Annual General Meeting

Copenhagen, Denmark

March 28, 2017

Genmab

Welcome

Mats Pettersson
Chairman of the Board

Genmab

Chairman of the AGM

Jørgen Kjergaard Madsen

Genmab

Agenda

Agenda Item	Speaker
1. Report by the Board of Directors on the Company's activities during the past year	Mats Pettersson, *Chairman of the Board,* Jan van de Winkel, *CEO*
2. Presentation and adoption of the audited Annual Report 2016 and resolution to discharge the Board of Directors and the Executive Management from liability	David Eatwell, *CFO,* Jørgen Kjergaard Madsen, *Chairman of the AGM*
3. Resolution on the distribution of profits as recorded in the adopted Annual Report	Jørgen Kjergaard Madsen, *Chairman of the AGM*
4. Election of the Board of Directors	Mats Pettersson, Jørgen Kjergaard Madsen
5. Election of Auditors	Jørgen Kjergaard Madsen
6. Proposals from the Board of Directors	Jørgen Kjergaard Madsen
7. Authorization of the Chairman of the AGM	Jørgen Kjergaard Madsen
8. Any other business	Jørgen Kjergaard Madsen, Mats Pettersson, Jan van de Winkel, David Eatwell

Introduction

Mats Pettersson
Chairman of the Board

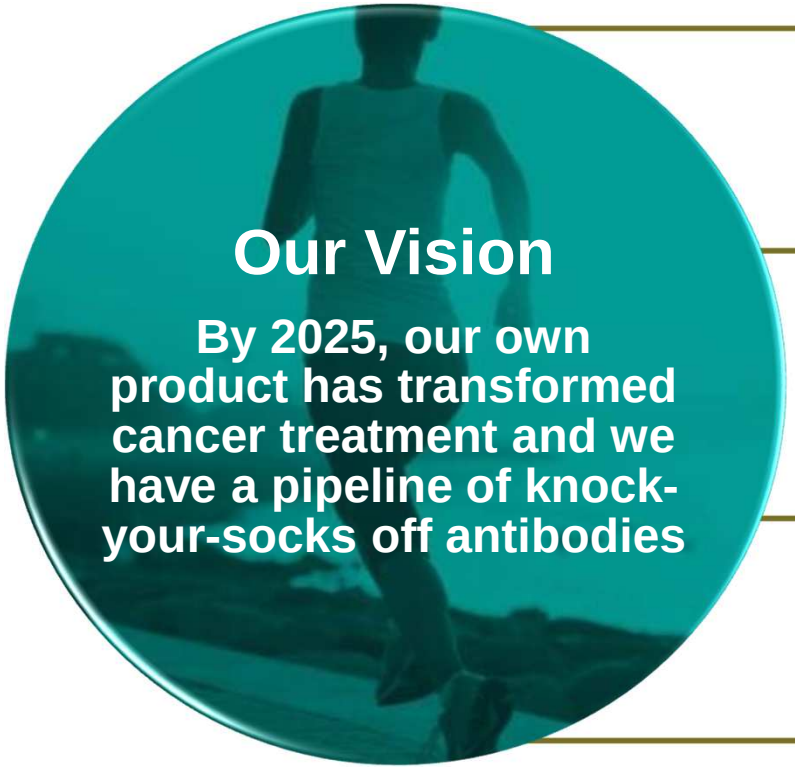
Genmab

Forward Looking Statement

This presentation contains forward looking statements. The words “believe”, “expect”, “anticipate”, “intend” and “plan” and similar expressions identify forward looking statements. All statements other than statements of historical facts included in this presentation, including, without limitation, those regarding our financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to our products), are forward looking statements. Such forward looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we will operate in the future. The important factors that could cause our actual results, performance or achievements to differ materially from those in the forward looking statements include, among others, risks associated with product discovery and development, uncertainties related to the outcome of clinical trials, slower than expected rates of patient recruitment, unforeseen safety issues resulting from the administration of our products in patients, uncertainties related to product manufacturing, the lack of market acceptance of our products, our inability to manage growth, the competitive environment in relation to our business area and markets, our inability to attract and retain suitably qualified personnel, the unenforceability or lack of protection of our patents and proprietary rights, our relationships with affiliated entities, changes and developments in technology which may render our products obsolete, and other factors. Further, certain forward looking statements are based upon assumptions of future events which may not prove to be accurate. The forward looking statements in this document speak only as at the date of this presentation.

Our Core Purpose

Genmab At-A-Glance



Our Vision

By 2025, our own product has transformed cancer treatment and we have a pipeline of knock-your-socks off antibodies

2 marketed products generating royalty income

2 exciting proprietary clinical programs

2 proprietary next generation technologies for robust pre-clinical pipeline

Solid Financial Base

Key Achievements 2016

DARZALEX® (daratumumab)

- EU conditional marketing authorization in double-refractory MM
- Positive Phase III data in relapsed/refractory MM
- Received 2nd Breakthrough Therapy Designation
- US approval in relapsed/refractory MM in combination w/other therapies – EU submission under review
- Regulatory filing in Japan for relapsed/refractory MM
- USD 160M in milestones under Janssen collaboration
- USD 572M net sales by Janssen
  - Resulting in DKK 458M in royalties from Janssen

Arzerra® (ofatumumab)

- Phase III studies in relapsing MS started by Novartis
- Label expanded in US & EU for ofatumumab plus fludarabine and cyclophosphamide in relapsed CLL
- US approval in maintenance CLL

Other Key Highlights

- DuoBody commercial agreement with Gilead Sciences
- 2 DuoBody® programs in clinical development by Janssen
- First study of HuMax®-AXL-ADC started
- Improved revenue by DKK 683M vs 2015

