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CONFIDENTIAL TREATMENT REQUESTED BY UNUM THERAPEUTICS INC.

CERTAIN PORTIONS OF THIS LETTER AS FILED VIA EDGAR HAVE BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS. OMITTED INFORMATION HAS BEEN REPLACED IN THIS LETTER AS FILED VIA EDGAR WITH A PLACEHOLDER IDENTIFIED BY THE MARK "[***]."

March 8, 2018

VIA EDGAR

U.S. Securities and Exchange Commission
Office of Healthcare and Insurance
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549
Attention: Jeffrey Gabor
Mary Beth Breslin

Re: Unum Therapeutics Inc.
Registration Statement on Form S-1
File No. 333-223414
CIK No. 0001622229

Ladies and Gentlemen:

On behalf of Unum Therapeutics Inc. (the "Company"), in response to comments from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") received by letter dated December 3, 2017 (the "Comment Letter") relating to the Company's Registration Statement on Form S-1, originally confidentially submitted to the Commission on November 3, 2017, resubmitted to the Commission on February 13, 2018, and subsequently filed by the Company with the Commission on March 2, 2018 (File No. 333-223414) (the "Registration Statement"), we submit this supplemental letter to further address comment 2 of the Comment Letter.

Because of the commercially sensitive nature of information contained herein, this submission is accompanied by the Company's request for confidential treatment for selected portions of this letter. The Company has filed a separate letter with the Office of Freedom of Information and Privacy Act Operations in connection with the confidential treatment request, pursuant to Rule 83 of the Commission's Rules on Information and Requests, 17 C.F.R. § 200.83. For the Staff's reference, we have enclosed a copy of the Company's letter to the Office of Freedom of Information and Privacy Act Operations.

For the convenience of the Staff, we have recited the prior comment from the Staff in italicized type and have followed the comment with the Company's response.

2. *Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the IPO and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features.*

The Company respectfully submits the below additional information to assist the Staff in its review of the Company's position with respect to its determination of the fair value of its common stock underlying its outstanding equity awards and the reasons for the differences between the recent valuation of its common stock and the estimated offering price for its initial public offering ("IPO").

Preliminary IPO Price Range

The Company advises the Staff that it preliminarily estimates a price range of approximately $[***] to $[***] per share (the "Preliminary Price Range") for its IPO, before giving effect to a reverse stock split that the Company plans to implement prior to effectiveness of the Registration Statement. The actual price range to be included in a subsequent amendment to the Registration Statement (which will comply with the Staff's interpretation regarding the parameters of a *bona fide* price range) has not yet been determined and remains subject to adjustment based on factors outside of the Company's control. However, the Company believes that the foregoing indicative price range will not be subject to significant change.

Determining the Fair Value of Common Stock Prior to the IPO

As there has been no public market for the Company's common stock to date, the estimated fair value of its common stock has been determined by the Company's board of directors (the "Board") as of the date of each option grant, with input from management, considering the Company's most recent third-party valuations of its common stock and the Board's assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent third-party valuation through the date of the grant. As

disclosed in the Registration Statement, the Company obtained third-party valuations of its common stock as of August 31, 2017 and November 27, 2017, which resulted in valuations of the Company's common stock of $6.22 per share as of August 31, 2017 and $6.73 per share as of November 27, 2017.

These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. The Company's recent common stock valuations were prepared using a hybrid method. The hybrid method is a probability-weighted expected return method where the equity value in one or more of the scenarios is calculated using an option pricing method.

The Company's most recent third-party valuation prepared as of November 27, 2017 (the "November 2017 Valuation") considered two future-event scenarios: a sale scenario and an IPO scenario. The equity value of the Company in each future-event scenario was determined using market approaches. The IPO scenario in the November 2017 Valuation assumed that all shares of preferred stock would convert into shares of common stock and would no longer have the liquidation preferences and preferential rights attributable to the preferred stock as compared to the common stock prior to the IPO. The November 2017 Valuation probability weighted the sale scenario at [***]% and the IPO scenario at [***]%, each based on the Company's assessment of its development pipeline and market conditions. The [***]% weighting of the IPO scenario was selected due to the high perceived risk, at that time, of successfully completing an IPO in the near term. For the future-event scenarios, the Company then applied a discount for lack of marketability of [***]% in the sale scenario and [***]% in the IPO scenario, each determined by a put option analysis, which considered the timing of each future-event scenario.

