
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 6)*

Repare Therapeutics Inc.

(Name of Issuer)

Common Shares

(Title of Class of Securities)

760273102

(CUSIP Number)

Max Eisenberg
One Sansome Street, Suite 1650
San Francisco, CA, 94104
415-801-8100

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

11/19/2025

(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. ☐

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 (“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).

SCHEDULE 13D

CUSIP No. 760273102

Name of reporting person

1

Versant Venture Capital V, L.P.

2

Check the appropriate box if a member of a Group (See Instructions)

	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	WC
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
5	☐
	Citizenship or place of organization
6	DELAWARE
	Sole Voting Power
7	0.00
Number of	Shared Voting Power
Shares	
Beneficially	8 0.00
Owned by	Sole Dispositive Power
Each	9 0.00
Reporting	Shared Dispositive Power
Person	
With:	10 0.00
	Aggregate amount beneficially owned by each reporting person
11	0.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	0.0 %
	Type of Reporting Person (See Instructions)
14	PN

SCHEDULE 13D

CUSIP No. 760273102

	Name of reporting person
1	Versant Affiliates Fund V, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	WC
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
5	☐
	Citizenship or place of organization
6	DELAWARE
Number of	7 Sole Voting Power

Shares	
Beneficially	2,693.00
Owned by	Shared Voting Power
Each	8
Reporting	0.00
Person	Sole Dispositive Power
With:	9
	2,693.00
	Shared Dispositive Power
	10
	0.00
	Aggregate amount beneficially owned by each reporting person
11	2,693.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	0.0 %
	Type of Reporting Person (See Instructions)
14	PN

Comment for Type of Reporting Person: All shares are held by VAF V (as defined in Item 2(a) of the Original 13D (as defined in Item 1 below)). VV V (as defined in Item 2(a) of the Original 13D) is the sole general partner of VAF V and may be deemed to have voting and dispositive power over the securities held by VAF V and as a result may be deemed to have beneficial ownership over such securities. The percentage in Row 13 is based on 42,985,755 Common Shares (as defined in Item 1 of the Original 13D) outstanding as of October 31, 2025, as set forth in the Issuer's quarterly report on Form 10-Q for the quarter ended September 30, 2025, filed with the United States Securities and Exchange Commission (the "Commission") on November 14, 2025 (the "Form 10-Q").

SCHEDULE 13D

CUSIP No. 760273102

1	Name of reporting person
	Versant Ophthalmic Affiliates I, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	WC
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
5	☐
	Citizenship or place of organization
6	DELAWARE
Number of	Sole Voting Power
Shares	7
Beneficially	2,982.00
Owned by	Shared Voting Power
Each	8
Reporting	0.00
Person	9
With:	Sole Dispositive Power

	2,982.00
	Shared Dispositive Power
10	0.00
11	Aggregate amount beneficially owned by each reporting person
	2,982.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	0.0 %
14	Type of Reporting Person (See Instructions)
	PN

Comment for Type of Reporting Person: All shares are held by VOA (as defined in Item 2(a) of the Original 13D). VV V is the sole general partner of VOA and may be deemed to have voting and dispositive power over the securities held by VOA and as a result may be deemed to have beneficial ownership over such securities. The percentage in Row 13 is based on 42,985,755 Common Shares outstanding as of October 31, 2025, as reported in the Form 10-Q.

SCHEDULE 13D

CUSIP No. 760273102

1	Name of reporting person
	Versant Ventures V, LLC
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
4	Source of funds (See Instructions)
	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	DELAWARE
	Sole Voting Power
7	0.00
Number of	Shared Voting Power
Shares	
Beneficially	8
Owned by	5,675.00
Each	Sole Dispositive Power
Reporting	9
Person	0.00
With:	Shared Dispositive Power
	10
	5,675.00
11	Aggregate amount beneficially owned by each reporting person
	5,675.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

	☐	Percent of class represented by amount in Row (11)
13		0.0 %
		Type of Reporting Person (See Instructions)
14		OO

Comment for Type of Reporting Person: The shares reported in Rows 8 and 10 consist of (i) 2,693 Common Shares held by VAF V and (ii) 2,982 Common Shares held by VOA. VV V is the sole general partner of each of VAF V and VOA and may be deemed to have voting and dispositive power over the securities held by each of VAF V and VOA. The percentage in Row 13 is based on 42,985,755 Common Shares outstanding as of October 31, 2025, as reported in the Form 10-Q.