Teamwork is Vital to Success

Our Strong Pipeline Will Create Future Success

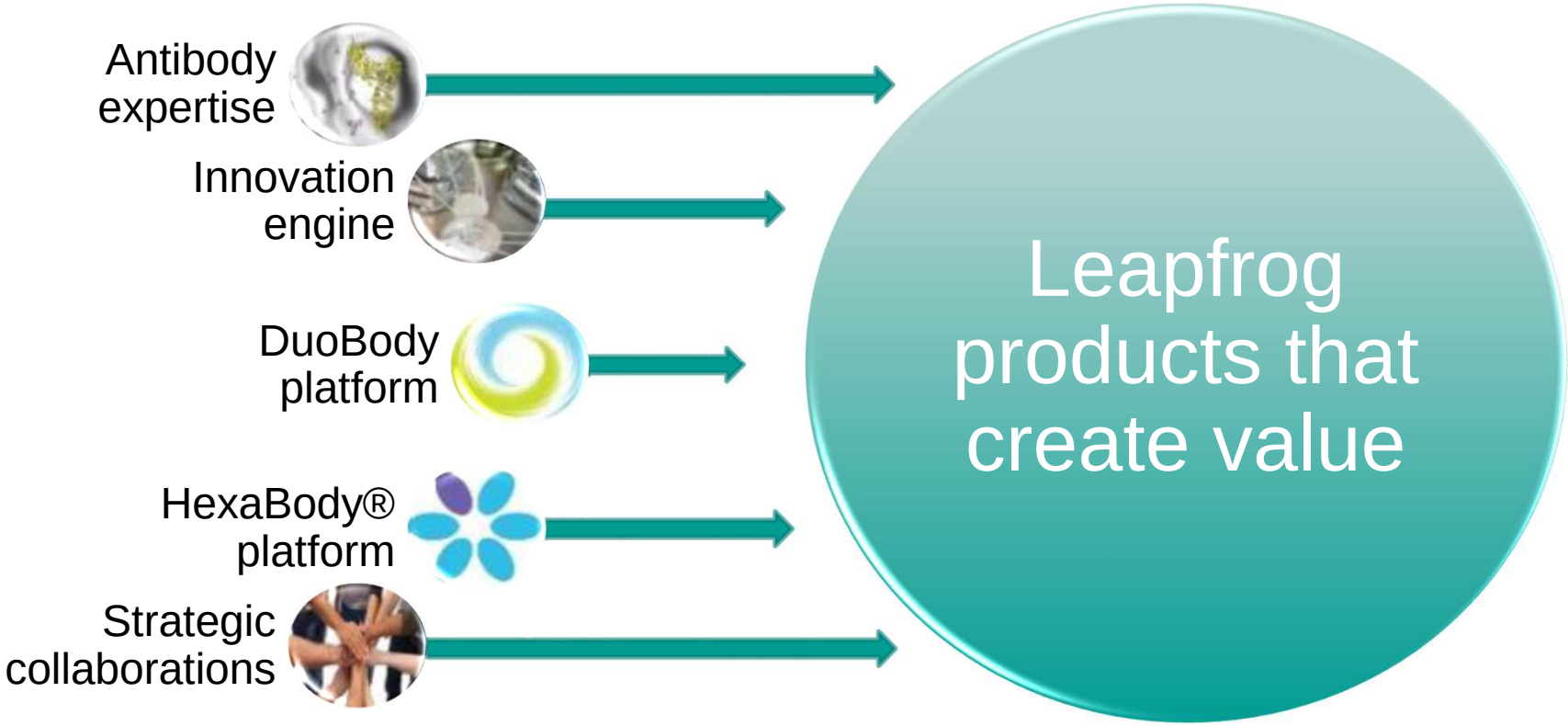
Jan van de Winkel, PhD

President & Chief Executive Officer

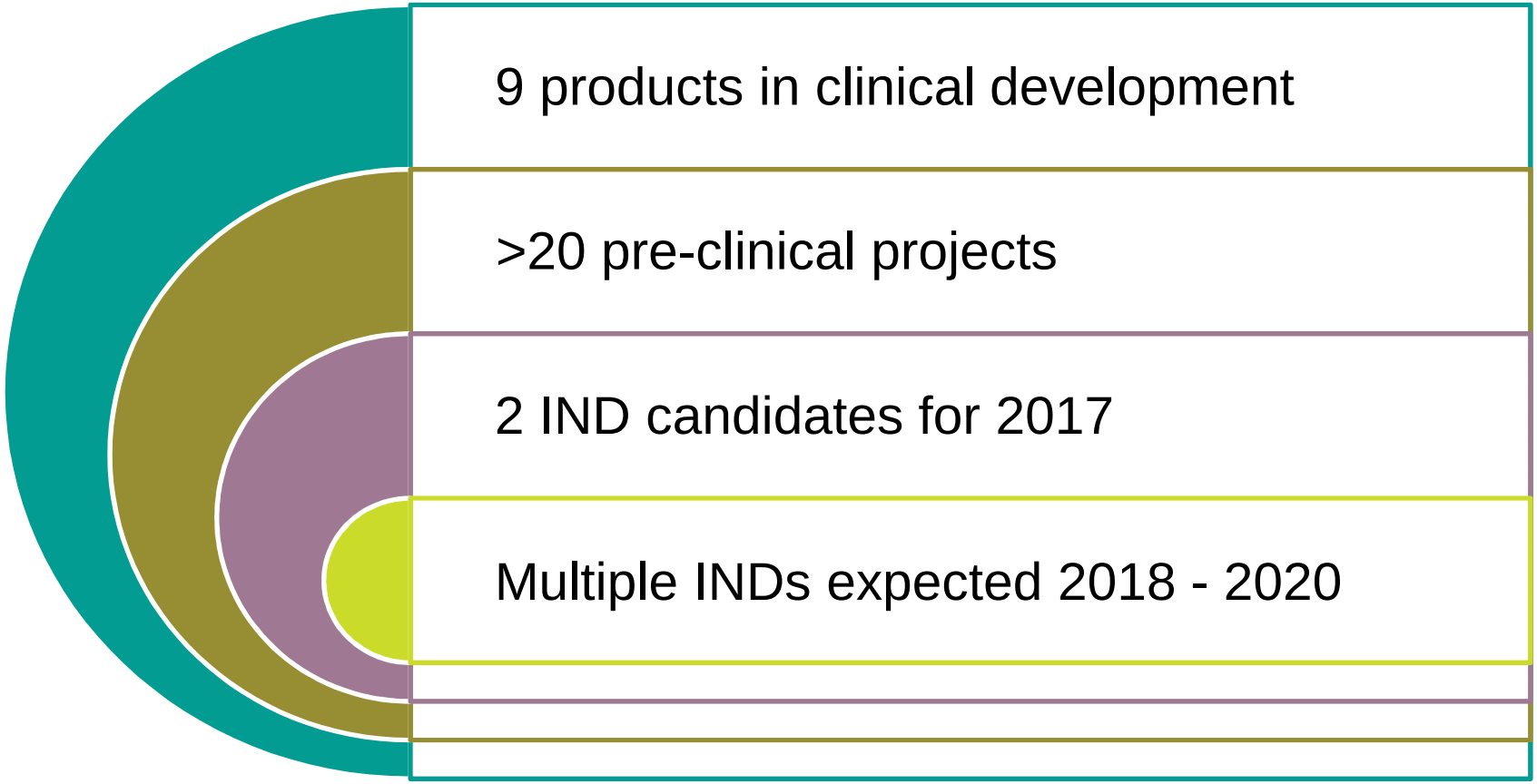
Genmab

Antibody Innovation Powerhouse

Creating Value for Stakeholders



Exciting Pipeline - The Value of the Future



Daratumumab (DARZALEX®)

- First-in-class antibody targeting CD38
- Marketed as monotherapy in US and EU for double refractory MM
- Approved in US in combination with Revlimid® & dex or Velcade® & dex for relapsed / refractory MM
- 2 FDA Breakthrough Therapy Designations
- Clinical studies ongoing or announced in MM, NHL, NKT-cell lymphoma, MDS, and solid tumors
- Blockbuster potential
- Collaboration with Janssen Biotech

DARZALEX Development Continues

Key studies ongoing in MM

- Smoldering MM
- Front line MM in combination with other drugs
- Relapsed or refractory MM in combination with other novel drugs
- Subcutaneous formulation

Potential in other hematological cancers

- Mantle cell lymphoma
- Acute myeloid leukemia
- Acute lymphoblastic leukemia
- Myelodysplastic syndrome
- Waldenstrom's macroglobulinemia
