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

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. 4)*

IGM Biosciences, Inc.

(Name of Issuer)

Common Stock, \$0.01 par value per share

(Title of Class of Securities)

449585108

(CUSIP Number)

Redmile Group, LLC
Attn: Jennifer Ciresi
One Letterman Drive, Bldg D, Ste D3-300
San Francisco, CA 94129
(415) 489-9980

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

October 3, 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 which 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 § 13d-7(b) 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 the 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 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.	NAME OF REPORTING PERSON Redmile Group, 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 (1)		
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	3,377,090 (2)
	9.	SOLE DISPOSITIVE POWER	0
	10.	SHARED DISPOSITIVE POWER	3,377,090 (2)
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,377,090 (2)		
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) 11.6% (3)		
14.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IA, OO		

(1) The source of funds was working capital of the Redmile Affiliates (as defined in Item 2 below).

(2) The information in Item 5(a) relating to the shares of common stock, \$0.01 par value per share, of the Issuer (the "Common Stock") that are or may be deemed beneficially owned by the Reporting Person (as defined in Item 2 below) is incorporated by reference herein.

(3) Percent of class is calculated based on: (i) 28,968,962 shares of Common Stock outstanding as of August 2, 2022, as disclosed in the Issuer's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2022 as filed with the SEC on August 8, 2022 (the "Form 10-Q"), plus (ii) 40,813 shares of Common Stock subject to options to purchase shares of Common Stock that are exercisable within 60 days of the date of this filing that were issued to Michael Lee, plus (iii) 1,922 shares of Common Stock pursuant to restricted stock units issued to Michael Lee, a managing director of Redmile, in connection with his service as a member of the Board of Directors of the Issuer. Pursuant to the policies of Redmile, Mr. Lee holds the stock options and the shares of Common Stock issued pursuant to the restricted stock units as a nominee on behalf, and for the sole benefit, of Redmile and has assigned all economic, pecuniary and voting rights in respect of the stock options and the shares of Common Stock issued pursuant to the restricted stock units to Redmile.

1.	NAME OF REPORTING PERSON Jeremy C. Green	
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 (1)	
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 Kingdom	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 0
	8.	SHARED VOTING POWER 3,377,090 (2)
	9.	SOLE DISPOSITIVE POWER 0
	10.	SHARED DISPOSITIVE POWER 3,377,090 (2)
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,377,090 (2)	
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) 11.6% (3)	
14.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN, HC	

(1) The source of funds was working capital of the Redmile Affiliates.

(2) The information in Item 5(a) relating to the shares of Common Stock that are or may be deemed beneficially owned by the Reporting Person is incorporated by reference herein.

(3) Percent of class is calculated based on: (a) 28,968,962 shares of Common Stock outstanding as of August 2, 2022, as disclosed in the Form 10-Q, plus (ii) 40,813 shares of Common Stock subject to options to purchase shares of Common Stock that are exercisable within 60 days of the date of this filing that were issued to Michael Lee, plus (iii) 1,922 shares of Common Stock issued pursuant to restricted stock units to Michael Lee, a managing director of Redmile, in connection with his service as a member of the Board of Directors of the Issuer. Pursuant to the policies of Redmile, Mr. Lee holds the stock options and the shares of Common Stock issued pursuant to the restricted stock units as a nominee on behalf, and for the sole benefit, of Redmile and has assigned all economic, pecuniary and voting rights in respect of the stock options and the shares of Common Stock issued pursuant to the restricted stock units to Redmile.

This amendment No. 4 to Schedule 13D (this "Amendment No. 4") amends and supplements the Schedule 13D filed with the SEC on September 24, 2019 (the "Original Schedule 13D"), as amended by that amendment No. 1 to Schedule 13D filed with the SEC on September 10, 2020, that amendment No. 2 to Schedule 13D filed with the SEC on December 15, 2020 and that amendment No. 3 to Schedule 13D filed with the SEC on April 5, 2022 (hereinafter the Original Schedule 13D and such amendments shall collectively be referred to as the "Prior Schedule 13D"), in each case by Redmile Group, LLC, a Delaware limited liability company ("Redmile"), Jeremy C. Green, a citizen of the United Kingdom, and Redmile Capital Offshore Master Fund, Ltd., a Cayman Islands company (the "Offshore Master Fund"), relating to the Common Stock of IGM Biosciences, Inc., a Delaware corporation (the "Issuer"). This Amendment No. 4 is being filed to report a material decrease in the beneficial ownership of the Offshore Master Fund, which also resulted in it ceasing to beneficially own more than 5% of the Issuer's Common Stock.

