

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

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

GENMAB A/S

(Exact name of registrant as specified in its charter)

The Kingdom of Denmark
(State or other jurisdiction of incorporation
or organization)

**Kalvebod Brygge 43
1560 Copenhagen V
Denmark**
(Address of Principal Executive
Offices, including zip code)

Not Applicable
(I.R.S. Employer
Identification No.)

**Genmab A/S 2021 Restricted Stock Units Program
Genmab A/S 2021 Warrant Scheme**
(Full title of the plans)

**Genmab US, Inc.
777 Scudders Mill Road
Plainsboro, NJ 08536**
(Name and address of agent for service)
(609) 430-2481
(Telephone number, including area code, of agent for service)

With a copy to:

**Doreen E. Lilienfeld, Esq.
Shearman & Sterling LLP
599 Lexington Avenue
New York, NY 10022
(212) 848-4000**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

PART I
INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

All information required by Part I of Form S-8 to be contained in the prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed with the Securities and Exchange Commission (the "Commission") are hereby incorporated by reference in this Registration Statement:

(a) The Registrant's annual report on Form 20-F for the fiscal year ended December 31, 2021, filed with the Commission on February 16, 2022.

(b) All other reports filed by the Registrant pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), since the end of the fiscal year covered by the registration statement referred to in (a) above (other than portions of those documents furnished or not otherwise deemed to be filed).

(c) The description of the Registrant's Ordinary Shares and American Depositary Shares incorporated by reference to Exhibit 2.3 to the Registrant's annual report on Form 20-F filed with the Commission on March 29, 2021.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act and, to the extent specifically designated therein, Reports of Foreign Private Issuer on Form 6-K furnished by the Registrant to the Commission that are identified in such forms as being incorporated into this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement indicating that all of the securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be part hereof from the date of filing such documents.

Item 4. Description of Securities.

Not applicable

Item 5. Interests of Named Experts and Counsel.

Not applicable

Item 6. Indemnification of Directors and Officers.

According to the Danish Companies Act, shareholders, at the general meeting, are permitted to discharge the Registrant's board members and registered managers from liability for any particular financial year based on a resolution relating to the period covered by the financial statements for the previous financial year. This discharge means that the shareholders will relieve such board members and registered managers from liability to the Registrant. However, shareholders cannot discharge any claims by individual shareholders or other third parties. In addition, the discharge can be set aside in case the general meeting prior to its decision to discharge was not presented with all reasonable information necessary for the general meeting to assess the matter at hand. In addition, the Registrant provides its board members and registered managers with directors' and officers' liability insurance.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The following exhibits are filed as part of this Registration Statement:

Exhibit Number	Description of Document
4.1	English translation of the Articles of Association of Genmab A/S, as in effect on the date hereof, filed as Exhibit 3.1 to the Registrant's Current Report on Form 6-K filed with the Commission on February 3, 2022 (File No. 001-38976)
4.2	Genmab A/S 2021 Restricted Stock Units Program (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-8, filed with the Commission on February 25, 2021 (File No. 333-253519))
5.1*	Opinion of Kromann Reumert, with respect to the legality of the securities being registered
23.1*	Consent of Kromann Reumert (included in the opinion filed as Exhibit 5.1)
23.2*	Consent of PricewaterhouseCoopers Statsautoriseret Revisionspartnerselskab
24.1*	Limited Power of Attorney of the directors of the Registrant (contained in the signature pages hereto)
99.1	Genmab A/S 2021 Warrant Scheme (incorporated by reference to Exhibit 99.1 to the Registrant's Registration Statement on Form S-8, filed with the Commission on February 25, 2021 (File No. 333-253519))
107*	Filing Fee Table

* Filed herewith.

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made of securities registered hereby, a post-effective amendment to this Registration Statement which shall include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; and

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby further undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, Registrant certifies that it has reasonable grounds to believe it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Utrecht, the Netherlands on February 24, 2022.

Genmab A/S

(Registrant)

By: /s/ Jan G. J. van de Winkel

Jan G. J. van de Winkel

President & Chief Executive Officer

Limited Power of Attorney

(Form S-8)