- NKT-cell lymphomas

Potential in solid tumors

- NSCLC
- Colon cancer
- Head & neck cancer
- Pancreatic cancer
- Triple negative breast cancer
- Virus associated cancers

Ofatumumab (Arzerra®)

- Human antibody targeting CD20
- Two Phase III studies in relapsing MS started
- Potential MS Advantages: Dosing
  Better disease management, subcutaneous dosing
- Potential MS Advantages: Attributes
  Low immunogenicity, manageable safety profile in Phase I/II studies
- Marketed in various territories for certain CLL indications*
- Collaboration with Novartis
  Cash flow positive for Genmab

*See local country prescribing information for precise indications

Subcutaneous Ofatumumab Development in MS

2 Phase III studies in relapsing MS comparing subcutaneous ofatumumab to teriflunomide

- 900 patients per study
- Expect studies to be completed in 2019
- If data is positive, Novartis plans regulatory filings in 2019

Potential to become best-in-class anti-B-cell therapy for MS

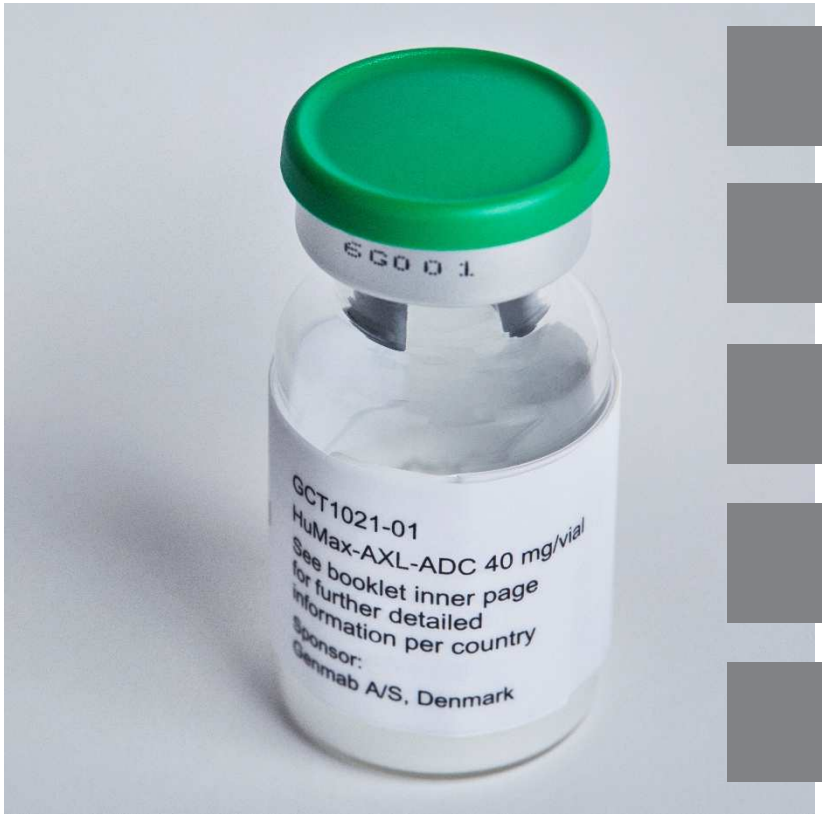
- Better disease management
- Manageable safety profile in Phase I/II studies and low immunogenicity
- Subcutaneous dosing
- Significant market potential

