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

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. 2)*

Sema4 Holdings Corp.
(Name of Issuer)

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

81663L101
(CUSIP Number)

John G. Finley
Blackstone Inc.
345 Park Avenue
New York, New York 10154
Tel: (212) 583-5000

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

April 29, 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 Rule 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 | |
| | BTO Sema4 Holdings L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 26,839,187 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 26,839,187 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 26,839,187 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | BTO Holdings Manager L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 26,839,187 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 26,839,187 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 26,839,187 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Tactical Opportunities Associates L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 26,839,187 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 26,839,187 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 26,839,187 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | BTOA L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 26,839,187 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 26,839,187 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 26,839,187 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 162,309 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 162,309 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 162,309 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) < 0.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | BTO Side-by-Side GP L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 162,309 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 162,309 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 162,309 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) < 0.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Holdings III L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 27,001,496 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 27,001,496 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 27,001,496 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.2% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Holdings III GP L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 27,001,496 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 27,001,496 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 27,001,496 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.2% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Holdings III GP Management L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 27,001,496 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 27,001,496 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 27,001,496 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.2% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Tactical Opportunities Fund—FD L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 555,497 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 555,497 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 555,497 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Tactical Opportunities Associates III—NQ L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 555,497 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 555,497 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 555,497 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | BTO DE GP—NQ L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 555,497 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 555,497 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 555,497 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Holdings II L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 555,497 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 555,497 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 555,497 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.1% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Aqua Master Sub-Fund, a sub-fund of Blackstone Global Master Fund ICAV | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 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) <input type="checkbox"/> | |
| 6 | CITIZENSHIP OR PLACE OF ORGANIZATION Ireland | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH | 7 | SOLE VOTING POWER 809,509 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 809,509 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 809,509 | |
| 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) 0.2% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Alternative Solutions L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 809,509 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 809,509 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 809,509 | |
| 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) 0.2% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO, IA | |

| | | |
|--|---|---------------------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Holdings I L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" 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 809,509 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 809,509 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 809,509 | |
| 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) 0.2% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN | |

| | | |
|--|---|---|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Holdings I/II GP L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC USE ONLY | |
| 4 | SOURCE OF FUNDS (SEE INSTRUCTIONS) OO, WC | |
| 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 1,365,006 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 1,365,006 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,365,006 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.4% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Inc. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC USE ONLY | |
| 4 | SOURCE OF FUNDS (SEE INSTRUCTIONS) OO, WC | |
| 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 28,366,502 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 28,366,502 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 28,366,502 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.5% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | Blackstone Group Management L.L.C. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC USE ONLY | |
| 4 | SOURCE OF FUNDS (SEE INSTRUCTIONS) OO, WC | |
| 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 28,366,502 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 28,366,502 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 28,366,502 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.5% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

| | | |
|--|---|--|
| 1 | NAMES OF REPORTING PERSONS | |
| | Stephen A. Schwarzman | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC USE ONLY | |
| 4 | SOURCE OF FUNDS (SEE INSTRUCTIONS) OO, WC | |
| 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 28,366,502 |
| | 8 | SHARED VOTING POWER 0 |
| | 9 | SOLE DISPOSITIVE POWER 28,366,502 |
| | 10 | SHARED DISPOSITIVE POWER 0 |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 28,866,502 | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input checked="" type="checkbox"/> | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.5% | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN | |

This Amendment No. 2 (“Amendment No. 2”) to Schedule 13D relates to the Class A common stock, par value \$0.0001 per share (the “Class A Common Stock”), of Sema4 Holdings Corp. (formerly known as CM Life Sciences, Inc.), a Delaware corporation (the “Issuer”), and amends and supplements the initial statement on Schedule 13D filed on August 30, 2021, as amended by Amendment No. 1 to Schedule 13D filed on January 20, 2022 (as amended, the “Schedule 13D”). Capitalized terms used but not defined in this Amendment No. 2 shall have the same meanings ascribed to them in the Schedule 13D.

Item 2. Identity and Background

Item 2 of the Schedule 13D is hereby amended by incorporating herein by reference the information set forth on the updated Schedule I attached to this Amendment No. 2.