KNOW ALL PERSONS BY THESE PRESENTS, that each of the undersigned officers and directors of GENMAB A/S, a corporation organized under the laws of the Kingdom of Denmark (the "Company"), does hereby constitute and appoint each of Birgitte Stephensen and Anthony Pagano as his or her true and lawful attorney-in-fact and agent, to do or cause to be done any and all acts and things and to execute any and all instruments and documents which said attorneys-in-fact and agents may deem advisable or necessary to enable the Company to comply with the Securities Act of 1933, as amended (the "Securities Act"), and any rules, regulations and requirements of the Securities and Exchange Commission in respect thereof, in connection with the registration of the securities or deferred compensation obligations of the Company being registered on the Registration Statement on Form S-8 to which this power of attorney is filed as an exhibit (the "Securities"), including specifically, but without limiting the generality of the foregoing, power and authority to sign, in the name and on behalf of each of the undersigned, the Registration Statement on Form S-8 to which this power of attorney is filed as an exhibit, a Registration Statement under Rule 462(b) of the Securities Act, or another appropriate form in respect of the registration of the Securities, and any and all amendments thereto, including post-effective amendments, and any instruments, contracts, documents or other writings of which the originals or copies thereof are to be filed as a part of, or in connection with, any such Registration Statement or any other appropriate form or amendments thereto, and to file or cause to be filed the same with the Securities and Exchange Commission, and to effect any and all applications and other instruments in the name and on behalf of each of the undersigned which said attorneys-in-fact and agents deem advisable in order to qualify or register the Securities under the securities laws of any of the several States or other jurisdictions; and each of the undersigned does hereby ratify all that said attorneys-in-fact and agents shall do or cause to be done by virtue thereof. Each attorney-in-fact and agent is hereby granted full power of substitution and revocation with respect hereto.

IN WITNESS WHEREOF, each of the undersigned has executed this Limited Power of Attorney as of and on the dates indicated below.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signatures	Title	Date
<u>/s/ Jan G. J. van de Winkel</u> Jan G. J. van de Winkel	President & Chief Executive Officer (Principal Executive Officer)	February 24, 2022
<u>/s/ Anthony Pagano</u> Anthony Pagano	Executive Vice President & Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 24, 2022
<u>/s/ Deirdre P. Connelly</u> Deirdre P. Connelly	Chair of the Board of Directors	February 24, 2022
<u>/s/ Pernille Erenbjerg</u> Pernille Erenbjerg	Deputy Chair of the Board of Directors	February 24, 2022
<u>/s/ Anders Gersel Pedersen</u> Anders Gersel Pedersen	Director	February 24, 2022
<u>/s/ Paolo Paoletti</u> Paolo Paoletti	Director	February 24, 2022
<u>/s/ Rolf Hoffman</u> Rolf Hoffman	Director	February 24, 2022
<u>/s/ Peter Storm Kristensen</u> Peter Storm Kristensen	Director	February 24, 2022
<u>/s/ Mijke Zachariasse</u> Mijke Zachariasse	Director	February 24, 2022
<u>/s/ Rima Bawarshi Nassar</u> Rima Bawarshi Nassar	Director	February 24, 2022

Signature of Authorized U.S. Representative of Registrant

Pursuant to the requirements of the Securities Act of 1933, as amended, the undersigned, the duly authorized representative in the United States of Genmab A/S, has signed this Registration Statement on February 24, 2022.

By: /s/ Anthony Pagano

Name: Anthony Pagano

Title: Executive Vice President and Chief Financial Officer

KROMANN REUMERT

Genmab A/S
Kalvebod Brygge 43
1560 København V
(the "Company")

REGARDING REGISTRATION STATEMENT ON FORM S-8 OF GENMAB A/S

Dear Sirs,

We have acted as Danish counsel to Genmab A/S (the "Company") in connection with the registration (made pursuant to the form S-8 dated February 24, 2022) of i) up to 725,000 ordinary shares of the Company that are authorized for issuance pursuant to warrants on the terms of the Genmab A/S 2021 Warrant Scheme (the "Warrant Shares") and ii) up to 775,000 ordinary shares of the Company to be delivered by the Company under the Genmab A/S 2021 Restricted Stock Units Program (the "RSU Shares", the Warrant Shares and the RSU Shares are collectively referred to as the "Incentive Shares"). We note that the Company will not issue any new shares under the RSU program but instead deliver the RSU Shares with Existing Shares that are held by the Company and are already issued and listed on Nasdaq Copenhagen. As used herein, the term "Existing Shares" shall include all issued and outstanding shares as of February 24, 2022.

In connection with the opinion expressed herein, we have examined such documents, records and matters of law as we have deemed relevant or necessary for purposes of this opinion.

Based on the foregoing, and subject to the further limitations, qualifications and assumptions set forth herein, we are of the opinion that the Warrant Shares that may be issued following exercise of the warrants have been duly authorized and, when issued in accordance with the terms of the respective warrants and against payment of due consideration therefor, will be validly issued, fully paid and non-assessable.

Non-assessable shall in this context mean, in relation to a share, that the issuer of the share has no right to require the holder of the share to pay to the issuer any amount (in addition to the amount required for the share to be fully paid) solely as a result of his shareholding.