Tisotumab vedotin

- Fully human antibody-drug conjugate (ADC)
- Targets Tissue Factor (TF)
- Therapeutic potential in broad range of solid tumors
- 2 Phase I/II studies ongoing in seven solid tumors
- Encouraging preliminary safety & efficacy data
- ADC technology licensed from Seattle Genetics*

*Seattle Genetics holds option to co-own program [following Phase I/II clinical evaluation]

Clinical Projects: HuMax-AXL-ADC

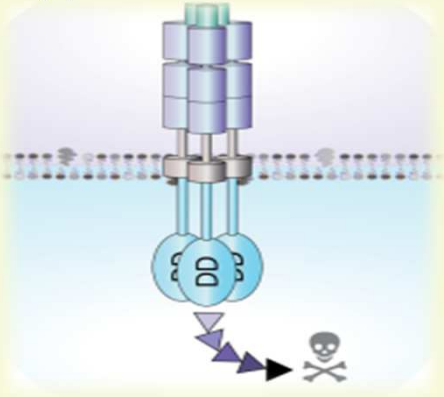


- Human ADC
- Targets the tumor-associated antigen AXL
- Therapeutic potential in solid tumors
- First-in-human Phase I/II study
- ADC technology licensed from Seattle Genetics

Next in the Clinic: 2017 IND Candidates

HexaBody-DR5/DR5

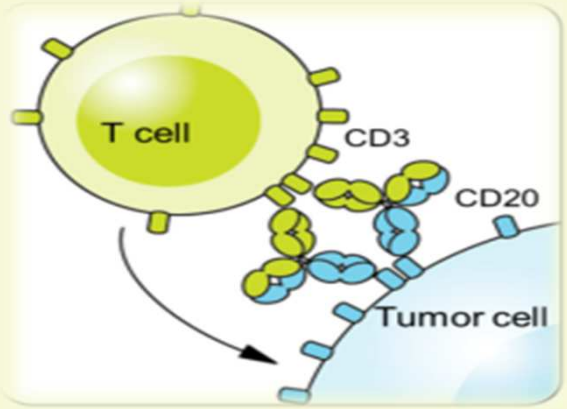
- Targets DR5 for Cancer Therapy
- Potentially effective in multiple tumor types



DR5 activation induces cell death

DuoBody-CD3xCD20

- Humanized bispecific antibody
- Activates T cells to kill $CD20^{+}$ tumor cells



Genmab Proprietary Innovative Pipeline

Potential INDs in next 4 years

Technology	product	2017	2018	2019	2020
HexaBody	HexaBody-DR5/DR5				
DuoBody	DuoBody-CD3xCD20				
HexaBody	HexaBody-X				
DuoBody-ADC	DuoBody-XxY-ADC				
DuoBody	DuoBody-CD3xX				
Immuno-Oncology [>10 progr.]*	DuoBody-A				
	DuoBody-B				
	DuoBody-C				
	DuoBody-D				
	DuoBody-E				