SCHEDULE 13D

CUSIP No. 760273102

	Name of reporting person	
1	Versant Venture Capital V (Canada) LP	
	Check the appropriate box if a member of a Group (See Instructions)	
2	☐ (a)	
	☒ (b)	
3	SEC use only	
	Source of funds (See Instructions)	
4	WC	
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
5	☐	
	Citizenship or place of organization	
6	ONTARIO, CANADA	
	Sole Voting Power	
7	6,814.00	
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power	
8	0.00	
	Sole Dispositive Power	
9	6,814.00	
	Shared Dispositive Power	
10	0.00	
	Aggregate amount beneficially owned by each reporting person	
11	6,814.00	
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)	
12	☐	
	Percent of class represented by amount in Row (11)	
13		0.0 %
	Type of Reporting Person (See Instructions)	
14		PN

Comment for Type of Reporting Person: All shares held by VVC CAN (as defined in Item 2(a) of the Original 13D). VV V CAN GP (as defined in Item 2(a) of the Original 13D) is the sole general partner of VV V CAN (as defined in Item 2(a) of the Original 13D), and VV V CAN is the sole general partner of VVC CAN. Each of VV V CAN GP and VV V CAN share voting and dispositive power over the shares held by VVC CAN and as a result may be deemed to have beneficial ownership over such securities. The percentage in Row 13 is based on 42,985,755 Common Shares outstanding as of October 31, 2025, as reported in the Form 10-Q.

SCHEDULE 13D

CUSIP No. 760273102

1	Name of reporting person
	Versant Ventures V (Canada), L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	DELAWARE
	Sole Voting Power
7	0.00
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power
8	6,814.00
	Sole Dispositive Power
9	0.00
	Shared Dispositive Power
10	6,814.00
	Aggregate amount beneficially owned by each reporting person
11	6,814.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	0.0 %
	Type of Reporting Person (See Instructions)
14	PN

Comment for Type of Reporting Person: All shares held by VVC CAN. VV V CAN GP is the sole general partner of VV V CAN, and VV V CAN is the sole general partner of VVC CAN. Each of VV V CAN GP and VV V CAN share voting and dispositive power over the shares held by VVC CAN and as a result may be deemed to have beneficial ownership over such securities. The percentage in Row 13 is based on 42,985,755 Common Shares outstanding as of October 31, 2025, as reported in the Form 10-Q.

SCHEDULE 13D

CUSIP No. 760273102

1

Name of reporting person

Versant Ventures V GP-GP (Canada), Inc.

Check the appropriate box if a member of a Group (See Instructions)

2

☐ (a)

☒ (b)

3

SEC use only

4

Source of funds (See Instructions)

5

AF

Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

6

☐

Citizenship or place of organization

7

DELAWARE

Sole Voting Power

8

0.00

Shared Voting Power

9

6,814.00

Sole Dispositive Power

10

0.00

Shared Dispositive Power

11

6,814.00

Aggregate amount beneficially owned by each reporting person

12

Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

13

☐

Percent of class represented by amount in Row (11)

14

0.0 %

Type of Reporting Person (See Instructions)

15

CO

Comment for Type of Reporting Person: All shares held by VVC CAN. VV V CAN GP is the sole general partner of VV V CAN, and VV V CAN is the sole general partner of VVC CAN. Each of VV V CAN GP and VV V CAN share voting and dispositive power over the shares held by VVC CAN and as a result may be deemed to have beneficial ownership over such securities. The percentage in Row 13 is based on 42,985,755 Common Shares outstanding as of October 31, 2025, as reported in the Form 10-Q.

SCHEDULE 13D

CUSIP No. 760273102

1

Name of reporting person

Versant Venture Capital VI, L.P.

2	Check the appropriate box if a member of a Group (See Instructions)	
	☐ (a)	
	☒ (b)	
3	SEC use only	
	Source of funds (See Instructions)	
4	WC	
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
5	☐	
	Citizenship or place of organization	
6	DELAWARE	
	Sole Voting Power	
7	0.00	
	Shared Voting Power	
8	0.00	
	Sole Dispositive Power	
9	0.00	
	Shared Dispositive Power	
10	0.00	
	Aggregate amount beneficially owned by each reporting person	
11	0.00	
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)	
12	☐	
	Percent of class represented by amount in Row (11)	
13	0.0 %	
	Type of Reporting Person (See Instructions)	
14	PN	

SCHEDULE 13D

CUSIP No. 760273102

	Name of reporting person	
1	Versant Ventures VI GP, L.P.	
	Check the appropriate box if a member of a Group (See Instructions)	
2	☐ (a)	
	☒ (b)	
3	SEC use only	
	Source of funds (See Instructions)	
4	AF	
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
5	☐	
6	Citizenship or place of organization	

DELAWARE

Sole Voting Power

7

0.00

Number of
Shares
Beneficially

Shared Voting Power

8

0.00

Owned by

Sole Dispositive Power

Each

9

0.00

Reporting

Person

With:

Shared Dispositive Power

10

0.00

Aggregate amount beneficially owned by each reporting person

11

0.00

Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

12



Percent of class represented by amount in Row (11)

13

0.0 %

Type of Reporting Person (See Instructions)

14

PN

SCHEDULE 13D

CUSIP No. 760273102

Name of reporting person

1

Versant Ventures VI GP-GP, LLC

Check the appropriate box if a member of a Group (See Instructions)

2



(a)



(b)

3

SEC use only

Source of funds (See Instructions)

4

AF

Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

5



Citizenship or place of organization

6

DELAWARE

Number of
Shares

Sole Voting Power

7

Beneficially

0.00

Owned by

Shared Voting Power

Each

8

0.00

Reporting

Person

With:

Sole Dispositive Power

9

0.00

Shared Dispositive Power

10

0.00

11	Aggregate amount beneficially owned by each reporting person
	0.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	0.0 %
14	Type of Reporting Person (See Instructions)
	OO

SCHEDULE 13D

CUSIP No. 760273102

1	Name of reporting person
	Versant Vantage I, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
4	Source of funds (See Instructions)
	WC
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	DELAWARE
	Sole Voting Power
7	72,211.00
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power
8	0.00
	Sole Dispositive Power
9	72,211.00
	Shared Dispositive Power
10	0.00
	Aggregate amount beneficially owned by each reporting person
11	72,211.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	0.2 %
14	Type of Reporting Person (See Instructions)
	PN

Comment for Type of Reporting Person: All shares are held by Vantage LP (as defined in Item 2(a) of the Original 13D). Vantage LLC (as defined in the Original 13D) is the general partner of Vantage GP (as defined in Item 2(a) of the Original 13D), which is the general partner of Vantage LP. Each of Vantage LLC and Vantage GP share voting and dispositive power over the shares held by Vantage LP and as a result may be deemed to have beneficial ownership over such securities. The percentage in Row 13 is based on 42,985,755 Common Shares outstanding as of October 31, 2025, as reported in the Form 10-Q.

SCHEDULE 13D

CUSIP No. 760273102

1	Name of reporting person
	Versant Vantage I GP, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	DELAWARE
	Sole Voting Power
7	0.00
Number of Shares Beneficially Owned by Each Reporting Person	Shared Voting Power
8	72,211.00
	Sole Dispositive Power
9	0.00
With:	Shared Dispositive Power
10	72,211.00
	Aggregate amount beneficially owned by each reporting person
11	72,211.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	0.2 %
	Type of Reporting Person (See Instructions)
14	PN

Comment for Type of Reporting Person: All shares are held by Vantage LP. Vantage LLC is the general partner of Vantage GP, which is the general partner of Vantage LP. Each of Vantage LLC and Vantage GP share voting and dispositive power over the shares held by Vantage LP and as a result may be deemed to have beneficial ownership over such securities. The percentage in Row 13 is based on 42,985,755 Common Shares outstanding as of October 31, 2025, as reported in the Form 10-Q.

SCHEDULE 13D

1

Name of reporting person

Versant Vantage I GP-GP, LLC

Check the appropriate box if a member of a Group (See Instructions)

2

☐ (a)

☒ (b)

3

SEC use only

Source of funds (See Instructions)

4

AF

Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

5

☐

Citizenship or place of organization

6

DELAWARE

Sole Voting Power

7

0.00

Shared Voting Power

8

72,211.00

Sole Dispositive Power

9

0.00

Shared Dispositive Power

10

72,211.00

Aggregate amount beneficially owned by each reporting person

11

72,211.00

Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

12

☐

Percent of class represented by amount in Row (11)

13

0.2 %

Type of Reporting Person (See Instructions)

14

OO

Comment for Type of Reporting Person: All shares are held by Vantage LP. Vantage LLC is the general partner of Vantage GP, which is the general partner of Vantage LP. Each of Vantage LLC and Vantage GP share voting and dispositive power over the shares held by Vantage LP and as a result may be deemed to have beneficial ownership over such securities. The percentage in Row 13 is based on 42,985,755 Common Shares outstanding as of October 31, 2025, as reported in the Form 10-Q.

SCHEDULE 13D

Item 1.

Security and Issuer

Title of Class of Securities:

(a)

Common Shares

Name of Issuer:

(b)

Repare Therapeutics Inc.

