UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

(Rule 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant $extsf{ }$

Filed by a Party other than the Registrant \Box

Check the appropriate box:

- Preliminary Proxy Statement
- □ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- □ Soliciting Material Pursuant to §240.14a-12

UNUM THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- ⊠ No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:
 - (2) Aggregate number of securities to which transaction applies:
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
 - (4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

□ Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

1. Amount Previously Paid:

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3.	Filing Party:
4.	Date Filed:



UNUM THERAPEUTICS INC. 200 Cambridge Park Drive, Suite 3100 Cambridge, Massachusetts 02140

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS To be held March 9, 2020

To the Stockholders of Unum Therapeutics Inc.:

We cordially invite you to attend a Special Meeting of Stockholders of Unum Therapeutics Inc. The Special Meeting will be held at 200 Cambridge Park Drive, Suite 3100, Cambridge, MA 02140 on March 9, 2020 at 9:00 a.m. Eastern Time. The purposes of the meeting are:

- 1. to approve a stock option exchange program for certain eligible employees, including certain of our executive officers, to exchange certain outstanding stock options for stock options with a lower exercise price; and
- 2. to transact such other business as may properly come before the Special Meeting and any adjournments or postponements of the Special Meeting.

Only Unum Therapeutics Inc. stockholders of record at the close of business on February 10, 2020, will be entitled to vote at the Special Meeting and any adjournment or postponement thereof.

Your vote is important. Whether or not you are able to attend the Special Meeting in person, it is important that your shares be represented. To ensure that your vote is recorded promptly, please vote as soon as possible, even if you plan to attend the Special Meeting, by submitting your proxy via the Internet at the address listed on the proxy card, by toll-free telephone or by signing, dating and returning the proxy card.

By order of the Board of Directors,

/s/ Charles Wilson, Ph.D.

Charles Wilson, Ph.D. President and Chief Executive Officer

Cambridge, Massachusetts February 18, 2020

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GENERAL INFORMATION PROPOSAL NO. 1 – APPROVAL OF STOCK OPTION EXCHANGE PROGRAM PRINCIPAL STOCKHOLDERS HOUSEHOLDING OTHER MATTERS

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UNUM THERAPEUTICS INC. PROXY STATEMENT FOR THE SPECIAL MEETING OF STOCKHOLDERS GENERAL INFORMATION

When are this proxy statement and the accompanying materials scheduled to be sent to stockholders?

On or about February 18, 2020, we will begin mailing our proxy materials, including the Notice of the Special Meeting, this proxy statement and the accompanying proxy card or, for shares held in street name (i.e. held for your account by a broker or other nominee), a voting instruction form.

Who is soliciting my vote?

Our Board of Directors, or the Board of Directors, is soliciting your vote for the Special Meeting.

When is the record date for the Special Meeting?

The record date for determination of stockholders entitled to vote at the Special Meeting is the close of business on February 10, 2020.

How many votes can be cast by all stockholders?

There were 29,888,218 shares of our common stock, par value \$0.001 per share, outstanding on February 10, 2020, all of which are entitled to vote with respect to all matters to be acted upon at the Special Meeting. Each stockholder of record is entitled to one vote for each share of our common stock held by such stockholder. None of our shares of undesignated preferred stock were outstanding as of February 10, 2020.

How do I vote?

In Person

If you are a stockholder of record, you may vote in person at the Special Meeting. We will give you a ballot when you arrive. If you hold your shares through a bank or broker and wish to vote in person at the meeting, you must obtain a valid proxy from the firm that holds your shares.

By Proxy

If you do not wish to vote in person or will not be attending the Special Meeting, you may vote by proxy. You can vote by proxy via the Internet by visiting the address listed on the proxy card, via telephone by calling the toll-free phone number listed on the proxy card or you can vote by mailing your proxy as described in the proxy materials. In order to be counted, proxies submitted by Internet or phone must be received by the cutoff time of 11:59 p.m. Eastern Time on March 8, 2020. Proxies submitted by mail must be received before the start of the Special Meeting.

If you complete and submit your proxy before the Special Meeting, the persons named as proxies will vote the shares represented by your proxy in accordance with your instructions. If you submit a proxy without giving voting instructions, your shares will be voted in the manner recommended by the Board of Directors on all matters presented in this proxy statement, and as the persons named as proxies may determine in their discretion with respect to any other matters properly presented at the Special Meeting. You may also authorize another person or persons to act for you as proxy in a writing, signed by you or your authorized representative, specifying the details of those proxies' authority. The original writing must be given to each of the named proxies, although it may be sent to them by electronic transmission if, from that transmission, it can be determined that the transmission was authorized by you.