*: Aduro Biotech & BioNTech

Pre-clinical pipeline targeting at least 4 leapfrog INDs in next 4 years

Proprietary Technologies Fuel Differentiated Pipeline

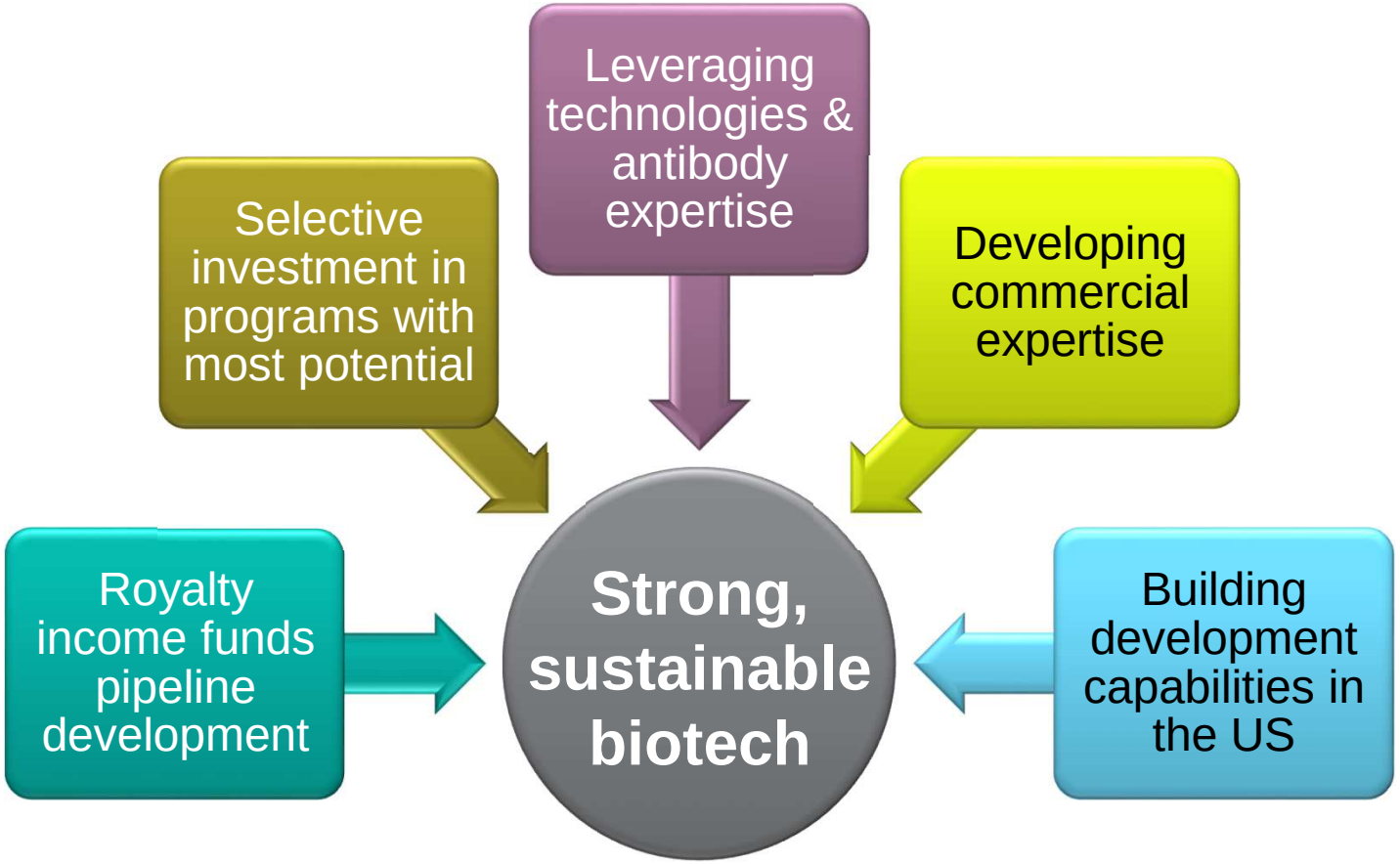
DuoBody

- Bispecific antibody platform
- Potential in cancer, autoimmune, infectious & central nervous system diseases
- New collaboration in 2016 with Gilead Sciences
- Multiple ongoing commercial collaborations
- First DuoBody products in clinical development under collaboration with Janssen

HexaBody

- Enhanced potency antibody technology platform
- Broadly applicable technology builds on natural antibody biology
- Creates innovative products in cancer & infectious diseases
- Multiple ongoing research collaborations

The Way Forward – Controlled Growth



2017 Goals: Maximizing Differentiated Product Portfolio Value

Priority	✓	Targeted Milestone
Maximize daratumumab progress		» EMA decision & launch in 2nd line+ in multiple myeloma (MM) relapsed / refractory setting » FDA decision in 3rd line MM setting (daratumumab + POM) » Phase III MM interim efficacy analysis in frontline (Alcyone trial) » Start Phase III subcutaneous trial » Start trials in solid tumors and non-MM blood cancers » Report non-MM clinical data
Optimize ofatumumab value		» Phase III refractory follicular lymphoma headline results
Strengthen differentiated product pipeline		» Phase I/II tisotumab vedotin data » Progress HuMax-AXL-ADC Phase I/II clinical trial » IND/CTA submission HexaBody-DR5/DR5 » IND/CTA submission DuoBody-CD3xCD20 » Progress pre-clinical pipeline
Broaden partnership portfolio with next generation technologies		» Enter new technology collaborations » Progress partnered programs
Disciplined financial management		» Execute controlled company growth with selective investments in product pipeline

Creating Value for Patients and Shareholders

Building on 3 central pillars: Focus, Innovation & Execution

- 2 marketed products
- 2 proprietary early stage clin. programs
- 2 proprietary technologies
- Robust pre-clinical pipeline
- Unique Antibody & R&D expertise
- Strategic collaborations
- Building commercial expertise
- Solid financials
- Proven track record