Item 3. Source and Amount of Funds or Other Consideration

Item 3 of the Schedule 13D is hereby supplemented as follows:

The information set forth in Item 4 of this Amendment No. 2 is hereby incorporated by reference into this Item 3.

Item 4. Purpose of Transaction

Item 4 of the Schedule 13D is hereby amended and supplemented by the following:

As contemplated by the Subscription Agreement previously described in Amendment No. 1 to this Schedule 13D, in connection with the closing by the Issuer of the GeneDx Transactions, on April 29, 2022, BTO Sema4 Holdings L.P., Blackstone Tactical Opportunities Fund – FD L.P., and Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P. (the “PIPE Purchasers”) purchased from the Issuer in a private placement at a purchase price of \$4.00 per share the number of shares of Class A Common Stock set forth below:

| <u>Reporting Person/PIPE Purchaser</u> | <u>Number of Shares</u> |
|--|-------------------------|
| BTO Sema4 Holdings L.P., | 2,434,863 |
| Blackstone Tactical Opportunities Fund – FD L.P. | 50,402 |
| Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P. | 14,735 |

The payment of the aggregate purchase price by the PIPE Purchasers was funded by capital contributions from their respective partners.

Item 5. Interest in Securities of the Issuer

Items 5(a)-(c) of the Schedule 13D are hereby amended and restated as follows:

(a) and (b) Calculations of the percentage of the shares of Class A Common Stock beneficially owned assumes that there were 377,249,186 shares of Class A Common Stock outstanding as of April 29, 2022, as disclosed by the Issuer to the Reporting Persons (after giving effect to the issuance of Class A Common Stock by the Issuer pursuant to the closing of the GeneDx Transactions and related private placement transactions, including pursuant to the closing under the Subscription Agreement), and takes into account shares of Class A Common Stock underlying warrants beneficially owned by the Reporting Persons, as applicable.

The aggregate number and percentage of the Class A Common Stock beneficially owned by each Reporting Person and, for each Reporting Person, the number of shares as to which there is sole power to vote or to direct the vote, shared power to vote or to direct the vote, sole power to dispose or to direct the disposition, or shared power to dispose or to direct the disposition are set forth on rows 7 through 11 and row 13 of the cover pages of this Schedule 13D and are incorporated herein by reference.

None of the shares of Class A Common Stock underlying Earnout Rights are included in the beneficial ownership of the Reporting Persons because none of the related thresholds have been satisfied.

As of the date hereof,

(i) BTO Sema4 Holdings L.P. directly holds 26,839,187 shares of Class A Common Stock and Earnout Rights with respect to up to 2,750,264 shares of Class A Common Stock;

(ii) Blackstone Tactical Opportunities Fund – FD L.P. directly holds 555,497 shares of Class A Common Stock and Earnout Rights with respect to up to 56,922 shares of Class A Common Stock;

(iii) Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P. directly holds 162,309 shares of Class A Common Stock and Earnout Rights with respect to up to 16,632 shares of Class A Common Stock; and

(iv) Blackstone Aqua Master Sub-Fund, a sub-fund of Blackstone Global Master Fund ICAV, directly holds 100,000 shares of Class A Common Stock and warrants to purchase 709,509 shares of Class A Common Stock which are exercisable within 60 days. Each warrant is exercisable to purchase one share of Class A Common Stock at a price of \$11.50 per share, subject to adjustment, and became exercisable September 3, 2021.

BTO Holdings Manager L.L.C. is the general partner of BTO Sema4 Holdings L.P. Blackstone Tactical Opportunities Associates L.L.C. is the managing member of BTO Holdings Manager L.L.C. BTOA L.L.C. is the sole member of Blackstone Tactical Opportunities Associates L.L.C.

BTO Side-by-Side GP L.L.C. is the general partner of Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P. Blackstone Holdings III L.P. is the sole member of BTO Side-by-Side GP L.L.C. and the managing member of BTOA L.L.C.

Blackstone Holdings III GP L.P. is the general partner of Blackstone Holdings III L.P. Blackstone Holdings III GP Management L.L.C. is the general partner of Blackstone Holdings III GP L.P.