If any other matters are properly presented for consideration at the Special Meeting, including, among other things, consideration of a motion to adjourn the Special Meeting to another time or place (including, without limitation, for the purpose of soliciting additional proxies), the persons named in your proxy and acting thereunder will have discretion to vote on those matters in accordance with their best judgment. We do not currently anticipate that any other matters will be raised at the Special Meeting.

How do I revoke my proxy?

You may revoke your proxy by (1) entering a new vote by mail that we receive before the start of the Special Meeting or over the Internet or by phone prior to the cutoff time of 11:59 p.m. Eastern Time on March 8, 2020, (2) attending and voting at the Special Meeting (although attendance at the Special Meeting will not in and of itself revoke a proxy), or (3) by filing an instrument in writing revoking the proxy or another duly executed proxy bearing a later date with our Corporate Secretary. Any written notice of revocation or subsequent proxy card must be received by our Corporate Secretary prior to the taking of the vote at the Special Meeting. Such written notice of revocation or subsequent proxy card should be hand delivered to our Corporate Secretary or sent to our principal executive offices at Unum Therapeutics Inc., 200 Cambridge Park Drive, Suite 3100, Cambridge, Massachusetts 02140, Attention: Corporate Secretary.

If a broker, bank, or other nominee holds your shares, you must contact such broker, bank, or nominee in order to find out how to change your vote.

How is a quorum reached?

Our Amended and Restated Bylaws, or bylaws, provide that a majority of the shares entitled to vote, present in person or represented by proxy, will constitute a quorum for the transaction of business at the Special Meeting.

Under the General Corporation Law of the State of Delaware, shares that are voted "abstain" or "withheld" are counted as present for purposes of determining whether a quorum is present at the Special Meeting. For the purposes of the Special Meeting, broker "non-votes" are not counted as present for purposes of determining whether a quorum is present. If a quorum is not present, the meeting may be adjourned until a quorum is obtained.

How is the vote counted?

Under our bylaws, any proposal other than an election of directors is decided by a majority of the votes properly cast for and against such proposal, except where a larger vote is required by law or by our Amended and Restated Certificate of Incorporation, or certificate of incorporation, or bylaws. Abstentions and broker "non-votes" are not included in the tabulation of the voting results on any such proposal and, therefore, do not have an impact on such proposals. A broker "non-vote" occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power with respect to that item, and has not received instructions from the beneficial owner.

If your shares are held in "street name" by a brokerage firm, your brokerage firm is required to vote your shares according to your instructions. If you do not give instructions to your brokerage firm, the brokerage firm will still be able to vote your shares with respect to certain "discretionary" items, but will not be allowed to vote your shares with respect to "non-discretionary" items. Proposal No. 1 is a "non-discretionary" item. If you do not instruct your broker how to vote with respect to this proposal, your broker may not vote for this proposal, and those votes will be counted as broker "non-votes."

Who pays the cost for soliciting proxies?

We are making this solicitation and will pay the entire cost of preparing and distributing our proxy materials and soliciting votes. If you choose to access the proxy materials or vote over the Internet, you are responsible for any Internet access charges that you may incur. Our officers and employees may, without compensation other than their regular compensation, solicit proxies through further mailings, personal conversations, facsimile transmissions, e-mails, or otherwise. We may hire a proxy solicitor to assist us in the distribution of proxy materials and the solicitation of votes described above. Proxy solicitation expenses that we may pay would include those for preparation, mailing, returning, and tabulating the proxies.

How can I know the voting results?

We plan to announce preliminary voting results at the Special Meeting and will publish final results in a Current Report on Form 8-K to be filed with the SEC within four business days following the Special Meeting.