2016 Financial Results

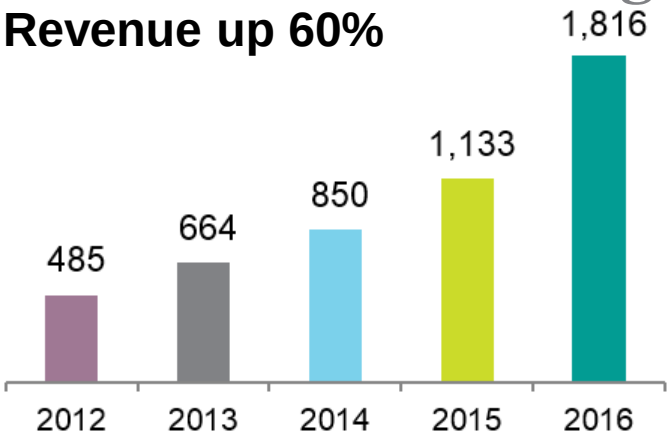
David A. Eatwell

EVP & Chief Financial Officer

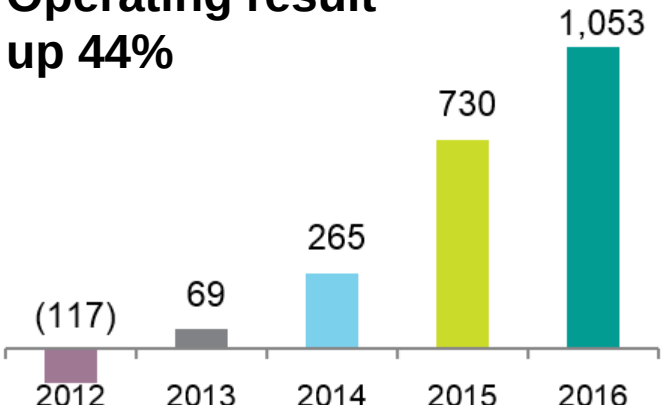
Genmab

2016: A Record Breaking Year

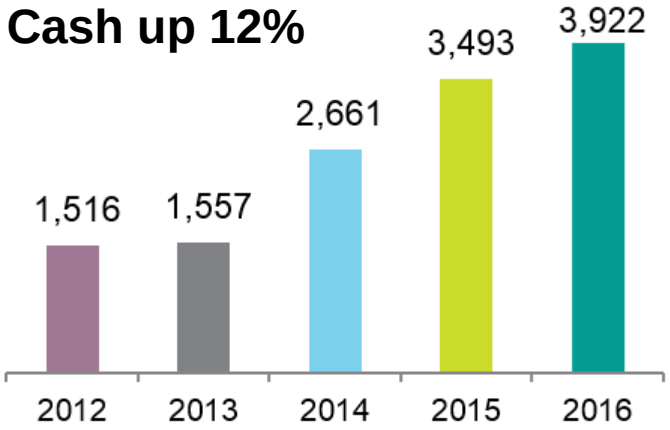
Revenue up 60%



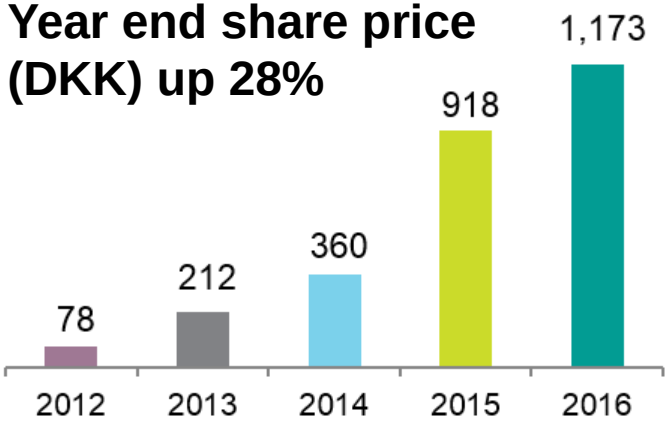
Operating result up 44%



Cash up 12%



Year end share price (DKK) up 28%



All amounts in DKK millions unless otherwise noted

Year Ended December 31 – Income Statement

Income Statement

	2016	2015	Change	
Royalties	521	92	429	
Milestones	1,187	706	481	
Other Revenue	108	335	(227)	
Total Revenue	1,816	1,133	683	⬆60%
R&D Costs	(661)	(488)	(173)	
G&A Expenses	(102)	(91)	(11)	
Operating Expenses	(763)	(579)	(184)	⬆32%
Other Income	-	176	(176)	
Operating Result	1,053	730	323	⬆44%
Net Financial Items	77	28	49	
Tax	57	6	51	
Net Result	1,187	764	423	

Royalty / Expense Ratio

2015 92 / 579 = 16%
2016 521 / 763 = 68%

Cash Position*

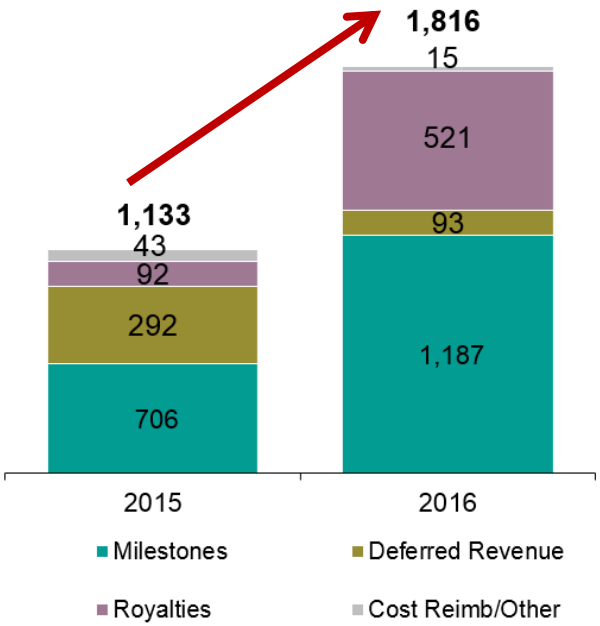
End 2015		3,493
Warrant exercise	209	
Treasury shares	(118)	
Other increase	338	
		429
End 2016		3,922

All amounts in DKK millions unless otherwise noted

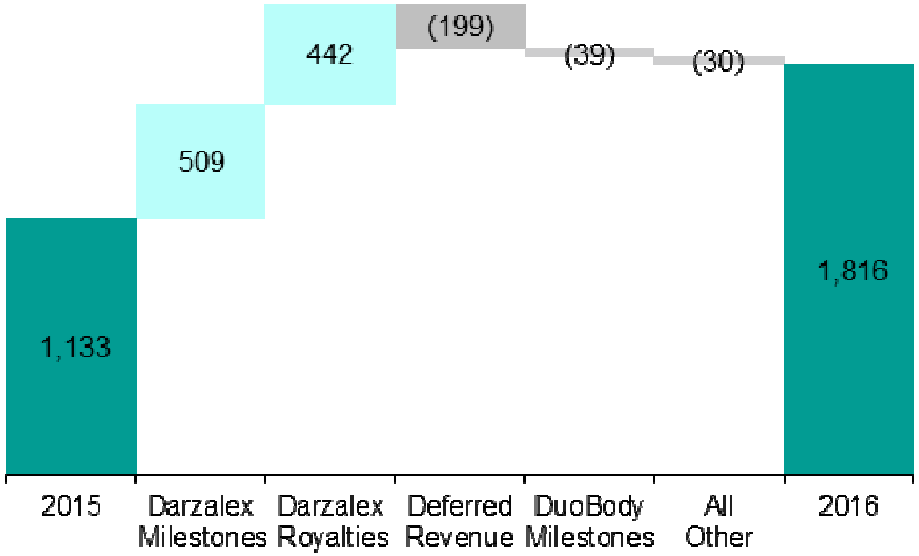
**Cash, cash equivalents, bank overdraft, and marketable securities*

