

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

SCHEDULE 13G

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

Graphite Bio, Inc.

(Name of Issuer)

Common Stock, par value \$0.00001 per share

(Title of Class of Securities)

38870X104

(CUSIP Number)

June 29, 2021

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

*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 the disclosures provided in a prior cover page.

The information required in 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 ("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).

CUSIP No. 38870X104

1. Names of Reporting Persons
Samsara BioCapital, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power
7,393,870 shares (2)

7. Sole Dispositive Power
0

8. Shared Dispositive Power
7,393,870 shares (2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
7,393,870 shares (2)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)
12.7% (3)

12. Type of Reporting Person (See Instructions)
PN

- (1) This Schedule 13G is filed by Samsara BioCapital, L.P. ("Samsara LP"), Samsara BioCapital GP, LLC ("Samsara GP"), 436, L.P. ("436 LP"), 436, LLC ("436 LLC") and Dr. Srinivas Akkaraju ("Akkaraju") (and together with Samsara LP, Samsara GP, 436 LP and 436 LLC, the "Reporting Persons"). The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) These shares are held by Samsara LP. Samsara GP is the sole general partner of Samsara LP and may be deemed to have voting and investment power over the securities held by Samsara LP. Akkaraju is a managing member of Samsara GP and may be deemed to have voting and dispositive power over the shares held by Samsara LP. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of June 29, 2021.
- (3) This percentage is calculated based on 58,079,002 shares of Common Stock outstanding as of as of June 29, 2021 upon the closing of the Issuer's initial public offering, as reported in the Issuer's prospectus (the "Prospectus") filed with the Securities and Exchange Commission (the "SEC") on June 28, 2021 pursuant to Rule 424(b)(4) of the Securities Act of 1933, as amended.

CUSIP No. 38870X104

1. Names of Reporting Persons
Samsara BioCapital GP, LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power
7,393,870 shares (2)

7. Sole Dispositive Power
0

8. Shared Dispositive Power
7,393,870 shares (2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
7,393,870 shares (2)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)
12.7% (3)

12. Type of Reporting Person (See Instructions)
OO

- (1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) These shares are held by Samsara LP. Samsara GP is the sole general partner of Samsara LP and may be deemed to have voting and investment power over the securities held by Samsara LP. Akkaraju is a managing member of Samsara GP and may be deemed to have voting and dispositive power over the shares held by Samsara LP. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of June 29, 2021.

(3) This percentage is calculated based on 58,079,002 shares of Common Stock outstanding as of as of June 29, 2021 upon the closing of the Issuer's initial public offering, as reported in the Issuer's prospectus (the "Prospectus") filed with the Securities and Exchange Commission (the "SEC") on June 28, 2021 pursuant to Rule 424(b)(4) of the Securities Act of 1933, as amended.

CUSIP No. 38870X104

1. Names of Reporting Persons
436, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power
37,753 shares (2)

7. Sole Dispositive Power
0

8. Shared Dispositive Power
37,753 shares (2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
37,753 shares (2)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)
0.1% (3)

12. Type of Reporting Person (See Instructions)
PN

(1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.

(2) These shares are held by 436 LP. 436 LLC is the sole general partner of 436 LP and may be deemed to have voting and investment power over the securities held by 436 LP. Akkaraju is a managing member of 436 LLC and may be deemed to have voting and dispositive power over the shares held by 436 LP. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of June 29, 2021.

(3) This percentage is calculated based on 58,079,002 shares of Common Stock outstanding as of as of June 29, 2021 upon the closing of the Issuer's initial public offering, as reported in the Issuer's prospectus (the "Prospectus") filed with the Securities and Exchange Commission (the "SEC") on June 28, 2021 pursuant to Rule 424(b)(4) of the Securities Act of 1933, as amended.

CUSIP No. 38870X104

1. Names of Reporting Persons
436, LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power
37,753 shares (2)

7. Sole Dispositive Power
0

8. Shared Dispositive Power
37,753 shares (2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
37,753 shares (2)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)
0.1% (3)

12. Type of Reporting Person (See Instructions)
OO

(1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.

(2) These shares are held by 436 LP. 436 LLC is the sole general partner of 436 LP and may be deemed to have voting and investment power over the securities held by 436 LP. Akkaraju is a managing member of 436 LLC and may be deemed to have voting and dispositive power over the shares held by 436 LP. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of June 29, 2021.

(3) This percentage is calculated based on 58,079,002 shares of Common Stock outstanding as of as of June 29, 2021 upon the closing of the Issuer's initial public offering, as reported in the Issuer's prospectus (the "Prospectus") filed with the Securities and Exchange Commission (the "SEC") on June 28, 2021 pursuant to Rule 424(b)(4) of the Securities Act of 1933, as amended.