Blackstone Tactical Opportunities Associates III – NQ L.P. is the general partner of Blackstone Tactical Opportunities Fund – FD L.P. BTO DE GP – NQ L.L.C. is the general partner of Blackstone Tactical Opportunities Associates III – NQ L.P. Blackstone Holdings II L.P. is the managing member of BTO DE GP – NQ L.L.C.

Blackstone Alternative Solutions L.L.C. is the investment manager of Blackstone Aqua Master Sub-Fund, a sub-fund of Blackstone Global Master Fund ICAV. Blackstone Holdings I L.P. is the sole member of Blackstone Alternative Solutions L.L.C. Blackstone Holdings I/II GP L.L.C. is the general partner of Blackstone Holdings I L.P.

Blackstone Holdings I/II L.L.C. is the general partner of each of Blackstone Holdings I L.P. and Blackstone Holdings II L.P.

Blackstone Inc. is the sole member of each Blackstone Holdings I/II GP L.L.C. and Blackstone Holdings III GP Management L.L.C. The sole holder of the Series II preferred stock of Blackstone Inc. is Blackstone Group Management L.L.C. Blackstone Group Management L.L.C. is wholly-owned by Blackstone's senior managing directors and controlled by its founder, Stephen A. Schwarzman.

Neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission that any Reporting Person is the beneficial owner of the Class A Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or for any other purpose and each of the Reporting Persons expressly disclaims beneficial ownership of such shares of Class A Common Stock.

Any beneficial ownership of Class A Common Stock by any of the persons listed on Schedule I is set forth on Schedule I attached hereto.

(c) Except as set forth in this Schedule 13D, none of the Reporting Persons or, to the best knowledge of the Reporting Persons, any other person named in Schedule I, has effected any transaction in Class A Common Stock in the past 60 days.

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: May 3, 2022

BTO SEMA4 HOLDINGS L.P.

By: BTO Holdings Manager L.L.C., its general partner

By: /s/ Christopher J. James

Name: Christopher J. James

Title: Manager

BTO HOLDINGS MANAGER L.L.C.

By: /s/ Christopher J. James

Name: Christopher J. James

Title: Manager

**BLACKSTONE TACTICAL OPPORTUNITIES
ASSOCIATES, L.L.C.**

By: BTOA L.L.C., its sole member

By: /s/ Christopher J. James

Name: Christopher J. James

Title: Chief Operating Officer

BTOA L.L.C.

By: /s/ Christopher J. James
Name: Christopher J. James
Title: Chief Operating Officer

**BLACKSTONE FAMILY TACTICAL
OPPORTUNITIES INVESTMENT PARTNERSHIP III
ESC L.P.**

By: BTO Side-by-Side GP L.L.C., its general partner

By: /s/ Christopher J. James
Name: Christopher J. James
Title: Authorized Person

BTO SIDE-BY-SIDE GP L.L.C.

By: /s/ Christopher J. James
Name: Christopher J. James
Title: Authorized Person

BLACKSTONE HOLDINGS III L.P.

By: Blackstone Holdings III GP L.P., its general partner
By: Blackstone Holdings III GP Management L.L.C., its
general partner

By: /s/ Tabea Hsi
Name: Tabea Hsi
Title: Senior Managing Director

BLACKSTONE HOLDINGS III GP L.P.

By: Blackstone Holdings III GP Management L.L.C., its
general partner

By: /s/ Tabea Hsi
Name: Tabea Hsi
Title: Senior Managing Director

**BLACKSTONE HOLDINGS III GP MANAGEMENT
L.L.C.**

By: /s/ Tabea Hsi

Name: Tabea Hsi

Title: Senior Managing Director

**BLACKSTONE TACTICAL OPPORTUNITIES FUND
—FD L.P.**

By: Blackstone Tactical Opportunities Associates III—NQ
L.P., its general partner

By: BTO DE GP - NQ L.L.C., its general partner

By: /s/ Christopher J. James

Name: Christopher J. James

Title: Chief Operating Officer

**BLACKSTONE TACTICAL OPPORTUNITIES
ASSOCIATES III—NQ L.P.**

By: BTO DE GP - NQ L.L.C., its general partner

By: /s/ Christopher J. James

Name: Christopher J. James

Title: Chief Operating Officer

BTO DE GP - NQ L.L.C.

