

To the Shareholders of Genmab A/S

Genmab A/S
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CVR no. 2102 3884

March 8, 2018

ANNUAL GENERAL MEETING

Genmab A/S (in the following the "Company") hereby invites its shareholders to attend the Annual General Meeting on

Tuesday April 10, 2018 at 2:00 PM CEST

at Copenhagen Marriott Hotel, Kalvebod Brygge 5, DK-1560 Copenhagen V, Denmark.

Agenda:

1. Report by the Board of Directors on the Company's activities during the past year.
2. Presentation and adoption of the audited Annual Report 2017 and resolution to discharge the Board of Directors and the Executive Management from liability.
3. Resolution on the distribution of profits as recorded in the adopted Annual Report.
4. Election of members of the Board of Directors.
5. Election of auditor.
6. Proposals from the Board of Directors:
 - (a) Amendment of the Remuneration Principles for the Board of Directors and the Executive Management.
 - (b) Approval of remuneration to the Board of Directors for 2018.
 - (c) Amendment of Article 4A of the Company's Articles of Association on authorization to issue shares.
 - (d) Amendment of Article 8 of the Company's Articles of Association on the language of the notice calling the general meeting as well as other documents prepared for and in connection with the general meeting.
 - (e) Amendment of Article 12 of the Company's Articles of Association on retirement age for the members of the Board of Directors.
7. Authorization of the chairman of the General Meeting.

8. Any other business.

Complete Proposals

Re item 1 on the agenda:

It is proposed to take note of the report of the Board of Directors.

Re item 2 on the agenda:

It is proposed to adopt the audited Annual Report 2017 and to grant discharge to the Board of Directors and the Executive Management.

Re item 3 on the agenda:

It is proposed that the profit of DKK 1,236 million for the accounting year 2017 be carried forward by transfer to the accumulated deficit.

Re item 4 on the agenda:

Pursuant to Article 12 of the Company's Articles of Association, the members of the Board of Directors are elected for periods of one year. The election period for Mats Pettersson, Dr. Anders Gersel Pedersen, Deirdre P. Connelly, Pernille Erenbjerg, Rolf Hoffmann and Dr. Paolo Paoletti expires at this General Meeting. The Board of Directors proposes to re-elect Mats Pettersson, Dr. Anders Gersel Pedersen, Deirdre P. Connelly, Pernille Erenbjerg, Rolf Hoffmann and Dr. Paolo Paoletti for a one-year period.

About Mats Pettersson, B.Sc.

Swedish, 72, Male

Board Chairman (Independent, elected by the General Meeting); Chairman of the Nominating and Corporate Governance Committee, Member of the Audit Committee and the Compensation Committee

First elected 2013, current term expires 2018

Special Competences

Extensive experience from international research-based biotech and pharmaceutical companies. Founder and CEO of SOBI AB. Responsible for several transforming Business Development deals and former member of various executive management committees at Pharmacia.

Current Board Positions

Member: Magle Chemoswed AB*

About Anders Gersel Pedersen, M.D., Ph.D.

Danish, 66, Male

Deputy Chairman (Non-independent, elected by the General Meeting); Chairman of the Compensation Committee, Member of the Scientific Committee

First elected 2003, current term expires 2018

Special Competences

Business and management experience in the pharmaceutical industry, including expertise in clinical research, development, regulatory affairs and product life cycle management.

Current Position, Including Managerial Positions

Executive Vice President, Research & Development at H. Lundbeck A/S

Current Board Positions

Member: ALK-Abelló A/S (retiring March 12, 2018)

Deputy Chairman: Bavarian Nordic A/S

About Deirdre P. Connelly

American, 57, Female

Board member (Independent, elected by the General Meeting); Member of the Audit Committee and the Nominating and Corporate Governance Committee.

First elected 2017, current term expires 2018

Special Competencies

More than 30 years' experience as a corporate leader and extensive experience in corporate governance as a board member. Comprehensive experience with business turnaround, corporate culture transformation, product launch, and talent development. Successfully directed the launch of more than 20 new pharmaceutical drugs. Former President, North America Pharmaceuticals for GlaxoSmithKline.

