

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

SCHEDULE 13D

**Under the Securities Exchange Act of 1934
(Amendment No. 3)***

Sema4 Holdings Corp

(Name of Issuer)

**CMLS Holdings LLC
Eli Casdin and Keith Meister
c/o Corvex Management LP
667 Madison Avenue
New York, New York 10065
(212) 474-6745**

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

Class A common stock, \$0.0001 par value per share

(Title of Class of Securities)

18978W109

(CUSIP Number)

December 1, 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 ("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 CMLS HOLDINGS 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: 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 Units Beneficially Owned by Each Reporting Person With:	7 Sole Voting Power 0
	8 Shared Voting Power 17,730,419 (1)(2)(3)
	9 Sole Dispositive Power 0
	10 Shared Dispositive Power 17,730,419 (1)(2)(3)
11	Aggregate Amount Beneficially Owned by Each Reporting Person 17,730,419 (1)(2)(3)
12	Check if the Aggregate Amount in Row (11) Excludes Certain Units (See Instructions) <input type="checkbox"/>
13	Percent of Class Represented by Amount in Row (11) 4.5% (4)
14	Type of Reporting Person (See Instructions) HC, OO

1	Names of Reporting Persons C-LSH 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: 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
	7 Sole Voting Power 0
Number of Units Beneficially Owned by Each Reporting Person With:	8 Shared Voting Power 17,730,419 (1)(2)(3)
	9 Sole Dispositive Power 0
	10 Shared Dispositive Power 17,730,419 (1)(2)(3)
	11 Aggregate Amount Beneficially Owned by Each Reporting Person 17,730,419 (1)(2)(3)
12	Check if the Aggregate Amount in Row (11) Excludes Certain Units (See Instructions) <input type="checkbox"/>
13	Percent of Class Represented by Amount in Row (11) 4.5% (4)
14	Type of Reporting Person (See Instructions) HC, OO

1	Names of Reporting Persons	M-LSH LLC
<hr/>		
2	Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a)	<input type="checkbox"/>
	(b)	<input type="checkbox"/>
<hr/>		
3	SEC Use Only	
<hr/>		
4	Source of Funds: OO	
<hr/>		
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
<hr/>		
6	Citizenship or Place of Organization	Delaware
<hr/>		
	7	Sole Voting Power
		0
<hr/>		
Number of Units Beneficially Owned by Each Reporting Person With:	8	Shared Voting Power
		17,730,419 (1)(2)(3)
	<hr/>	
	9	Sole Dispositive Power
		0
<hr/>		
	10	Shared Dispositive Power
		17,730,419 (1)(2)(3)
<hr/>		
11	Aggregate Amount Beneficially Owned by Each Reporting Person	17,730,419 (1)(2)(3)
<hr/>		
12	Check if the Aggregate Amount in Row (11) Excludes Certain Units (See Instructions) <input type="checkbox"/>	
<hr/>		
13	Percent of Class Represented by Amount in Row (11)	4.5% (4)
<hr/>		
14	Type of Reporting Person (See Instructions)	HC, OO
<hr/>		

1 Names of Reporting Persons
 ELI CASDIN

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

3 SEC Use Only

4 Source of Funds: OO

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

6 Citizenship or Place of Organization
 United States of America

Number of Units Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 35,122 (7)
	8	Shared Voting Power 34,167,919 (1)(2)(3)(5)
	9	Sole Dispositive Power 35,122 (7)
	10	Shared Dispositive Power 34,167,919 (1)(2)(3)(5)

11 Aggregate Amount Beneficially Owned by Each Reporting Person
 34,203,041 (1)(2)(3)(5)(7)

12 Check if the Aggregate Amount in Row (11) Excludes Certain Units (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
 8.7% (4)

14 Type of Reporting Person (See Instructions)
 HC, IN

- 1 Names of Reporting Persons
KEITH A. MEISTER
-
- 2 Check the Appropriate Box if a Member of a Group (See Instructions)
(a)
(b)
-
- 3 SEC Use Only
-
- 4 Source of Funds: OO
-
- 5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):
-
- 6 Citizenship or Place of Organization
United States of America
-
- | | | |
|---|----|--|
| Number of
Units
Beneficially
Owned by
Each
Reporting
Person With: | 7 | Sole Voting Power
9,148,140 (6) |
| | 8 | Shared Voting Power
17,730,419 (1)(2)(3) |
| | 9 | Sole Dispositive Power
9,148,140 (6) |
| | 10 | Shared Dispositive Power
17,730,419 (1)(2)(3) |
-
- 11 Aggregate Amount Beneficially Owned by Each Reporting Person
26,878,559 (1)(2)(3)(6)
-
- 12 Check if the Aggregate Amount in Row (11) Excludes Certain Units (See Instructions)
-
- 13 Percent of Class Represented by Amount in Row (11)
6.8% (4)
-
- 14 Type of Reporting Person (See Instructions)
HC, IN
-