Capitalized terms used but not defined in this Amendment No. 4 shall have the meanings set forth in the Prior Schedule 13D. Except as specifically amended by this Amendment No. 4, the Prior Schedule 13D is unchanged.

ITEM 2. Identity and Background.

Item 2 of the Prior Schedule 13D is hereby amended and restated to read in its entirety as follows:

Item (a), (b), (c) and (f). This Schedule 13D is being filed jointly by Redmile Group, LLC, a Delaware limited liability company ("Redmile"), and Jeremy C. Green, a citizen of the United Kingdom (together with Redmile, the "Reporting Persons"), pursuant to the provisions of Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as separate persons and not as members of a group. See Exhibit 99.1 to this Schedule 13D for their Joint Filing Agreement.

Redmile Group, LLC

Redmile Group, LLC is a Delaware limited liability company whose principal business is to serve as investment manager/adviser to certain private investment funds and separately managed accounts, including RedCo II Master Fund, L.P., RedCo I, L.P., Redmile Capital Fund, L.P., Redmile Capital Offshore Master Fund, Ltd., Redmile Capital Offshore Fund (ERISA), Ltd., Redmile Capital Offshore II Master Fund, Ltd., Redmile Strategic Long Only Trading Sub, Ltd., Redmile Strategic Trading Sub, Ltd., Redmile Biopharma Investments II, L.P., and Map 20 Segregated Portfolio, a segregated portfolio of LMA SPC (collectively, the "Redmile Affiliates"). The business address of Redmile is One Letterman Drive, Bldg D, Ste D3-300, San Francisco, CA 94129. Information relating to the managing member of Redmile is set forth below.

Jeremy C. Green

The principal occupation of Jeremy C. Green is managing member of Redmile Group, LLC. The business address of Jeremy C. Green is c/o Redmile Group, LLC, 45 West 27th Street, Floor 11, New York, New York 10001. Jeremy C. Green is a citizen of the United Kingdom.

(d) and (e). During the last five years, none of the Reporting Persons has 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. During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

ITEM 3. Source and Amount of Funds or Other Consideration.

Item 3 of the Prior Schedule 13D is hereby amended and supplemented to add the following paragraph and the remainder of Item 3 of the Prior Schedule 13D is unchanged:

On October 3, 2022, certain Redmile Affiliates completed cross trades with certain other Redmile Affiliates using their working capital to acquire 221,072 shares of Common Stock at a price of \$22.49 per share, 297,801 shares of Non-Voting Common Stock at a price of \$22.49 per share and 16,375 shares of common stock underlying pre-funded warrants to purchase shares of Common Stock at a price of \$22.48 per underlying Common Stock. The cross-trades occurred simultaneously at the market open, at which time the price of the Issuer's common stock was \$22.49, and therefore the reported transactions resulted in no profit to the Reporting Persons and resulted in no change in the aggregate beneficial ownership of the Reporting Persons.

ITEM 5. Interest in Securities of the Issuer.

Item 5(a), (b), (c) and (e) of the Prior Schedule 13D is hereby amended and restated in its entirety as follows:

(a) The aggregate amount of the Issuer's securities that may be deemed beneficially owned by the Reporting Persons is comprised of the following: (i) 633,805 shares of Common Stock, 211,554 shares of Non-Voting Common Stock and a Pre-Funded Warrant to purchase 90,736 shares of Common Stock held by Redmile Capital Fund, LP, (ii) 1,220,885 shares of Common Stock and a Pre-Funded Warrant to purchase 95,089 shares of Common Stock held by Redmile Capital Offshore Master Fund, Ltd., (iii) 99,200 shares of Common Stock and 113,400 shares of Non-Voting Common Stock held by Redmile Capital Offshore Fund (ERISA), Ltd., (iv) 273,078 shares of Common Stock, 103,927 shares of Non-Voting Common Stock and a Pre-Funded Warrant to purchase 93,244 shares of Common Stock held by Redmile Capital Offshore II Master Fund, Ltd., (v) 348,605 shares of Common Stock, 365,928 shares of Non-Voting Common Stock and a Pre-Funded Warrant to purchase 140,725 shares of Common Stock held by Redmile Strategic Trading Sub, Ltd., (vi) 220,882 shares of Common Stock, 135,796 shares of Non-Voting Common Stock and a Pre-Funded Warrant to purchase 25,650 shares of Common Stock held by Redmile Strategic Long Only Trading Sub, Ltd. (vii) 1,513,225 shares of Non-Voting Common Stock held by Redmile Biopharma Investments II, L.P., (viii) 175,087 shares of Common Stock held by Map 20 Segregated Portfolio, a segregated portfolio of LMA SPC, (ix) 362,813 shares of Common Stock held by a separately managed account, (x) a Pre-Funded Warrant to purchase 222,222 shares of Common Stock held by RedCo I, L.P. and (xi) 2,056,395 shares of Non-Voting Common Stock held by RedCo II Master Fund, L.P. Redmile Group, LLC is the investment manager/adviser to each of the Redmile Affiliates and, in such capacity, exercises sole voting and investment power over all of the shares held by the Redmile Affiliates and may be deemed to be the beneficial owner of these shares. Jeremy C. Green serves as the managing member of Redmile Group, LLC and also may be deemed to be the beneficial owner of these shares. Redmile Group, LLC and Mr. Green each disclaim beneficial ownership of these shares, except to the extent of its or his pecuniary interest in such shares, if any.

Redmile and Mr. Green may also be deemed to beneficially own: (i) 40,813 shares of Common Stock subject to options to purchase shares of Common Stock that are exercisable within 60 days of the date of this filing, and (ii) 1,922 shares of Common Stock issued to Michael Lee pursuant to restricted stock units. The stock options and restricted stock units were granted to Mr. Lee, a managing director of Redmile, in connection with his service as a member of the Board of Directors of the Issuer. Pursuant to the policies of Redmile, Mr. Lee holds the stock options and the shares of Common Stock issued pursuant to the restricted stock units as a nominee on behalf, and for the sole benefit, of Redmile and has assigned all economic, pecuniary and voting rights in respect of the stock options and the shares of Common Stock issued pursuant to the restricted stock units to Redmile. Redmile and Mr. Green each disclaim beneficial ownership of the stock options and the shares of Common Stock issued pursuant to the restricted stock units, except to the extent of its or his pecuniary interest in the shares subject to such options and the shares of Common Stock issued pursuant to the restricted stock units, if any, and this Schedule 13D shall not be deemed an admission that the Reporting Persons are the beneficial owner of such securities any purpose.

The 3,377,090 shares of Common Stock reported as beneficially owned by Redmile and Mr. Green in this Schedule 13D/A (including the Common Stock subject to the options to purchase shares that are exercisable within 60 days of the date of this filing) represents approximately 11.6% of the outstanding shares of Common Stock, as calculated in accordance with the last paragraph of this Item 5(a).

The Non-Voting Common Stock is initially convertible into shares of Common Stock on a one-for-one basis. Pursuant to the Issuer's Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation"), the Issuer may not effect any conversion of the Non-Voting Common Stock, and a holder of the Non-Voting Common Stock does not have the right to convert any portion of the Non-Voting Common Stock held by such holder, to the extent that, after giving effect to the attempted conversion set forth in a notice of conversion, such holder, together with such holder's affiliates and any other person whose beneficial ownership of Common Stock would be aggregated with such holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the applicable regulations of the Securities and Exchange Commission (the "SEC"), including any "group" of which such holder is a member, would beneficially own a number of shares of Common Stock in excess of the Beneficial Ownership Limitation (the "Beneficial Ownership Blocker"). The "Beneficial Ownership Limitation" is 4.99% of the shares of Common Stock then issued and outstanding, which percentage may be changed at a holder's election upon 61 days' notice to the Issuer. Because the percentage of shares of Common Stock collectively held directly by the Redmile Affiliates currently exceeds 4.99%, the conversion of the Non-Voting Common Stock held by the Redmile Affiliates is currently limited in its entirety by the Beneficial Ownership Blocker and the Reporting Persons therefore cannot be deemed to have beneficial ownership over any of the shares of Common Stock issuable upon conversion of the Non-Voting Common Stock and such shares have not been included in the aggregate amount of shares of Common Stock beneficially owned as reported in this Schedule 13D.