Current Board Positions

Member: Macy's Inc. and Lincoln National Corporation

About Pernille Erenbjerg

Danish, 50, Female

Board member (Independent, elected by the General Meeting); Chairman of the Audit Committee, Member of the Nominating and Corporate Governance Committee

First elected 2015, current term expires 2018

Special Competences

Senior executive management and broad business experience from the telecoms industry. Comprehensive all round background within finance including extensive exposure to stock markets, equity and debt investors. Certified Public Accountant background. Responsible for major transformation processes in complex organizations including M&A. Due to her experience and background within accounting, Pernille Erenbjerg is designated as audit committee financial expert.

Current Position, Including Managerial Positions

Group CEO and President of TDC A/S

Current Board Positions

Vice Chairman: DFDS A/S (retiring March 19, 2018)

Member: Nordea Bank AB

Audit Committee Chairman: DFDS A/S (retiring March 19, 2018)

Audit Committee Member: Nordea Bank AB

About Rolf Hoffmann

German, 58, Male

Board member (Independent, elected by the General Meeting); Member of the Scientific Committee and the Compensation Committee

First elected 2017, current term expires 2018

Special Competencies

Extensive international management experience with expertise in creating and optimizing commercial opportunities in global markets. Additional expertise in

P&L management, governance and corporate integrity agreement management, compliance and organizational efficiency. Over 20 years' experience in the international pharmaceutical and biotechnology industries at Eli Lilly and Company and Amgen, Inc.

Current Position, including Managerial Positions

Adjunct Professor of Strategy and Entrepreneurship at the University of North Carolina Business School

Current Board Positions

Chairman: Biotest AG

Member: Trigemina, Inc.*, Shield Therapeutics PLC and EUSA Pharma, Inc.*

About Paolo Paoletti, M.D.

Italian (USA citizenship), 67, Male

Board member (Independent, elected by the General Meeting); Chairman of the Scientific Committee

First elected 2015, current term expires 2018

Special Competences

Extensive experience in research, development and commercialization in the pharmaceutical industry. Successfully conducted submissions and approvals of new cancer drugs and new indications in the USA and in Europe. Responsible for seven new medicines for cancer patients during his 10 years at GlaxoSmithKline and one new cancer medicine during his time at Eli Lilly.

Current Position, Including Managerial Positions

CEO at GammaDelta Therapeutics Limited*

Current Board Positions

Chairman: PsiOxus Therapeutics Limited*

Member: FORMA Therapeutics, Inc.*

Companies marked with an asterisk (*) are non-public companies.

Re item 5 on the agenda:

The Board of Directors proposes re-election of PricewaterhouseCoopers, Statsautoriseret Revisionspartnerselskab as the Company's elected auditor in accordance with the Audit Committee's recommendation. The Audit Committee has not been influenced by third parties and has not been subject to any agreement with third parties, which limits the General Meeting's choice to certain auditors or audit firms.

Re item 6 (a) on the agenda:

The Board of Directors proposes to amend the Company's remuneration principles for the Board of Directors and the Executive Management including the general guidelines for incentive-based remuneration (the "Remuneration Principles") so that each member of the Executive Management shall be required to hold a number of Genmab A/S shares corresponding to the value of such member's annual base salary. The number of shares shall be finally fixed at commencement of the employment as, or promotion to, member of the Executive Management and may be built up over a five (5) year period from the date of employment or promotion. Notwithstanding the foregoing, for the current members of the executive management, the number of shares is finally fixed at

the date of adoption of these Remuneration Principles. The board of directors may diverge from this shareholding requirement.

It is further proposed to amend the Remuneration Principles so that the Company shall be entitled to reclaim in full or in part, on the basis of generally applicable principles of Danish law, variable components of remuneration that were paid to the members of the Executive Management on the basis of data, which proved to be misstated.

It is moreover proposed to amend the Remuneration Principles so that warrants granted to the members of the Executive Management will be subject to an additional two (2) year lock-in period upon vesting.

