

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

April 11, 2019

David Eatwell Chief Financial Officer Genmab A/S Kalvebod Brygge 43 1560 Copenhagen V, Denmark

Re: Genmab A/S

Amendment No. 1 to Draft Registration Statement on Form F-1 Submitted on April 2, 2019 CIK No. 0001434265

Dear Mr. Eatwell:

We have reviewed your amended 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.

Amendment No. 1 to Draft Registration Statement on Form F-1

Capitalization, page 73

1. Please tell us why it is appropriate to include total liabilities in your capitalization table when it appears that you have no long-term debt or other long-term liabilities.

Business

Medarex UltiMAb System License, page 161

2. We note your response to comment 12. Please disclose the aggregate value of the perproduct milestone payments remaining under this agreement.

David Eatwell Genmab A/S April 11, 2019 Page 2

You may contact Isaac Esquivel at (202) 551-3395 or Kate Tillan at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Tonya K. Aldave at (202) 551-3601 or Dietrich King at (202) 551-8071 with any other questions.

Sincerely,

Division of Corporation Finance Office of Healthcare & Insurance

cc: Harald Halbhuber, Esq.