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

> Re: Genmab A/S Amendment No. 2 to Draft Registration Statement on Form F-1 Submitted on May 13, 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. 2 to Draft Registration Statement on Form F-1

Exhibits

1. Please revise Exhibit 4.2 to state that no disclaimer of liability under the Exchange Act is intended by any provision of the deposit agreement. In addition, revise the arbitration provision to provide that the provision does not preclude holders and beneficial owners from pursuing claims under the Securities Act or the Exchange Act in federal courts. David Eatwell FirstName LastNameDavid Eatwell Genmab A/S Comapany NameGenmab A/S May 15, 2019 Page 2 May 15, 2019 Page 2 FirstName LastName 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 Office of Healthcare &

Corporation Finance

Insurance cc: Harald Halbhuber, Esq.