The Pre-Funded Warrants are exercisable at a price of \$0.01 per share. Pursuant to the terms of the Pre-Funded Warrants, the Issuer shall not effect any exercise of, and a holder of the Pre-Funded Warrants shall not be entitled to exercise, any Pre-Funded Warrants held by such holder for a number of shares of Common Stock in excess of the number of shares of Common Stock which, upon giving effect or immediately prior to such exercise, would cause (i) the aggregate number of shares of Common Stock beneficially owned by such holder, such holder's affiliates and any persons who are members of a group for purposes of Section 13(d) of the Exchange Act with such holder or its affiliates to exceed the Maximum Percentage (as defined below) of the total number of issued and outstanding shares of Common Stock following such exercise, or (ii) the combined voting power of the securities of the Issuer beneficially owned by such holder and its affiliates and any other persons who are members of a group for purposes of Section 13(d) of the Exchange Act with such holder or its affiliates to exceed the Maximum Percentage of the combined voting power of all of the securities of the Issuer then outstanding following such exercise (the "Warrant Beneficial Ownership Blocker"). The "Maximum Percentage" is 9.99%, which percentage may be changed to up to 19.99% at a holder's election upon at least 61 days' notice to the Issuer. Because the percentage of shares of Common Stock collectively held directly by the Redmile Affiliates currently exceeds 9.99%, the exercise of the Pre-Funded Warrants held by the Redmile Affiliates is currently limited in its entirety by the Warrant Beneficial Ownership Blocker and the Reporting Persons therefore cannot be deemed to have beneficial ownership over any of the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants and such shares have not been included in the aggregate amount of shares of Common Stock beneficially owned as reported in this Schedule 13D.

For purposes of this Schedule 13D, the percent of class beneficially owned by the Reporting Persons is calculated based on the sum of: (i) 28,968,962 shares of Common Stock outstanding as of August 2, 2022, as disclosed in the Issuer's Form 10-Q for the quarterly period ended June 30, 2022 as filed with the SEC on August 8, 2022, plus (ii) 40,813 shares of Common Stock subject to options to purchase shares of Common Stock that are exercisable within 60 days of the date of this filing that were issued to Mr. Lee plus (iii) 1,922 shares of Common Stock issued to Mr. Lee pursuant to restricted stock units in connection with his service as a member of the Board of Directors of the Issuer.

Item 5(b) of the Prior Schedule 13D is hereby amended and restated to read in its entirety as follows:

(b) **Redmile Group, LLC:**

(1) Sole Voting Power: 0

(2) Shared Voting Power: 3,377,090

(3) Sole Dispositive Power: 0

(4) Shared Dispositive Power: 3,377,090

Jeremy C. Green:

(1) Sole Voting Power: 0

(2) Shared Voting Power: 3,377,090

(3) Sole Dispositive Power: 0

(4) Shared Dispositive Power: 3,377,090

(c) The information in Item 3 above relating to the transactions effected by the Reporting Persons in the Issuer's securities is incorporated herein by reference. No other transactions have been effected by the Reporting Persons during the past sixty days.

(e) The Offshore Master Fund ceased to beneficially own more than 5% of the Issuer's Common Stock on October 3, 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.

Dated: October 5, 2022

REDMILE GROUP, LLC

/s/ Jeremy C. Green

Name: Jeremy C. Green

Title: Managing Member

Dated: October 5, 2022

/s/ Jeremy C. Green

JEREMY C. GREEN