CUSIP No. 38870X104

1. Names of Reporting Persons
Dr. Srinivas Akkaraju

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization
United States of America

5. Sole Voting Power
0

Number of
Shares
Beneficially

6. Shared Voting Power
7,431,623 shares (2)

Owned by
Each
Reporting
Person With

7. Sole Dispositive Power
0

8. Shared Dispositive Power
7,431,623 shares (2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
7,431,623 shares (2)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)
12.8% (3)

12. Type of Reporting Person (See Instructions)
IN

- (1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Includes 7,393,870 shares of Common Stock held by Samsara LP and 37,753 shares of Common Stock held by yyy. Samsara GP is the sole general partner of Samsara LP and may be deemed to have voting and investment power over the securities held by Samsara LP. Akkaraju is a managing member of Samsara GP and may be deemed to have voting and dispositive power over the shares held by Samsara LP. 436 LLC is the sole general partner of 436 LP and may be deemed to have voting and investment power over the securities held by 436 LP. Akkaraju is a managing member of 436 LLC and may be deemed to have voting and dispositive power over the shares held by 436 LP. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of June 29, 2021.
- (3) This percentage is calculated based on 58,079,002 shares of Common Stock outstanding as of as of June 29, 2021 upon the closing of the Issuer's initial public offering, as reported in the Issuer's prospectus (the "Prospectus") filed with the Securities and Exchange Commission (the "SEC") on June 28, 2021 pursuant to Rule 424(b)(4) of the Securities Act of 1933, as amended.

Item 1.

- (a) Name of Issuer
Graphite Bio, Inc.
- (b) Address of Issuer's Principal Executive Offices
279 East Grand Avenue, Suite 430
South San Francisco, CA 94080

Item 2.

- (a) Name of Person Filing
Samsara BioCapital, L.P. ("Samsara LP")
Samsara BioCapital GP, LLC ("Samsara GP")
436, L.P. ("436 LP")
436, LLC ("436 LLC")
Srinivas Akkaraju ("Akkaraju")
- (b) Address of Principal Business Office or, if none, Residence
c/o Samsara BioCapital, LLC
628 Middlefield Road
Palo Alto, CA 94301
- (c) Citizenship
- | | | | |
|--------------|------------|---|--------------------------|
| Entities: | Samsara LP | - | Delaware |
| | Samsara GP | - | Delaware |
| | 436, L.P. | - | Delaware |
| | 436, LLC | - | Delaware |
| Individuals: | Akkaraju | - | United States of America |
- (d) Title of Class of Securities
Common Stock
- (e) CUSIP Number
38870X104

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable.

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

Reporting Persons	Shares Held Directly	Sole Voting Power	Shared Voting Power	Sole Dispositive Power	Shared Dispositive Power	Beneficial Ownership	Percentage of Class (5)
Samsara LP (1) (2)	7,393,870		7,393,870		7,393,870	7,393,870	12.7%
Samsara GP (1) (2)			7,393,870		7,393,870	7,393,870	12.7%
436 LP (3) (4)	37,753		37,753		37,753	37,753	0.1%
436 LLC (3) (4)			37,753		37,753	37,753	0.1%
Akkaraju (1) (2) (3) (4)			7,431,623		7,431,623	7,431,623	12.8%

- (1) Includes 7,393,870 shares of Common Stock held by Samsara LP.
- (2) Samsara GP is the sole general partner of Samsara LP and may be deemed to have voting and investment power over the securities held by Samsara LP. Akkaraju is a managing member of Samsara GP and may be deemed to have voting and dispositive power over the shares held by Samsara LP.
- (3) Includes 37,753 shares of Common Stock held by 436 LP.
- (4) 436 LLC is the sole general partner of 436 LP and may be deemed to have voting and investment power over the securities held by 436 LP. Akkaraju is a managing member of 436 LLC and may be deemed to have voting and dispositive power over the shares held by 436 LP.
- (5) This percentage is calculated based on 58,079,002 shares of Common Stock outstanding as of as of June 29, 2021 upon the closing of the Issuer's initial public offering, as reported in the Issuer's prospectus (the "Prospectus") filed with the Securities and Exchange Commission (the "SEC") on June 28, 2021 pursuant to Rule 424(b)(4) of the Securities Act of 1933, as amended.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following .

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person

Not applicable.

Item 8. Identification and Classification of Members of the Group

Not applicable.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

By signing below, each of the undersigned certifies that, to the best of their knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under §240.14a-11.

Signature

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

Dated: July 9, 2021

Samsara BioCapital, L.P..

Samsara BioCapital GP, LLC

By: Samsara BioCapital GP, LLC
its General Partner

By: /s/ Srinivas Akkaraju
Name: Srinivas Akkaraju
Title: Managing Member

436, L.P.

436, LLC

By: 436, LLC
its General Partner

By: /s/ Srinivas Akkaraju
Name: Srinivas Akkaraju

By: /s/ Srinivas Akkaraju
Name: Srinivas Akkaraju

Title: Managing Member

Title: Managing Member

/s/ Srinivas Akkaraju
Srinivas Akkaraju

ATTENTION

Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).

Exhibit(s):

A - Joint Filing Statement

EXHIBIT A

JOINT FILING STATEMENT

We, the undersigned, hereby express our agreement that the attached Schedule 13G (or any amendments thereto) relating to the Common Stock of Graphite Bio, Inc. is filed on behalf of each of us.

Dated: July 9, 2021

Samsara BioCapital, L.P..

Samsara BioCapital GP, LLC

By: Samsara BioCapital GP, LLC
its General Partner

By: /s/ Srinivas Akkaraju
Name: Srinivas Akkaraju
Title: Managing Member

By: /s/ Srinivas Akkaraju
Name: Srinivas Akkaraju
Title: Managing Member

436, L.P.

436, LLC

By: 436, LLC
its General Partner

By: /s/ Srinivas Akkaraju
Name: Srinivas Akkaraju
Title: Managing Member

By: /s/ Srinivas Akkaraju
Name: Srinivas Akkaraju
Title: Managing Member

/s/ Srinivas Akkaraju
Srinivas Akkaraju