Re item 6 (b) on the agenda:

The Board of Directors proposes that the fees for members of the Board of Directors, including the committees thereof, in 2018 shall remain unchanged at the same level as in 2017:

- The annual base fee for members of the Board of Directors shall be DKK 400,000
- The chairman of the Board of Directors shall receive three times the annual base fee
- The deputy chairman of the Board of Directors shall receive two times the annual base fee
- The Audit Committee chairman shall receive an annual fee of DKK 150,000 and the Audit Committee members an annual fee of DKK 100,000
- The Compensation Committee chairman shall receive an annual fee of DKK 120,000 and the Compensation Committee members an annual fee of DKK 80,000
- The Nominating and Corporate Governance Committee chairman shall receive an annual fee of DKK 100,000 and the Nominating and Corporate Governance Committee members an annual fee of DKK 70,000
- The Scientific Committee chairman shall receive an annual fee of DKK 130,000 and the Scientific Committee members an annual fee of DKK 100,000
- All committee members shall receive a fee of DKK 10,000 per committee meeting

Members of the Board of Directors will furthermore receive share-based instruments in the form of restricted stock units within the scope described and adopted in the Company's Remuneration Principles.

Re item 6 (c) on the agenda:

The Board of Directors proposes to extend and adjust the Board of Directors' authorization in Article 4A of the Articles of Association to issue new shares, so that the authorization is lowered from nominally DKK 10,400,000 shares to nominally DKK 7,500,000 shares, with and without preemption right for the existing shareholders, respectively, and so that the authorization is prolonged to

five (5) years from this General Meeting. Article 4A has furthermore been subject to minor editorial changes.

The proposal serves to ensure that the Board of Directors is able to use share issues in connection with the entering into of partner deals, M&A activities and in order to raise new capital to ensure the continued development and growth of the Company.

Following adoption of this proposal, the amended Article 4A will have the following wording:

"§ 4A

The Board of Directors is until April 10, 2023 authorized to increase the nominal registered share capital on one or more occasions without pre-emption rights for the existing shareholders by up to nominally DKK 7,500,000 by subscription of new shares that shall have the same rights as the existing shares of the Company. The capital increase can be made by cash or by non-cash payment. Within the authorization to increase the share capital by nominally DKK 7,500,000 shares, the Board of Directors may on one or more occasions and without pre-emption rights for the existing shareholders of the Company issue up to nominally DKK 2,000,000 shares to employees of the Company and the Company's directly and indirectly owned subsidiaries by cash payment at market price or at a discount price as well as by the issue of bonus shares. No transferability restrictions or redemption obligations shall apply to the new shares. The shares shall be negotiable instruments, issued in the name of the holder and registered in the name of the holder in the Company's Register of Shareholders. The new shares shall give right to dividends and other rights as determined by the Board in its resolution to increase the capital.

Further, the Board of Directors is until April 10, 2023 authorized to increase the nominal registered share capital on one or more occasions with pre-emption rights for the existing shareholders by up to nominally DKK 7,500,000 by subscription of new shares that shall have the same rights as the existing shares of the Company. The capital increase can be made by cash or by non-cash payment. No transferability restrictions or redemption obligations shall apply to the new shares. The shares shall be negotiable instruments, issued in the name of the holder and registered in the name of the holder in the Company's Register of Shareholders. The new shares shall give right to dividends and other rights as determined by the Board in its resolution to increase the capital.

In connection with the exercise of these authorizations, the Board of Directors may, however, not increase the nominal registered share capital by more than a total of DKK 7,500,000."

Re item 6 (d) on the agenda:

The Board of Directors proposes to amend Article 8 of the Company's Articles of Association, so that the notice calling the general meeting as well as other documents prepared for and in connection with the general meeting shall be prepared in English and, if decided by the Board of Directors, also in Danish.

Following adoption of this proposal, the amended Article 8 will have the following wording:

" § 8

The Company's General Meetings shall be held in the municipality of Copenhagen or in the greater Copenhagen area.

Annual General Meetings shall be held each year not later than four (4) months after the end of the financial year.

Extraordinary General Meetings shall be held when resolved by the Board of Directors or one of the Company's auditors appointed by the General Meeting, or when the Board of Directors is so requisitioned in writing and by shareholders holding not less than one-twentieth of the Company's share capital who wishes to have a specific subject discussed on the General Meeting. When so requisitioned the Board of Directors shall within two (2) weeks convene an extraordinary General Meeting by giving the shortest possible notice.