Address of Issuer's Principal Executive Offices:

(c)

7171 Frederick Banting, Building 2, Suite 270, Saint-Laurent, Quebec, CANADA (FEDERAL LEVEL) , H4S 1Z9.

Item 1 This Amendment No. 6 (this "Amendment") amends and supplements the Schedule 13D originally filed by the
Comment: Reporting Persons with the Commission on July 7, 2020, as amended by Amendment No. 1 filed with the Commission on January 25, 2021, Amendment No. 2 filed with the Commission on February 26, 2021, Amendment No. 3 filed with the Commission on August 16, 2021, Amendment No. 4 filed with the Commission on June 13, 2022 and Amendment No. 5 filed with the Commission on January 6, 2023 (collectively, the "Original 13D"). Only those items that are hereby reported are amended; all other items reported in the Original 13D remain unchanged. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable. Capitalized terms not defined in this Amendment have the meanings ascribed to them in the Original 13D.

Item 2. Identity and Background

(b) One Sansome Street, Suite 1650, San Francisco, CA 94104

Item 5. Interest in Securities of the Issuer

(a) See Items 7-11 and 13 of the cover pages of this Amendment for each Reporting Person and the corresponding comments.

(b) See Items 7-11 and 13 of the cover pages of this Amendment for each Reporting Person and the corresponding comments.

(c) On November 19, 2025, VVC V sold 44,594 Common Shares at a price per share of \$2.1605 for aggregate proceeds of approximately \$96,345.34. On November 19, 2025, Versant VI sold 331,558 Common Shares at a price per share of \$2.1605 for aggregate proceeds of approximately \$716,331.06. On November 20, 2025, VVC V sold 237,107 Common Shares at a price per share of \$2.1064 for aggregate proceeds of approximately \$499,442.18. On November 20, 2025, Versant VI sold 1,762,893 Common Shares at a price per share of \$2.1064 for aggregate proceeds of approximately \$3,713,357.82. On November 20, 2025, Vantage LP sold 4,006 Common Shares at a price per share of \$2.1275 for aggregate proceeds of approximately \$8,522.77. On November 21, 2025, VAF V sold 5,782 Common Shares at a price per share of \$2.1357 for aggregate proceeds of approximately \$12,348.53. On November 21, 2025, VOA sold 6,399 Common Shares at a price per share of \$2.1357 for aggregate proceeds of approximately \$13,666.25. On November 21, 2025, VVC CAN sold 14,624 Common Shares at a price per share of \$2.1357 for aggregate proceeds of approximately \$31,232.26. On November 21, 2025, Vantage LP sold 154,994 Common Shares at a price per share of \$2.1357 for aggregate proceeds of approximately \$331,018.36.

(e) November 20, 2025

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.

Versant Venture Capital V, L.P.

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO of Versant Ventures V, LLC
the GP of Versant Venture Capital V, L.P.

Date: 11/21/2025

Versant Affiliates Fund V, L.P.

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO of Versant Ventures V, LLC
the GP of Versant Affiliates Fund V, L.P.

Date: 11/21/2025

Versant Ophthalmic Affiliates I, L.P.

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO of Versant Ventures V, LLC
the GP of Versant Ophthalmic Affiliates I, L.P.

Date: 11/21/2025

Versant Ventures V, LLC

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO

Date: 11/21/2025

Versant Venture Capital V (Canada) LP

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO of Versant Ventures V GP-

GP (Canada), Inc., GP of Versant Ventures V (Canada), L.P., GP of Versant Venture Capital (Canada) LP

Date: 11/21/2025

Versant Ventures V (Canada), L.P.

Signature: /s/ Max Eisenberg

Max Eisenberg, COO of Versant Ventures V GP-

Name/Title: GP (Canada), Inc. the GP of Versant Ventures V (Canada), L.P.

Date: 11/21/2025

Versant Ventures V GP-GP (Canada), Inc.

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO

Date: 11/21/2025

Versant Venture Capital VI, L.P.

Signature: /s/ Max Eisenberg

Max Eisenberg, COO of Versant Ventures VI GP-

Name/Title: GP, LLC the GP of Versant Ventures VI GP, L.P. the GP of Versant Venture Capital VI, L.P.

Date: 11/21/2025

Versant Ventures VI GP, L.P.

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO of Versant Ventures VI GP-GP, LLC the GP of Versant Ventures VI GP, L.P.

Date: 11/21/2025

Versant Ventures VI GP-GP, LLC

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO

Date: 11/21/2025

Versant Vantage I, L.P.

Signature: /s/ Max Eisenberg

Max Eisenberg, COO of Versant Vantage I GP-

Name/Title: GP, LLC the GP of Versant Vantage I GP, L.P. the GP of Versant Vantage I, L.P.

Date: 11/21/2025

Versant Vantage I GP, L.P.

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO of Versant Vantage I GP-GP, LLC the GP of Versant Vantage I GP, L.P.

Date: 11/21/2025

Versant Vantage I GP-GP, LLC

Signature: /s/ Max Eisenberg

Name/Title: Max Eisenberg, COO

Date: 11/21/2025