the Company securities held by the Triggering Shareholder (calculated as a percentage of the total outstanding shares of Common Stock held by the Triggering Shareholder) at the time of the request of the Triggering Release. In the event of a Triggering Release, the Company shall notify the undersigned of the occurrence of each such Triggering Release within two business days prior to the effective date thereof, provided that the failure to provide such notice shall not give rise to any claim or liability against the Representatives or the Underwriters. Notwithstanding the foregoing, (1) the provisions of this paragraph will not apply if the release or waiver is effected (A) solely to permit a transfer not involving a disposition for value and if the transferee agrees in writing to be bound by the same terms described in this letter to the extent and for the duration that such terms remain in effect at the time of transfer or (B) in the case of a natural person, due to circumstances of a bona fide emergency or hardship, as determined by the Representatives in their sole judgment, and (2) if the release or waiver is in connection with any secondary underwritten public offering of Shares (including a secondary underwritten public offering with a primary component) (an “**Underwritten Sale**”), then such waiver or release shall only apply with respect to, and to the extent of, the undersigned’s participation in such Underwritten Sale, *provided* that, if the undersigned has a contractual right to “piggyback” on a registration statement filed by the Company for the offer and sale of Common Stock in an Underwritten Sale, the undersigned is offered the opportunity to participate in the secondary component of any such Underwritten Sale pursuant to such contractual rights.

The undersigned understands that the Company and the Underwriters are relying upon this agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this agreement is irrevocable and shall be binding upon the undersigned’s heirs, legal representatives, successors and assigns.

The undersigned acknowledges and agrees that the Underwriters have not provided any recommendation or investment advice nor have the Underwriters solicited any action from the undersigned with respect to the Public Offering and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the

extent deemed appropriate. The undersigned further acknowledges and agrees that, although the Underwriters may provide certain Regulation Best Interest and Form CRS disclosures or other related documentation to you in connection with the Public Offering, the Underwriters are not making a recommendation to you to participate in the Public Offering or sell any Shares at the price determined in the Public Offering, and nothing set forth in such disclosures or documentation is intended to suggest that any Underwriter is making such a recommendation.

The undersigned hereby consents to receipt of this agreement in electronic form and understand and agree that this letter agreement may be signed electronically. If any signature is delivered by facsimile transmission, electronic mail, or otherwise by electronic transmission evidencing an intent to sign this agreement (including any electronic signature complying with the U.S. federal E-SIGN Act of 2000, e.g., www.docusign.com), such facsimile transmission, electronic mail or other electronic transmission shall create a valid and binding obligation of the undersigned with the same force and effect as if such signature were an original. Execution and delivery of this agreement by facsimile transmission, electronic mail or other electronic transmission is legal, valid and binding for all purposes.

The undersigned further acknowledges and agrees that none of the Underwriters has made any recommendation or provided any investment or other advice to the undersigned with respect to this Lock-Up Agreement or the subject matter hereof, and the undersigned has consulted its own legal, accounting, financial, regulatory, tax and other advisors with respect to this Lock-Up Agreement and the subject matter hereof to the extent the undersigned has deemed appropriate.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

Notwithstanding anything to the contrary contained herein, this agreement shall immediately terminate and the undersigned shall be released from all obligations under this agreement if (i) the Company notifies the Representatives, on the one hand, or the Representatives notify the Company, on the other hand, in writing, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Public Offering, (ii) the Company files an application with the Securities and Exchange Commission to withdraw the registration statement related to the Public Offering, (iii) the Underwriting Agreement is executed but is then terminated (other than the provisions thereof which survive termination) prior to payment for and delivery of the Shares to be sold thereunder, or (iv) March 15, 2022, in the event the Underwriting Agreement has not been executed by such date.

This agreement and any claim, controversy or dispute arising under or related to this agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof.

Very truly yours,

Northpond Ventures, LP

By: Northpond Ventures, GP, its general partner

By: /s/ Patrick Smerkers

Patrick Smerkers
Senior Vice President, Finance and
Operations

7500 Old Georgetown Rd, Bethesda, MD
20814

(Address)

[Signature Page to Lock-up Agreement]

Very truly yours,

Northpond Ventures II, LP

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

By: /s/ Patrick Smerkers

Patrick Smerkers
Senior Vice President, Finance and
Operations

7500 Old Georgetown Rd, Bethesda, MD
20814

(Address)

[Signature Page to Lock-up Agreement]

FORM OF PRESS RELEASE

Vigil Neuroscience, Inc.

[Date]

Vigil Neuroscience, Inc. (the “**Company**”) announced today that Morgan Stanley & Co. LLC and Jefferies LLC as Representatives of the several underwriters of the Company’s recent public sale of [•] shares of its common stock is [waiving][releasing] a lock-up restriction with respect to [•] shares of the Company’s common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver][release] will take effect on [•], 2021, and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.