The Board of Directors shall call the General Meeting with no less than three (3) weeks' notice and not more than five (5) weeks' notice by notification to Nasdaq Copenhagen and by posting on the Company's website (www.genmab.com). The length of the notice shall be reckoned from the first advertisement. General meetings shall moreover be convened by sending a notice to all shareholders entered in the Company's Register of Shareholders having so requested, to the address, including the e-mail address, cf. § 16, indicated to the Company. The notice calling the general meeting as well as other documents prepared for and in connection with the general meeting shall be prepared in English and, if decided by the Board of Directors, also in Danish.

In order to be transacted at the Annual General Meeting, resolutions proposed by the shareholders shall be submitted in writing to the Board of Directors no less than six (6) weeks prior to the date of the Annual General Meeting."

Re item 6 (e) on the agenda:

The Board of Directors proposes that Article 12 of the Company's Articles of Association be amended so that the retirement age for the members of the Board of Directors is removed. Article 12 has furthermore been subject to minor editorial changes.

The proposed amendment is motivated by the deletion of the retirement age for members of the board of directors in the updated Danish Recommendations on Corporate Governance effective January 1, 2018 and is a measure to prevent discrimination on the grounds of age.

Following adoption of this proposal, the amended Article 12 will have the following wording:

"§ 12

The Board of Directors is elected partly by the General Meeting and partly by the employees of the Company and its directly and indirectly owned subsidiaries and branch offices from time to time, regardless of whether their place of residence is within or outside the EU/EEA.

The General Meeting elects between three (3) and nine (9) members of the Board of Directors for a period which expires at the Annual General Meeting in the Company in the first year after the year of their election.

Provided the Company and its directly and indirectly owned subsidiaries and branch offices residing in Denmark, if any, together during the last three (3) years before an ordinary election have employed at least 35 employees on average the employees of the Company and its directly and indirectly owned subsidiaries and branch offices from time to time, regardless of whether their place of residence is within or outside the EU/EEA, have the right to elect a number of members of the Board of Directors equal to half of the members of the Board of Directors elected by the General Meeting as well as alternate members. If the condition of employment of at least 35 employees on average during the last three (3) years is not met prior to an ordinary election by the employees of members of the Board of Directors and alternate members, the right for the employees to elect members of the Board of Directors and alternate members according to these Articles shall cease for the period thereafter. An ordinary election by the employees of members of the Board of Directors and alternate members shall occur every third year. Re-election can occur. The election is being held as a direct election in accordance with an election regulation approved by the Board of Directors.

If the employees of the Company or the Company's directly and indirectly owned subsidiaries exercise their right to elect company representatives and/or group representatives to the Board of Directors in accordance with the Companies Act, the right for the group employees to elect employee representatives in accordance with these articles shall no longer apply. Employee representatives already elected in accordance with these articles shall resign simultaneously with the commencement of the employee representatives elected in accordance with the Companies Act.

The Board of Directors shall elect one of its members as chairman of the Board.

The specific rules governing the activities of the Board of Directors shall be laid down in rules of procedure drawn up by the Board.

The Board of Directors shall form a quorum when more than half of its members are represented.

The business of the Board of Directors shall be resolved upon by a simple majority of votes.

The Board of Directors shall receive an annual remuneration the size of which shall be stated in the Annual Report."

Re item 7 on the agenda:

The Board of Directors proposes that the chairman of the General Meeting is authorized to register the resolutions passed by the General Meeting with the Danish Business Authority and to make such amendments and additions thereto or therein, including the Articles of Association of the Company, as the Danish Business Authority may require for registration.

The proposals under item 6 (c) and 6 (e) of the agenda to amend the Articles of Association are required to be adopted by an affirmative vote of not less than 2/3 of the votes cast as well as of the voting share capital represented at the General Meeting. The proposals under the remaining items of the agenda require a simple majority of votes.

The Company's share capital amounts to DKK 61,251,093 divided into shares of DKK 1 each or any multiple hereof. Each share amount of DKK 1 shall entitle the shareholder to one vote.