PROPOSAL NO. 1 – APPROVAL OF STOCK OPTION EXCHANGE PROGRAM

Introduction

We are seeking stockholder approval of a stock option cancellation and regrant program, or the Option Exchange, that would allow us to cancel out-of-the-money stock options, meaning outstanding stock options that have an exercise price that is less than the market price for our stock, currently held by many of our employees, including certain of our executive officers, which we will collectively refer to as the Eligible Optionholders, in exchange for the issuance of stock options for the same number of shares and otherwise on the same terms but with lower exercise prices. If approved by our stockholders and implemented by our Board of Directors, the Option Exchange will permit Eligible Optionholders to cancel their out-of-the-money stock options, or the Eligible Options, in exchange for a grant of new options with a lower exercise price. We believe, as a result of these options being out-of-the-money, that the options fail to provide an appropriate incentive to the Eligible Optionholders. We are proposing the Option Exchange because we believe that, by granting new options with a lower exercise price, we will provide a better incentive and motivation to our key contributors than the out-of-the-money stock options that they currently hold as the Option Exchange will restore the incentive and retentive benefit of our equity program, and reduce the need to grant replacement equity incentives, which would deplete the available share reserve under the 2018 Stock Option and Incentive Plan, or the 2018 Plan. Moreover, the Option Exchange will allow us to devote more of our cash resources toward advancing our product candidates, as the Option Exchange is an alternative to increased cash compensation for the Eligible Optionholders.

Overview of the Proposed Option Exchange

On January 24, 2020, the compensation committee of the Board of Directors authorized the Option Exchange, subject to stockholder approval and implementation by our Board of Directors. Under the proposed Option Exchange, Eligible Optionholders will be able to cancel Eligible Options and be granted new stock options with a lower exercise price, or the New Options. Eligible Options are stock options that have an exercise price per share greater than the closing price of our common stock as reported on the Nasdaq Select Global Market on the date the stockholders approve the Option Exchange and held by Eligible Optionholders as of the date of the New Options granted. The opportunity to participate in the Option Exchange will be offered to the Eligible Optionholders who hold Eligible Options that were granted under the 2015 Stock Incentive Plan, or the 2015 Plan, and the 2018 Plan, which we will collectively refer to as the Plans. As of February 3, 2020, there were approximately 72 Eligible Optionholders and approximately 77% of our outstanding stock options constitute Eligible Options. Eligible Options will be cancelled effective upon the expiration of the Exchange Offer, as defined below, and New Options will be granted under our 2018 Plan.

Each New Option granted will have an exercise price per share equal to the closing price of our common stock as reported on the Nasdaq Select Global Market for the business day on which the Exchange Offer expires. The New Options granted to employees will have an exercise term of ten (10) years from the business day on which the New Options are granted.

The initial vesting of New Options takes into consideration the prior vesting of the surrendered Eligible Options, and awards full credit for such vesting. New Options for Eligible Optionholders will vest according to the following schedule: (i) the same number of the surrendered Eligible Options that have already vested, will immediately vest on the grant date and (ii) the remaining New Options will vest according to the prior schedule of the surrendered Eligible Options.

Reasons for the Option Exchange

We believe that the Option Exchange is in the best interests of our shareholders and an important component of our strategy to maintain an equity compensation program that effectively motivates and retains our employees

while reducing the number of shares we would otherwise need to grant employees as replacement equity incentives under the 2018 Plan. We further believe that, if approved by the stockholders, the Option Exchange will permit us to enhance long-term stockholder value by aligning incentives among the Eligible Optionholders who choose to participate in the Option Exchange so they are further motivated to achieve our strategic, operational and financial goals.

Many of our employees now hold stock options with exercise prices significantly higher than the current market price of our common stock. For example, on February 3, 2020, the closing price of our common stock on the Nasdaq Select Global Market was \$0.75 per share and the weighted average exercise price of Eligible Options was \$5.47. Consequently, as of February 3, 2020, approximately 2,923,501 shares of outstanding stock options held by Eligible Optionholders were out-of-the-money. Although we continue to believe that stock options are an important component of our employees' total compensation, many of our employees view their existing options as having little or no value due to the difference between the exercise prices and the current market price of our common stock. As a result, for many employees, these options are ineffective at providing the incentives and retention value that our Board of Directors believes are necessary to motivate our management and our employees to achieve our strategic, operational and financial goals. Additionally, the Option Exchange will allow us to devote more of our cash resources toward advancing our product candidates, as the Option Exchange is an alternative to increased cash compensation for the Eligible Optionholders.

Consideration of Alternatives

Our compensation committee considered alternatives to the Option Exchange to provide meaningful performance and retention incentive to our employees, including providing new option or restricted stock awards to employees, an equitable value for value exchange of existing underwater options, exchanging underwater options for full value shares, or exchanging underwater options for a cash payment. After careful consideration, our compensation committee determined that, compared to other alternatives, the Option Exchange provides better performance and retention incentives at a lower exercise price with potentially less dilution to stockholders. The Option Exchange also incentivizes certain of our executive officers and key employees as the primary drivers of the strategic and operational initiatives to advance the creation of long-term stockholder value.

