

March 16, 2022

Robert Ang, M.B.B.S.  
President and Chief Executive Officer  
Vor Biopharma Inc.  
100 Cambridgepark Drive  
Suite 101  
Cambridge, Massachusetts 02140

Re: Vor Biopharma Inc.  
Registration

Statement on Form S-3  
2022

Filed March 14,

File No. 333-263541

Dear Mr. Ang:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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 Michael Davis at 202-551-4385 or Celeste Murphy at 202-551-3257 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc:

Richard Segal