Revenue Sources & Key Growth Drivers

Revenue up 60%



Growth driven by DARZALEX



DARZALEX 2016

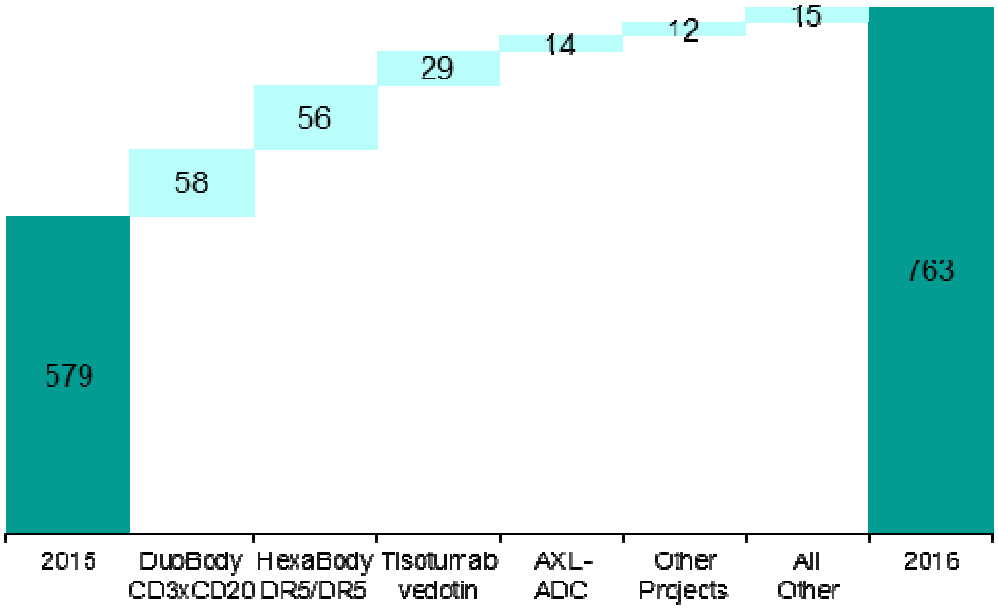
Janssen net sales USD 572M

Royalty to Genmab DKK 458M

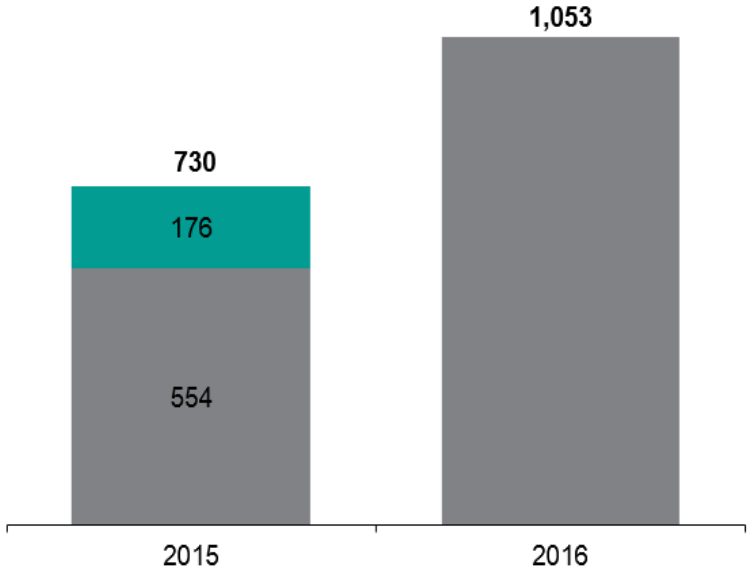
All amounts in DKK millions unless otherwise noted

Operating Result: Investing in our Pipeline

Operating Expenses increased 32% driven by pipeline investments



Revenue growth outpaces expense growth increasing Operating Income



All amounts in DKK millions unless otherwise noted

Overview - 2017 Guidance

DKK Millions	2017 Guidance	2016 Actual
Revenue	1,950 – 2,150	1,816
Operating expenses	(1,000) – (1,100)	(763)
Operating income	900 – 1,100	1,053
Cash position at end of year*	>4,500	3,922

**Cash, cash equivalents, bank overdraft, and marketable securities*

DARZALEX sales

- Genmab's estimate of DARZALEX net sales USD 1.1 to 1.3 billion
- Sales ~ double 2016 sales of USD 572 million

Revenue mid-point DKK 2,050M

- DARZALEX royalties DKK 1,000M
- DARZALEX milestones DKK 800M
- Quality of revenue improving
- Royalty income similar to total operating expenses

Overview - 2017 Guidance

DKK Millions	2017 Guidance	2016 Actual
Revenue	1,950 – 2,150	1,816
Operating expenses	(1,000) – (1,100)	(763)
Operating income	900 – 1,100	1,053
Cash position at end of year*	>4,500	3,922

**Cash, cash equivalents, bank overdraft, and marketable securities*

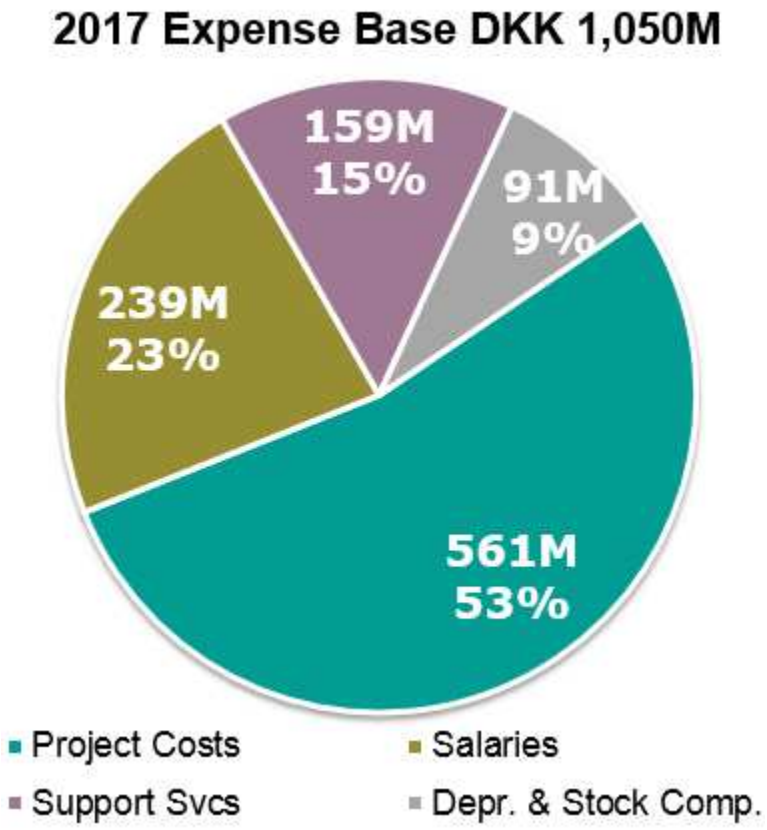
Expense mid-point DKK 1,050M

- Expense increase DKK 287M, +38%
- Continued investment in our clinical & pre-clinical pipeline
- 8 pipeline projects drive ~DKK 440M, 42% of total expense