Description of the Option Exchange

Implementing the Option Exchange. If the Option Exchange is approved by the stockholders, it is the Board of Directors' intent to implement the tender offer, or the Exchange Offer, pursuant to a tender offer statement on Schedule TO that will be filed with the Securities and Exchange Commission, or the SEC, within twelve (12) months of the date of such stockholder approval of the proposal. From the time the Exchange Offer commences, the Eligible Optionholders will be given at least twenty (20) business days to make an election to surrender for cancellation their Eligible Options on a grant-by-grant basis in exchange for New Options. The New Options will be issued on the day the Exchange Offer expires. We currently anticipate that the Exchange Offer would commence during March 2020. Even if the Option Exchange, at any time prior to the expiration of the Exchange Offer or to exclude certain Eligible Options or Eligible Optionholders from participating in the Option Exchange due to tax, regulatory or accounting reasons or because participation would be inadvisable or impractical. Stockholder approval of the Option Exchange applies only to this exchange of options. If we were to implement a stock option exchange in the future, we would once again need to seek stockholder approval.

Outstanding Options Eligible for the Option Exchange. To be eligible for cancellation and regrant, an option must have an exercise price that is greater than the closing price of our common stock as reported on the Nasdaq Select Global Market on the date the stockholders approve the Option Exchange and be held by an Eligible Optionholder. As of February 3, 2020, options to purchase approximately 4,827,288 shares of our common stock were outstanding, of which options to purchase approximately 2,923,501 shares, would be eligible for exchange under the Option Exchange.

Eligibility. The Option Exchange will be open to the Eligible Optionholders, including certain of our executive officers, who hold Eligible Options. To be eligible, an employee must be employed by us at the time the Exchange Offer commences. Additionally, in order to receive the New Options, an Eligible Optionholder who surrenders his or her Eligible Options for cancellation must be an employee on the date the New Options are granted. As of February 3, 2020, there were approximately 72 Eligible Optionholders.

Election to Participate. Participation in the Option Exchange will be voluntary. Eligible Optionholders will be permitted to exchange all or none of their Eligible Options for New Options on a grant-by-grant basis, meaning that an Eligible Optionholder who holds more than one Eligible Option need not surrender every Eligible Option he or she holds, but if any part of a single Eligible Option is surrendered, the entire Eligible Option must be surrendered.

Exercise Price of New Options. Each New Option granted will have an exercise price per share equal to the closing price of our common stock as reported on the Nasdaq Select Global Market for the business day on which the New Options are granted.

Vesting of New Options. The initial vesting of New Options takes into consideration the prior vesting of the surrendered Eligible Options, and awards full credit for such vesting. New Options for Eligible Optionholders will vest according to the following schedule: (i) the same number of the surrendered Eligible Options that have already vested, will immediately vest on the grant date and (ii) the remaining New Options will vest according to the prior schedule of the surrendered Eligible Options.

We expect to grant the New Options on the day the Exchange Offer expires. If the expiration date of the Exchange Offer is extended, then the New Option grant date will be similarly extended.

Term of the New Options. The New Options granted to employees will have an exercise term of ten (10) years from the New Option grant date.

Change of Control Provisions. Any New Options granted to Eligible Optionholders will have the same change of control provision that is currently included in the Eligible Options surrendered by such Eligible Optionholder.

Other Terms and Conditions of the New Options. The other terms and conditions of the New Options will be set forth in an option agreement to be entered into as of the New Option grant date. Any additional terms and conditions will be comparable to the other terms and conditions of the Eligible Options and will be granted under the 2018 Plan.

Return of Eligible Options Surrendered. Consistent with the terms of the 2018 Plan, shares subject to Eligible Options issued under the Plans cancelled in the Option Exchange will be added back to the pool of shares available for grant under the 2018 Plan and subsequently regranted as New Options.

Accounting Treatment. The incremental compensation expense associated with the Option Exchange will be measured as the excess of the fair value of each award of New Option granted to participants in the Option Exchange, measured as of the date the New Options are granted, over the fair value of the Eligible Options cancelled in exchange for the New Options, measured immediately prior to the cancellation. As the fair value will be determined at a later date, the impact of the incremental compensation expense is undeterminable. We will recognize any such incremental compensation expense immediately.