Comparison of Most Recent Valuation and the Preliminary Price Range

As is typical in IPOs, the Preliminary Price Range was not derived using a formal determination of fair value, but was determined by negotiations between the Company and the underwriters. Prior to March 1, 2018, the Company and underwriters had not had any specific discussions regarding the Preliminary Price Range. Among the factors that were considered in setting the Preliminary Price Range were the following:

- the general conditions of the securities market and the recent market prices of, and the demand for, publicly traded common stock of comparable companies;
- the Company's financial condition and prospects;
- estimates of business potential and earnings prospects for the Company and the industry in which it operates;

- recent performance of IPOs of companies in the biotechnology sector; and
- progress and stage of development of the Company's development programs.

The Company believes that the difference between the fair value of its common stock as of November 27, 2017 of $6.73 per share and the Preliminary Price Range of $[***] to $[***] per share is the result of the factors above and the following factors and positive developments with respect to the Company's business that occurred subsequent to November 27, 2017:

- The Preliminary Price Range is based only upon a scenario in which the Company completes the IPO and is not probability weighted, in contrast to the November 2017 Valuation, which considered multiple potential outcomes, some of which would have resulted in a lower value of the Company's common stock than its IPO.
- The Preliminary Price Range necessarily assumes that the IPO has occurred and that a public market for the Company's common stock has been created, and, therefore, excludes any discount for lack of marketability of the Company's common stock or impact of the time value of money, which were appropriately taken into account in the November 2017 Valuation.
- The Preliminary Price Range assumes the conversion of all of the Company's outstanding preferred stock. The Company's preferred stock currently has substantial economic rights and preferences over the Company's common stock. Upon the closing of this offering, all outstanding shares of the Company's preferred stock will convert into common stock, thus eliminating the superior rights and preferences of the preferred stock as compared to the common stock.
- Since November 27, 2017, the Company has taken several steps towards the completion of an IPO, including (i) publicly filing the Registration Statement with the Commission on March 2, 2018 and (ii) adding two new members to the Board who possess relevant strategic, financial, fundraising and biotechnology and pharmaceutical industry experience.
- Since November 27, 2017, the Company also made further progress in the advancement of its lead development programs and the execution of its business strategies, including:
    - In December 2017, the Company began dosing patients in a Phase I clinical trial of its second clinical-stage product candidate, ACTR707 used in combination with rituximab, for the treatment of adult patients with relapsed or refractory ("r/r") non-Hodgkin lymphoma;
    - In February 2018, the Company began enrolling and dosing patients in a Phase I clinical trial of its third clinical-stage product candidate, ACTR087 used in

combination with the novel antibody SEA-BCMA, for the treatment of adult patients with r/r multiple myeloma;

- In February 2018, the Company defined the preliminary recommended phase 2 dose ("RP2D") for the expansion cohort of its ongoing Phase I clinical trial of ACTR087 used in combination with rituximab, the Company's most advanced product candidate, for the treatment of adult patients with r/r non-Hodgkin lymphoma (called "ATTCK-20-2") and is advancing towards testing in an expanded patient cohort using the RP2D to support potential registration trials; and
- In February 2018, the U.S. Food and Drug Administration removed the clinical hold on the Company's ATTCK-20-2 clinical trial, following review of certain information submitted by the Company relating to that trial, which increased the probability of the Company commencing its IPO.

- In February 2018, the Company held "testing-the-waters" meetings, at which the Company received positive feedback from potential investors.
- The proceeds of a successful IPO would substantially strengthen the Company's balance sheet by increasing its cash resources. In addition, the completion of this offering would provide the Company with ready access to the public equity and debt markets.

The Company respectfully submits that the deemed per share fair values used as the basis for determining the stock-based compensation in connection with its grants of equity awards are reasonable and appropriate for the reasons described herein and in the Registration Statement.

We hereby further request, pursuant to Rule 418(b) under the Securities Act of 1933, as amended, the return of the unredacted version of this letter. The Company believes that the return of the supplemental information contained in this letter will protect the interests of investors and is consistent with the provisions of the Freedom of Information Act by maintaining in confidence the potential valuation of the Company that may, if disseminated, negatively impact the trading in the common stock of the Company following the IPO. The Company advises the Staff that it has not filed the supplemental information subject to this request in electronic format. Please return this letter to the Company, in care of the undersigned, a responsible representative of the Company, at 100 Northern Avenue, Boston, MA 02210.

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If you have any questions or comments with regard to this matter, please do not hesitate to contact the undersigned at (617) 570-1955.

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Respectfully submitted,

GOODWIN PROCTER LLP

By /s/ Danielle Lauzon
Danielle Lauzon

cc: Charles Wilson, Ph.D., *Unum Therapeutics Inc.*
Christiana Stamoulis, *Unum Therapeutics Inc.*
Kingsley Taft, *Goodwin Procter LLP*
Caitlin Murray, *Goodwin Procter LLP*
Patrick O'Brien, *Ropes & Gray LLP*

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