- (1) Includes 10,993,750 shares of Class A common stock of Sema4 Holdings Corp. (the “Issuer”), par value \$0.0001 per share (“Common Stock”).
- (2) Includes 6,736,669 shares of Common Stock issuable upon the exercise of 6,736,669 private placement warrants of the Issuer. On September 3, 2021, each private placement warrant became exercisable to purchase one share of Common Stock at a price of \$11.50 per share, subject to adjustment, as described in the definitive proxy statement of the Issuer (File No. 001-39482) filed with the U.S. Securities Exchange Commission (the “SEC”) on July 2, 2021.
- (3) CMLS Holdings LLC is the record holder of the shares reported herein. The Board of Managers of CMLS Holdings LLC is comprised of Mr. Casdin and Mr. Meister who share voting and investment discretion with respect to the common stock held of record by CMLS Holdings LLC. C-LSH LLC and M-LSH LLC are the members of CMLS Holdings LLC, and Mr. Casdin and Mr. Meister are the managing members of C-LSH LLC and M-LSH LLC, respectively. As such, each of the foregoing may be deemed to have or share beneficial ownership of the Common Stock held directly by CMLS Holdings LLC.
- (4) Based on 386,795,130 shares of Common Stock outstanding as of November 4, 2022, as reported in the Issuer’s Quarterly Report on Form 10-Q filed with the SEC on November 14, 2022.
- (5) Casdin Partners Master Fund, LP is the record holder of 16,437,500 shares reported herein. Casdin Capital, LLC is the investment adviser to Casdin Partners Master Fund, LP and Casdin Partners GP, LLC is the general partner of Casdin Partners Master Fund LP. Eli Casdin is the managing member of Casdin Capital, LLC and Casdin Partners GP, LLC. As such, each of the foregoing may be deemed to have or share beneficial ownership of the Common Stock held directly by Casdin Partners Master Fund, LP.
- (6) The shares reflected as beneficially owned by Mr. Meister include 9,148,140 shares of Common Stock owned by investment funds advised by Corvex Management, L.P., which may be deemed to be indirectly beneficially owned by Keith Meister by virtue of Mr. Meister’s control of the general partner of Corvex Management, L.P.
- (7) Includes 22,286 shares issuable upon exercise of fully vested options and 12,836 shares of Common Stock that were issued upon vesting of restricted stock units, in each case that were granted to Mr. Casdin in connection with his service on the board of directors of the Issuer.

SCHEDULE 13D

This Amendment No. 3 (the "Amendment") supplements the information set forth in the Schedule 13D (the "Schedule 13D") filed with the United States Securities and Exchange Commission (the "SEC") on August 2, 2021, as amended as of January 19, 2022 and May 3, 2022, by CMLS Holdings LLC, Keith Meister, Eli Casdin and the other Reporting Persons named therein, relating to the shares of common stock, par value \$0.0001 per share ("Common Stock"), of Sema4 Holdings Corp. (the "Issuer"). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Schedule 13D.

The information set forth in response to each separate Item below shall be deemed to be a response to all Items where such information is relevant. Items 4 and 6 to the Schedule 13D are supplementally amended as follows, and Item 5 to the Schedule 13D is amended and restated as follows. Information with respect to each Reporting Person is given solely by such Reporting Person and no Reporting Person assumes responsibility for the accuracy or completeness of the information furnished by another Reporting Person, except as otherwise provided in Rule 13d-1(k).

Item 4 Source and Amount of Funds or Other Consideration

On December 1, 2022, investment funds advised by Corvex Management LP, the general partner of which is controlled by Mr. Meister, sold 6,789,360 shares of Common Stock to an unaffiliated third party financial institution at a price of \$0.399 per share, excluding commissions.

Item 5 Interest in the Securities of the Issuer

The information set forth in the facing pages of this Schedule 13D with respect to the shared beneficial ownership of Common Stock by the Reporting Persons is incorporated by reference into this Item 5.

The information set forth in Items 2, 3 and 4 is hereby incorporated by reference into this Item 5.

(a) The aggregate number of shares of Common Stock and the percentage of total outstanding shares of Common Stock beneficially owned by the Reporting Persons is set forth below.