U.S. Federal Income Tax Consequences. The cancellation of Eligible Options and grant of New Options pursuant to the Option Exchange should be treated as a non-taxable event because the New Options will have an exercise price equal to or greater than the fair market value of our common stock on the grant date. Neither the company nor the participants in the Option Exchange should recognize any income for U.S. federal income tax purposes upon the grant of the New Options. New Options granted under the Option Exchange will be incentive stock

options, to the extent permitted by the law, for U.S. federal income tax purposes. Tax effects may vary in other countries. A more detailed summary of tax considerations will be provided to all participants in the Option Exchange documents.

Potential Modifications to Terms to Comply with Governmental Requirements. The terms of the Option Exchange will be described in the Exchange Offer that we will file with the SEC. Although we do not anticipate that the SEC will require us to modify the terms significantly, it is possible we will need to alter the terms of the Option Exchange, including an extension of the period we will keep the Option Exchange open, to comply with comments from the SEC. Changes in the terms of the Option Exchange may also be required for tax purposes for Eligible Optionholders in the United States as the tax treatment of the Option Exchange is not entirely certain.

Effect on Stockholders

We are not able to predict the impact the Option Exchange will have on your interests as a stockholder, as we are unable to predict how many Eligible Optionholders will exchange their Eligible Options or what the future market price of our common stock will be on the date that the New Options are granted. We expect to recognize incremental compensation expense from the Option Exchange. In addition, the Option Exchange is intended to reduce our need to issue supplemental stock options to remain competitive with other employers.

Benefits of the Option Exchange to Certain of our Executive Officers

Because the decision whether to participate in the option exchange is completely voluntary, we are not able to predict who will participate, how many Eligible Options any particular group of employees will elect to cancel, nor the number of New Options that we may grant. However, for purposes of illustration only, the following table indicates the number of shares subject to Eligible Options held, as of February 3, 2020, by certain of our executive officers who are eligible to participate in the Option Exchange and all non-executive officer employees as a group assuming that: (1) certain of our executive officers who are eligible to participate in the Option Exchange and employees decide to exchange all of his or her Eligible Options and (2) the closing price of our common stock on the date of exchange is \$0.75, which was the closing price of our common stock on February 3, 2020.

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Name and Position	Number of Shares	Weighted Average Per Share Exercise Price	Weighted Average Remaining Life (in years)	New Option Exercise Price	
Matthew Osborne	290,000	\$ 2.44	9.4	\$ 0.75	
Chief Financial Officer					
Jessica Sachs, M.D.	339,678	\$ 3.91	8.9	\$ 0.75	
Chief Medical Officer					
Seth Ettenberg	1,055,792	\$ 2.52	7.3	\$ 0.75	
Chief Scientific Officer					
Geoffrey Hodge	332,304	\$ 7.41	7.4	\$ 0.75	
Chief Technical Officer					
Eligible executive group	2,017,774	\$ 3.55	7.9	\$ 0.75	
Non-executive officer employee group	1,782,265	\$ 5.13	8.2	\$ 0.75	

The members of our Board of Directors and certain of our executive Officers are not eligible to participate in the Option Exchange and, therefore are not reflected in the table above.

Implementation of the Option Exchange

Upon the commencement of the Exchange Offer, Eligible Optionholders holding Eligible Options will receive written materials in the form of an "Offer to Exchange" explaining the precise terms and timing of the Option

Exchange. At or before the commencement of the Option Exchange, we will file an Offer to Exchange with the SEC as part of a tender offer statement on Schedule TO. Eligible Optionholders, as well as stockholders and members of the public, will be able to obtain the Offer to Exchange and other documents filed by us with the SEC free of charge from the SEC's website at *www.sec.gov*.

Eligible Optionholders will be given at least twenty (20) business days to elect to surrender their Eligible Options in exchange for new stock options, which period may be extended by us subject to our compliance with applicable legal and regulatory requirements. Once the offer to exchange is closed, Eligible Options that were surrendered for exchange will be cancelled, and our Board of Directors will approve grants of New Options to participating Eligible Optionholders. All such New Options will be granted under our 2018 Plan and a stock option award agreement to be entered into between us and each participant.

