UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

December 3, 2017

Charles Wilson, Ph.D.
President and Chief Executive Officer
Unum Therapeutics Inc.
200 Cambridge Park Drive, Suite 3100
Cambridge, Massachusetts 02140

Re: Unum Therapeutics, Inc.
Draft Registration Statement on Form S-1
Submitted November 3, 2017
CIK No. 0001622229

Dear Dr. Wilson:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement submitted November 3, 2017

Prospectus Summary
Our Pipeline, page 3

1. Please revise your pipeline table to disclose the undisclosed candidate in the preclinical phase and specify the additional indications it addresses. Alternatively, remove this line from the table.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Stock-Based Compensation
Critical Accounting Policies and Significant Judgments and Estimates
Determination of Fair Value of Common Stock, page 83

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.

Business
Overview, page 87

3. We note your disclosure that at your current dose level, ACTR087 used in combination with rituximab resulted in "no severe CRS or neurotoxicity, no other adverse events of special interest (AESIs)..., and no ACTR087-related SAEs or other adverse events leading to study discontinuation" and the use of this information as a comparison to competitors in which "a significant number of NHL adult patients treated with CD19 CARs experienced severe CRS (13% for Yescarta and 26% for Kymriah) and severe neurotoxicity (28% for Yescarta and 13% for Kymriah)." Based on your risk factor disclosure contained on page 15, that you "will likely observe some or all of these side effects in [your] clinical trials at some dosage level, because of [your] dose escalation design," please put this selected information into its full and proper context by providing the specific details and parameters of the studies in which this data was drawn. Without this contextual information, it may be difficult for the reader to draw an accurate and balanced assessment of these favorable results.

ACTR087 Used in Combination with Rituximab for B Cell Non-Hodgkin Lymphoma, page 99

4. We note that you are currently evaluating the safety, tolerability, and anti-lymphoma activity of ACTR087 used in combination with Rituximab in your ongoing Phase 1 clinical trial. Given that this Phase 1 was designed to establish a dose level and assess overall safety, please clarify in your disclosure the extent which you can rely on observations relating to efficacy in future regulatory filings with the FDA. Please include a similar discussion for your other candidates.

5. We note that patients demonstrating complete remission received the highest total dose of ACTR087 T cells. Please revise to clarify whether any of the partial remission or progressive disease patients also received the highest total dose of ACTR087 T cells.

Our Product Candidates, page 99

6. Please revise your disclosure to identify the primary and secondary endpoints being measure in your ongoing Phase I clinical trial for ACTR087 used in combination with Rituximab and your primary and secondary endpoints in your planned Phase I clinical trials for ACTR707 used in combination with Rituximab and ACTR087 used in combination with SEA-BCMA.

ACTR707 Used in Combination with Rituximab for B Cell Non-Hodgkin Lymphoma, page 101

7. Please revise, here or elsewhere in your document as appropriate, to explain why you were required to submit a waiver request to the National Institutes of Health, explain the process involved in receiving the waiver, and the current status of the request. Provide similar disclosure regarding the waiver for ACTR087 used in combination with SEA-BCMA for multiple myeloma.

Intellectual Property, page 108

8. Please revise your disclosure to describe the patent portfolio underlying the approved and commercially available antibodies and antibodies in preclinical or clinical development used in combination with your proprietary technology.

Management, page 129

9. Please revise to clarify the description of the business experience for Christiana Stamoulis so that it covers her principal occupations and employment during the past five years. Please see Item 401(e) of Regulation S-K.

Shares Eligible for Future Sale
Lock-Up Agreements, page 154

10. Please file the form of lock-up agreement as an exhibit to your registration statement.

Notes to Consolidated Financial Statements
6. Collaboration Agreement, page F-21

11. We note that under the terms of the Seattle Genetics collaboration agreement you will receive additional payments upon achievement of certain development, regulatory and commercial milestones or the occurrence of specified events in the aggregate amount of up to $400.0 million. Please revise your disclosure to describe each substantive milestone and specified event, and the related contingent consideration. Refer to ASC 605-28-50-2b.

Exhibits

12. We note you plan to enter into revised employment agreements upon effectiveness of the registration statement, as well as a stock option and incentive plan. Please file these as exhibits or tell us why you do not believe you are required to file them.

General

13. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

14. Please provide us proofs of all graphics, visual, or photographic information you will provide in the printed prospectus prior to its use, for example in a preliminary prospectus. Please note that we may have comments regarding this material.

You may contact Sasha Parikh at 202-551-3627 or Sharon Blume at 202-551-3474 if you have questions regarding comments on the financial statements and related matters. Please contact Jeffrey Gabor at 202-551-2544 or Mary Beth Breslin at 202-551-3625 with any other questions.

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Caitlin Murray