September 30, 2020

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

Re: Unum Therapeutics

Amendment No. 2 to

Proxy Statement on Schedule 14A

2020

Inc.

Filed September 22, File No. 001-38443

Dear Dr. Wilson:

We have reviewed your amended filing 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Amendment No. 2 to Preliminary Proxy Statement on Schedule 14A

Overview of KIQ, page 25

1. We note your disclosure that Kiq was formed on April 28, 2020 and that prior to its acquisition by Unum, Kiq never had any employees or facilities and only had one asset, an exclusive License Agreement, and that Kiq had no assembled workforce or processes in place to perform the development of the license. Given this disclosure, please revise to clarify the basis for s most advanced program your disclosure that PLX9486 was Kiq highly and is a potent and selective KIT D816V inhibitor. It does not appear that you have filed the exclusive License Agreement with Plexxicon Inc. as an exhibit to any of your filings. Please file that agreement as an exhibit to an appropriate filing or explain to us the basis for your determination that it is not required to be filed. If you believe the agreement is not required to be filed, please include in your explanation a detailed analysis supporting your belief that your plans to develop PLX9486 are not substantially dependent on the license agreement. Charles Wilson, Ph.D. Unum Therapeutics Inc. September 30, 2020 Page 2 If our efforts to protect the proprietary nature of the intellectual property related to our technologies..., page 74 Please revise to clarify if the patents disclosed in this risk factor 3. relate to your ACTR technologies and revise to clarify any material risks related to the technology licensed

under the agreement with Plexxikon, Inc.

Sales of a substantial number of shares of our common stock, page 99 Please update this risk factor to address the number of shares 4. registered for resale under your recently filed registration statement on Form S-3. Principal Stockholders, page 110 Please disclose the natural person who beneficially own the shares held 5. in the name of the legal entities identified in your table in this section. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff. Please contact Tim Buchmiller at (202) 551-3635 or Celeste Murphy at (202) 551-3257 with any questions. Sincerely,

FirstName LastNameCharles Wilson, Ph.D. Corporation Finance Comapany NameUnum Therapeutics Inc.

Office of Life

Division of

Sciences September 30, 2020 Page 2 cc: Andrew H. Goodman, Esq. FirstName LastName