While the terms of the Option Exchange are expected to be materially similar to the terms described above, we may find it necessary or appropriate to change the terms of the Option Exchange to take into account our administrative or strategic needs, the requirements of applicable laws, regulations or listing standards, accounting rules or guidance, and our policy decisions that make it appropriate to change the Option Exchange.

Additionally, we may decide not to implement the Option Exchange even if stockholder approval of the Option Exchange is obtained, or we may amend, postpone or terminate the Option Exchange once it has been commenced. Our Compensation Committee will retain the discretion to make any necessary or desirable changes to the terms of the Option Exchange for purposes of complying with legal or regulatory requirements.

Financial Statements

Our financial statements and other information required by Item 13(a) are incorporated by reference from our quarterly reports on Form 10-Q filed with the SEC on May 13, 2019, August 12, 2019 and November 12, 2019 and our annual report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 28, 2019.

Interest of Certain Persons in or Opposition to Matter to be Acted Upon

In considering the recommendation of our Board of Directors with respect to the approval of the Option Exchange, stockholders should be aware that certain of our executive officers have direct interests in the adoption of this proposal, which may present them with conflicts of interest in connection with the recommendation and adoption of this proposal. As discussed above, our employees (including certain of our executive officers) are eligible to participate in the Option Exchange to the extent they hold Eligible Options. Therefore, in recommending adoption of this proposal to our stockholders, our Board of Directors recognizes, and our stockholders should be aware, that approval of this proposal may benefit certain of our executive officers.

If you are both a stockholder and an employee holding Eligible Options, please note that voting to approve the Option Exchange does not constitute an election to participate in the Option Exchange.

Required Vote

The affirmative vote of a majority of the outstanding shares of our common stock present in person or represented by proxy and entitled to vote on this proposal at the special meeting is required to approve the Option Exchange. Abstentions and broker non-votes will not affect the outcome of the voting on this proposal.

Recommendation of our Board of Directors

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT OUR STOCKHOLDERS VOTE "FOR" APPROVAL OF THE OPTION EXCHANGE.

PRINCIPAL STOCKHOLDERS

The following table sets forth information, to the extent known by us or ascertainable from public filings, with respect to the beneficial ownership of our common stock as of February 3, 2020 by:

- each of our directors;
- each of our named executive officers;
- all of our directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known by us to beneficially owner of greater-than-5.0% of our common stock.

The column entitled "Shares Beneficially Owned" is based on a total of 29,888,218 shares of our common stock outstanding as of February 3, 2020.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options that are currently exercisable or exercisable within 60 days of February 3, 2020 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable. Except as otherwise indicated in the table below, addresses of named beneficial owners are in care of Unum Therapeutics Inc., 200 Cambridge Park Drive, Suite 3100, Cambridge, Massachusetts 02140.

		Shares beneficially owned				
Name and address of beneficial owner(1)	Number	Percentage				
5% Stockholders:						
Dario Campana	5,095,114	17.1%				
Atlas Venture Fund IX, L.P. (2)	3,361,535	11.3%				
Entities affiliated with New Leaf (3)	1,795,545	6.0%				
Aventisub LLC (4)	1,773,481	5.9%				
Named Executive Officers and Directors:						
Charles Wilson, Ph.D.(5)	5,249,026	17.5%				
Jörn Aldag (6)	107,537	*				
Bruce Booth, DPhil. (7)	3,450,530	11.5%				
Karen Ferrante, M.D. (8)	77,056	*				
Matthew Ros (9)	42,912	*				
Arlene Morris (10)	6,369	*				
All executive officers and directors as a group (10 persons)(11)	9,780,695	31.3%				

- * Represents beneficial ownership of less than one percent.
- (1) Unless otherwise indicated, the address for each beneficial owner is c/o Unum Therapeutics Inc., 200 Cambridge Park Drive, Suite 3100, Cambridge, Massachusetts 02140.
- (2) Information herein is based on a Schedule 13G/A filed by Atlas Venture Fund IX, L.P. with the SEC on February 4, 2020. The shares are held directly by Atlas Venture Fund IX, L.P. The general partner of Atlas Venture Fund IX, L.P. is Atlas Venture Associates IX, L.P. ("AVA IX LP"). Atlas Venture Associates IX, LLC ("AVA IX LLC") is the general partner of AVA IX LP. Bruce Booth, DPhil. is a member of AVA IX LLC and is a member of our Board of Directors. Bruce Booth, DPhil. disclaims beneficial ownership of the shares held by each of the aforementioned funds except to the extent of their pecuniary interest therein. The address of Atlas Venture Fund IX, L.P., AVA IX LP, and AVA IX LLC is 46 Wareham Street, Boston, MA 02118.