References to percentage ownerships of shares of Common Stock in this Statement are based upon 386,795,130 shares of Common Stock outstanding as of November 4, 2022, as reported in the Issuer's Quarterly Report on Form 10-Q filed with the SEC on November 14, 2022. The filing of this Statement shall not be construed as an admission that a Reporting Person beneficially owns those shares held by any other Reporting Person.

(b) Eli Casdin has the sole power to vote or direct the vote of 35,122 shares of Common Stock (including 22,286 vested options) reported in (a) above and shared power to vote or to direct the vote and shared power to dispose or to direct the disposition of the 34,167,919 shares of Common Stock reported in (a) above. Keith Meister has the sole power to vote or to direct the vote and sole power to dispose or to direct the disposition of 9,148,140 shares of Common Stock reported in (a) above and shared power to vote or direct the vote and shared power to dispose or to direct the disposition of 17,730,419 shares of Common Stock reported in (a) above. The beneficial ownership of the shares of Common Stock reported herein does not include shares underlying unvested options to purchase shares of Common Stock or unvested restricted stock units held by Mr. Meister or Mr. Casdin as described in Item 6 of this Schedule 13D.

Except with respect to the 6,789,360 shares of Common Stock sold as of December 1, 2022 described in Item 4 above, the Reporting Persons have not effected any transactions in the Issuer's Common Stock during the past 60 days.

No person other than the Reporting Persons is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Common Stock beneficially owned by the Reporting Persons.

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

The information set forth in Item 4 above is hereby incorporated by reference into this Item 6.

On December 1, 2022, contemporaneously with the sale of 6,789,360 shares of Common Stock described in Item 4 above, investment funds advised by Corvex Management LP (the "Corvex Funds"), the general partner of which is controlled by Mr. Meister, entered into cash-settled swaps (the "Long Swaps") with an unaffiliated third party financial institution or affiliate of the purchaser of the shares of Common Stock described in Item 4 above that represent the economic long-side exposure to a basket of securities which includes a notional interest in 6,789,360 shares of Common Stock (the "Notional Securities"), representing economic exposure to 2.4% of the outstanding shares, with a reference price of \$0.399 a share (the "Reference Price"). Under the terms of the Long Swaps (i) the counterparty will be obligated to pay in cash to the Corvex Funds any positive price performance in the Notional Securities from the Reference Price with respect to the Notional Securities as of the termination of the Long Swaps and (ii) the Corvex Funds will be obligated to pay in cash to the counterparty any negative price performance in the Notional Securities from the Reference Price as of the termination of the Long Swaps, in each case as part of the overall cash payment to be made under the Long Swaps taking into account the other securities reflected in the basket. All balances will be exclusively cash settled at the termination of the Long Swaps. The Long Swaps have a maximum term of three years.

The Long Swaps do not give the Reporting Persons or the Corvex Funds, direct or indirect voting, investment, or dispositive control over any securities of the Issuer, do not provide for the Reporting Persons or Corvex Funds to have any power to acquire any shares of Common Stock from the counterparty, and do not require the counterparty to acquire, hold, vote or dispose of any securities of the Issuer. Accordingly, the Reporting Persons hereby expressly disclaim beneficial ownership of the Notional Securities and any other securities that may be referenced in the Long Swaps or other securities or financial instruments that may be held from time to time by the counterparty.

Outstanding Equity Awards held by Mr. Meister

In connection with Mr. Meister's service on the board of directors of the Issuer, Mr. Meister has been awarded various equity grants. Mr. Meister currently holds 78,914 unvested options and 45,454 unvested restricted stock units, each of which vest on the earlier of (i) the date of the Issuer's next annual meeting of shareholders following the grant date on May 2, 2022 and (ii) the first anniversary of the grant date on May 2, 2022.

Outstanding Equity Awards held by Mr. Casdin

In connection with Mr. Casdin's service on the board of directors of the Issuer, Mr. Casdin has been awarded various equity grants. Mr. Casdin currently holds 78,914 unvested options and 45,454 unvested restricted stock units, each of which vest on the earlier of (x) the date of the Issuer's next annual meeting of shareholders following the grant date on May 2, 2022 and (y) the first anniversary of the grant date on May 2, 2022.

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.

Date: December 5, 2022

CMLS HOLDINGS LLC

By: /s/ Keith A. Meister
Name: Keith A. Meister
Title: Manager

Date: December 5, 2022

C-LSH LLC

By: /s/ Eli Casdin
Name: Eli Casdin
Title: Managing Member

Date: December 5, 2022

M-LSH LLC

By: /s/ Keith A. Meister
Name: Keith A. Meister
Title: Managing Member

Date: December 5, 2022

/s/ Eli Casdin
Eli Casdin

Date: December 5, 2022

/s/ Keith A. Meister
Keith A. Meister