Further, we are of the opinion that according to an online transcript for the Company from the Danish Business Authority dated February 24, 2022, the Existing Shares are validly issued, fully paid and non-assessable (i.e. no further contributions in respect thereof will be required

LAW FIRM

WWW.KROMANNREUMERT.COM
CENTRAL BUSINESS REGISTER
(CVR) NO. DK 62 60 67 11

PARTNER

JØRGEN KJERGAARD MADSEN
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24 FEBRUARY 2022

MATTER ID. 143400 JKM/JKM
DOC. NO. 62320054

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DK-2100 COPENHAGEN Ø

AARHUS
RÅDHUSPLADSEN 3
DK-8000 AARHUS C

LONDON
65 ST. PAUL'S CHURCHYARD
LONDON EC4M 8AB

to be made to the Company by the holders thereof, by reason only of their being such holders).

This Opinion is given only with respect to the laws of Denmark as in force today and as such laws are currently applied by Danish courts and we express no opinion with respect to the laws of any other jurisdiction nor have we made any investigations as to any law other than the laws of Denmark.

This Opinion expresses no opinion on the settlement agent's actions or omissions in relation to settlement of any Incentive Shares and registrations with VP Securities A/S.

Further, this opinion is qualified upon that the information contained in the online transcript dated February 24, 2022 from the Danish Business Authority concerning the Company being accurate, complete and updated.

We advise you that we are not assuming any obligation to notify you of any changes in this opinion as a result of any facts or circumstances that may come to our attention in the future or as a result of any changes in laws which may hereafter occur.

This Opinion is governed by and construed in accordance with Danish law and is limited to matters of the laws of Denmark (excluding Greenland and the Faroe Islands) as in effect and applied on the date of this Opinion. We express no opinion with respect to the laws of any other jurisdiction, nor have we made any investigation as to any laws other than the laws of Denmark. The courts of Denmark shall have exclusive jurisdiction to adjudicate upon any dispute arising under or in connection with this Opinion.

This Opinion is strictly limited to the matters stated herein and is not to be read as extending by implication to any other matter.

We hereby consent to the filing of this Opinion as an exhibit to the Registration Statement on Form S-8 filed by the Company with the Securities and Exchange Commission to effect the registration of the Incentive Shares. In giving this consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

We are qualified to practice law in Denmark.

Best regards,
Kromann Reumert

/s/ Jørgen Kjergaard Madsen
Jørgen Kjergaard Madsen
Partner



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 of Genmab A/S of our report dated February 16, 2022, relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in Genmab A/S's Annual Report on the Form 20-F, filed with the Securities and Exchange Commission on February 16, 2022.

/s/ PricewaterhouseCoopers
Statsautoriseret Revisionspartnerselskab
Hellerup, Denmark
February 24, 2022

Calculation of Filing Fee Table

Form S-8

(Form Type)

GENMAB A/S

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title ⁽¹⁾	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Ordinary shares, DKK 1 nominal value per share ("Ordinary Shares") ⁽¹⁾ ⁽²⁾ reserved for issuance under the Genmab A/S 2021 Restricted Stock Units Program	Rule 457(c) and Rule 457(h)	775,000	\$304 ⁽³⁾	\$235,600,000	\$0.0000927	\$21,840.12
Equity	Ordinary Shares, DKK 1 nominal value per share ("Ordinary Shares") ⁽¹⁾ ⁽²⁾ reserved for issuance under the Genmab A/S 2021 Warrant Scheme	Rule 457(c) and Rule 457(h)	725,000	\$304 ⁽³⁾	\$220,400,000	\$0.0000927	\$20,431.08
Total Offering Amounts					\$456,000,000		\$42,271.20
Total Fee Offsets							--
Net Fee Due							\$42,271.20

- (1) Represents Ordinary Shares issuable under the Genmab A/S 2021 Warrant Scheme and Genmab A/S 2021 Restricted Stock Units Program. In addition, this Registration Statement also relates to such indeterminable number of additional Ordinary Shares as may be issuable pursuant to stock splits, stock dividends or similar transactions.
- (2) The Ordinary Shares may be represented by the Registrant's American Depositary Shares ("ADS"), each of which represents one tenth of one Ordinary Share. The ADSs have been registered under a registration statement on Form F-6, filed with the Commission on May 22, 2013, as amended by Post-Effective Amendment No. 1, filed with the Commission on April 13, 2018, and Post-Effective Amendment No. 2, filed with the Commission on July 15, 2019.
- (3) The price of the Ordinary Shares underlying the warrants and the restricted stock units registered under this Registration Statement is estimated pursuant to Rule 457(c) and 457(h) under the Securities Act of 1933, as amended (the "Securities Act"), solely for the purpose of computing the registration fee, based on the average of the high and low sales prices of the Ordinary Shares listed on Nasdaq Copenhagen on February 24, 2022 and on the exchange rate of DKK 6.67 per \$1.00 as published by Danmarks Nationalbank on February 24, 2022.