- (3) Information herein is based on a Schedule 13D filed by New Leaf Ventures with the SEC on February 12, 2019. Consists of: (i) 897,772 shares of common stock held by New Leaf Ventures III, L.P., or NLV-III; and (ii) 897,773 shares of common stock held by New Leaf Ventures Biopharma Opportunities I, L.P., or NLV Biopharma. The general partner of NLV-III is New Leaf Venture Associates III, L.P., or NLVA-III. The general partner of NLV Biopharma is New Leaf BPO Associates I, L.P., or NLBA-I. The general partner of both NLVA-III and NLBA-I is New Leaf Venture Management III, L.L.C., or Management-III. Ronald M. Hunt and Vijay K. Lathi are individual members of Management-III, or Individual Members, which is responsible for the investment decisions of NLV-III and Biopharma-I. Each of the Individual Members disclaims beneficial ownership of the shares held by NLV-III and Biopharma-I except to the extent of their pecuniary interest therein. The address of the entities and individuals listed above is 7 Times Square, Suite 3502, New York, New York 10036.
- (4) Information herein is based on a Schedule 13D filed by Sanofi with the SEC on February 11, 2019. Consists of 1,773,481 shares of common stock held by Aventisub LLC, a wholly owned subsidiary of Sanofi. The address of Sanofi is 54 Rue La Boétie, 75008 Paris (France).
- (5) Consists of: (i) 5,095,114 shares of common stock held by Dr. Wilson and (ii) 153,912 shares of common stock underlying options exercisable within 60 days of February 3, 2020.
- (6) Consists of: 107,537 shares of common stock underlying options exercisable within 60 days of February 3, 2020.
- (7) Consists of: (i) the shares referenced in Footnote (2) and (ii) 88,995 shares of common stock underlying options exercisable within 60 days of February 3, 2020.
- (8) Consists of: 77,056 shares of common stock underlying options exercisable within 60 days of February 3, 2020.
- (9) Consists of: 42,912 shares of common stock underlying options exercisable within 60 days of February 3, 2020.
- (10) Consists of: 6,369 shares of common stock underlying options exercisable within 60 days of February 3, 2020.
- (11) See notes 5 through 10 above; also includes Seth Ettenberg, Ph.D., Geoffrey Hodge, Jessica Sachs, M.D. and Matthew Osborne who are executive officers but not named executive officers.

HOUSEHOLDING

Some banks, brokers and other nominee record holders may be participating in the practice of "householding" proxy statements and annual reports. This means that only one copy of our documents, including the annual report to stockholders and proxy statement, may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you upon written or oral request to Unum Therapeutics Inc., 200 Cambridge Park Drive, Suite 3100, Cambridge, Massachusetts 02140, Attention: Corporate Secretary, telephone: 617-945-5576. If you want to receive separate copies of the proxy statement or annual report to stockholders in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.

OTHER MATTERS

Our Board of Directors does not know of any other matters to be brought before the Special Meeting. If any other matters not mentioned in this proxy statement are properly brought before the Special Meeting, the individuals named in the enclosed proxy intend to use their discretionary voting authority under the proxy to vote the proxy in accordance with their best judgment on those matters.

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UNUM THERAPEUTICS INC. 200 CAMBRIDGE PARK DRIVE, SUITE 310 CAMBRIDGE, MA 02140

VOTE BY INTERNET - www.proxyvote.com Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 P.M. ET on 3/8/2020. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 P.M. ET on 3/8/2020, Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

	THIS	THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.								DETACH AND RETURN THIS PORTION ONLY				
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Important Notice Regarding the Availability of Proxy Materials for the Special Meeting: The Notice and Proxy Statement is available at www.proxyvote.com

UNUM THERAPEUTICS INC. Special Meeting of Shareholders 3/9/2020, 9:00 a.m. Eastern Time This proxy is solicited by the Board of Directors

The shareholder(s) hereby appoint(s) Charles Wilson and Matt Osborne, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common stock of UNUM THERAPEUTICS INC. that the shareholder(s) is/are entitled to vote at the Special Meeting of Shareholders to be held at 9:00 a.m. Eastern Time on 3/9/2020, at 200 Cambridge Park Drive, Suite 3100 Cambridge, MA 02140, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side