By: /s/ Christopher J. James

Name: Christopher J. James

Title: Chief Operating Officer

BLACKSTONE HOLDINGS II L.P.

By: Blackstone Holdings I/II GP L.L.C., its general partner

By: /s/ Tabea Hsi

Name: Tabea Hsi

Title: Senior Managing Director

**BLACKSTONE GLOBAL MASTER FUND ICAV
Acting solely on behalf of its sub-fund**

BLACKSTONE AQUA MASTER SUB-FUND

By: Blackstone Alternative Solutions L.L.C., its investment
manager

By: /s/ Jonathan Feiler

Name: Jonathan Feiler

Title: Authorized Person

BLACKSTONE ALTERNATIVE SOLUTIONS L.L.C.

By: /s/ Jonathan Feiler
Name: Jonathan Feiler
Title: Authorized Person

BLACKSTONE HOLDINGS I L.P.

By: Blackstone Holdings I/II GP L.L.C., its general partner

By: /s/ Tabea Hsi
Name: Tabea Hsi
Title: Senior Managing Director

BLACKSTONE HOLDINGS I/II GP L.L.C.

By: /s/ Tabea Hsi
Name: Tabea Hsi
Title: Senior Managing Director

BLACKSTONE INC.

By: /s/ Tabea Hsi
Name: Tabea Hsi
Title: Senior Managing Director

BLACKSTONE GROUP MANAGEMENT L.L.C.

By: /s/ Tabea Hsi
Name: Tabea Hsi
Title: Senior Managing Director

Stephen A. Schwarzman

By: /s/ Stephen A. Schwarzman
Name: Stephen A. Schwarzman

[Sema4 Holdings Corp. – Schedule 13D Amendment No. 2]

SCHEDULE I

Executive Officers and Directors of Blackstone Inc.

The name and principal occupation of each director and executive officer of Blackstone Inc. are set forth below. The address for each person listed below is c/o Blackstone Inc., 345 Park Avenue, New York, New York 10154. All executive officers and directors listed are United States citizens other than The Honourable Brian Mulroney, who is a citizen of Canada, and Sir John Antony Hood, who is a citizen of New Zealand.

OFFICERS:

| <u>Name</u> | <u>Present Principal Occupation or Employment</u> |
|-----------------------|--|
| Stephen A. Schwarzman | Founder, Chairman and Chief Executive Officer of Blackstone Inc. |
| Jonathan D. Gray | President, Chief Operating Officer of Blackstone Inc. |
| Michael S. Chae | Chief Financial Officer of Blackstone Inc. |
| John G. Finley | Chief Legal Officer of Blackstone Inc. |

DIRECTORS:

| <u>Name</u> | <u>Present Principal Occupation or Employment</u> |
|-------------------------------------|---|
| Stephen A. Schwarzman | Founder, Chairman and Chief Executive Officer of Blackstone Inc. |
| Jonathan D. Gray | President, Chief Operating Officer of Blackstone Inc. |
| Kelly A. Ayotte | Former United States Senator from New Hampshire |
| Joseph P. Baratta | Global Head of Private Equity at Blackstone Inc. |
| James W. Breyer | Founder and Chief Executive Officer of Breyer Capital |
| Reginald J. Brown | Partner for the law firm, Kirkland & Ellis |
| Sir John Antony Hood | Former President and Chief Executive Officer of the Robertson Foundation and Former Chair of the Rhodes Trust |
| Rochelle B. Lazarus | Chairman Emeritus & Former Chief Executive Officer, Ogilvy & Mather Worldwide |
| Jay O. Light | Dean Emeritus, Harvard Business School |
| The Right Honourable Brian Mulroney | Senior Partner for the Montreal law firm, Norton Rose Fulbright Canada LLP |
| William G. Parrett | Retired CEO, Deloitte Touche Tohmatsu and retired Senior Partner, Deloitte (USA) |
| Ruth Porat | Chief Financial Officer of Alphabet Inc. and Google Inc. |

Except as set forth in this Schedule 13D, to the best knowledge of the Reporting Persons, none of the individuals listed above beneficially owns any shares of Class A Common Stock.