Pursuant to Section 99 of the Danish Companies Act, the following documents will be published on the Company's website (www.genmab.com) no later than March 19, 2018: (1) the notice of the Annual General Meeting, (2) information on the total number of shares and votes issued by the Company on the date of the notice, (3) the agenda, (4) the complete proposals to be presented at the Annual General Meeting, (5) the Remuneration Principles, (6) the Annual Report for 2017 and (7) forms needed to register for the Annual General Meeting and possible proxy voting and post voting.

Registration Date: A shareholder's right to participate in and vote at the Annual General Meeting is determined in proportion to the number of shares the shareholder owns on the registration date Tuesday April 3, 2018.

Admission card: Admission cards may be requested no later than Friday April 6, 2018 by:

- Visiting the Company's website www.genmab.com or VP Investor Services A/S' website www.uk.vp.dk/agm no later than 11:59 PM CEST to register electronically; or
- Returning the enclosed registration form – duly completed and signed – to VP Investor Services A/S, Weidekampsgade 14, DK-2300 Copenhagen S, Denmark by post or by fax to +45 43 58 88 67 no later than 11:59 PM CEST; or
- Contacting Genmab A/S, Investor Relations, Kalvebod Brygge 43, DK-1560 Copenhagen V, Denmark either in person or in writing no later than 10:00 AM CEST; or
- Contacting VP Investor Services A/S telephonically at +45 43 58 88 66 no later than 10:00 AM CEST.

Proxy vote: Shareholders who do not expect to be able to participate in the General Meeting may:

- Assign a proxy to a person appointed by the shareholder. Proxies shall submit a request for an admission card as described above; or
- Assign a proxy to the Board of Directors. In this case your votes will be cast in accordance with the recommendations of the Board of Directors; or
- Assign a proxy to the Board of Directors by indicating how you wish your votes to be cast.

Go to the Company's website www.genmab.com or VP Investor Services A/S' website www.uk.vp.dk/agm to assign a proxy to the Board of Directors to vote in

accordance with its recommendations, or assign a proxy indicating how you wish your votes to be cast by checking the boxes on the electronic proxy form. This must be done by 11:59 PM CEST on Friday April 6, 2018. You may complete and sign the enclosed proxy form and return it by post to VP Investor Services A/S, Weidekampsgade 14, DK-2300 Copenhagen S, Denmark, or scan it and return it by e-mail to vpinvestor@vp.dk or by fax to +45 43 58 88 67 so that it is received by VP Investor Services A/S by 11:59 PM CEST on Friday April 6, 2018.

Postal vote: Shareholders who do not expect to be able to participate in the General Meeting may also vote by post:

Go to the Company's website www.genmab.com or www.uk.vp.dk/agm to vote by post. This must be done by 10:00 AM CEST on Monday April 9, 2018. You may complete and sign the enclosed postal voting form and return it by post to VP Investor Services A/S, Weidekampsgade 14, DK-2300 Copenhagen S, Denmark, or scan it and return it by e-mail to vpinvestor@vp.dk or by fax to +45 43 58 88 67 so that it is received by VP Investor Services A/S by 10:00 AM CEST on Monday April 9, 2018.

Please note that you may *either* assign a proxy *or* vote by post, but not both.

Any shareholder, to whom an admission card already has been issued, but who is prevented from attending the Annual General Meeting is kindly asked to notify the Company - preferably before Friday April 6, 2018.

Right to ask questions: Prior to the General Meeting, the shareholders may ask the Company's management in writing about matters of importance to the evaluation of the Annual Report 2017, the Company's position or any of the other matters which are to be transacted at the General Meeting, or the Company's relation to other companies in the Genmab Group. Shareholders' questions must be sent by letter to Rachel Curtis Gravesen, Senior Vice President, Investor Relations & Communications or by e-mail to rcg@genmab.com. The question may be answered in writing by e.g. making the answer available on the Company's website (www.genmab.com). The question may be neglected if the shareholder asking the question is not represented at the General Meeting. At the General Meeting, the shareholders may also ask the Company's management about the above matters and may ask questions regarding the Annual Report 2017 to the auditor appointed by the General Meeting.

Copenhagen, March 8, 2018
On behalf of the Board of Directors


MATS PETTERSSON
Chairman



Scan the QR code with your smartphone or tablet to go to the registration site.