Operating income mid-point DKK 1,000M

Cash position

- Greater than DKK 4,500M



All amounts in DKK millions unless otherwise noted

Approval of the Annual Report 2016 & Discharge of the Board of Directors and Executive Management

Jørgen Kjergaard Madsen
Chairman of the AGM

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Election of Board of Directors

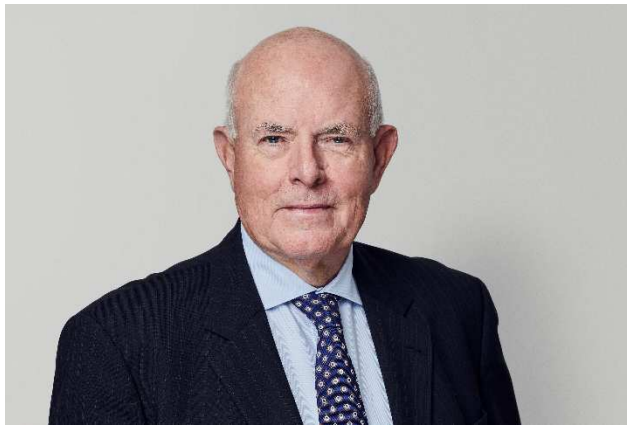
Mats Pettersson

Chairman of the Board

Genmab

Mats Pettersson

- Re-election for 1 year
- Genmab board member since 2013
- Chairman
  - Chairman of Nominating and Corporate Governance Committee, Member of Audit Committee and Compensation Committee
- Other board memberships: Magle Chemoswed AB



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

- Re-election for 1 year
- Genmab board member since 2003
- Deputy Chairman
  - Chairman of Compensation Committee and Member of Nominating and Corporate Governance Committee
- Executive Vice President, Research & Development at H. Lundbeck A/S
- Other board memberships: Bavarian Nordic A/S and ALK-Abelló A/S

Pernille Erenbjerg

- Re-election for 1 year
- Genmab board member since 2015
- Board member
  - Chairman of Audit Committee and member of Nominating & Corporate Governance Committee
- Group CEO and President of TDC A/S
- Other board memberships: DFDS A/S and Nordea Bank AB

Paolo Paoletti, M.D.

- Re-election for 1 year
- Genmab board member since 2015
- Board member
  - Member of Compensation Committee
- Acting CEO GammaDelta Therapeutics
- Other board memberships: PsiOxus Therapeutics Limited, FORMA Therapeutics and NuCana BioMed Limited

Rolf Hoffmann

- Election for 1 year
- Genmab board observer since August 2016
- Adjunct Professor of Strategy and Entrepreneurship at the University of North Carolina Business School
- Other board memberships: STADA Arzneimittel AG and Trigemina, Inc.

Deirdre P. Connelly

- Election for 1 year
- Former President, North America Pharmaceuticals for GlaxoSmithKline
- Other board memberships: Macy's Inc. and Lincoln National Corporation

Composition Board of Directors

- Mats Pettersson
- Anders Gersel Pedersen
- Pernille Erenbjerg
- Paolo Paoletti
- Rolf Hoffmann
- Deirdre P. Connelly
- Peter Storm Kristensen, *Employee elected Board Member*
- Rick Hibbert, *Employee elected Board Member*
- Daniel Bruno, *Employee elected Board Member*

Election of Board of Directors

Jørgen Kjergaard Madsen

Chairman of the AGM

Genmab

Election of Auditors

Genmab

Proposals from the Board of Directors

Jørgen Kjergaard Madsen

Chairman of the AGM

Genmab

Proposals from the Board of Directors

General Guidelines for Incentive-Based Remuneration

- Item 6 (a): Amendment of the general guidelines for incentive-based remuneration of the Board of Directors and the Executive Management
  - It is specified that a new member of Executive Management may receive a sign-on payment upon engagement subject to certain claw-back provisions
  - In exceptional cases, international, and in particular US based, members of Executive Management may on an annual basis be granted restricted stock units (RSUs) or a combination of RSUs and warrants corresponding to a value of up to 4 times annual base salary, not to exceed a value of DKK 25 million
    - If a combination of RSUs and warrants is granted, the proportional value of warrants may not exceed 50% of the total value
  - Maximum value of RSUs granted to a new member of the Board of Directors upon election may no longer exceed 4 times the fixed annual base fee
  - Maximum proportional value of RSUs granted to members of the Board of Directors annually is lowered
  - Vesting of RSUs and warrants granted to a member of the Executive Management may be subject to fulfilment of forward-looking performance criteria, whereas vesting of RSUs granted to a member of the Board of Directors may not be subject to fulfilment of forward-looking performance criteria
  - Warrants granted to Executive Management will vest three years after date of grant – same vesting schedule to be applied to the Company's warrant program

Proposals from the Board of Directors
Board Remuneration

- Item 6 (b): Approval of remuneration to the Board of Directors for 2017
  - Basic fee for members of the Board of Directors increased from DKK 375,000 to DKK 400,000; deputy chairman receives double and chairman receives triple
  - Supplemental fee for membership on Board committees increased from up to DKK 75,000 per membership to up to DKK 100,000 per membership
    - Committee Chairman receives up to DKK 150,000
  - Fee per committee meeting increased from DKK 9,000 to DKK 10,000
  - Board plans to establish Scientific Committee which will have remuneration within range of proposed fees
  - Board members will receive RSUs within scope described and adopted in the general guidelines for incentive-based remuneration

Proposals from the Board of Directors
Articles of Association

- Item 6 (c): Amendment of Article 5 of the Company's Articles of Association on authorization to issue warrants
  - Authorization to issue additional 500,000 warrants
  - Board of Directors no longer entitled to issue warrants to members of the Board of Directors and consultants
  - Board of Directors is entitled to issue warrants to, among others, employees in the Company's directly and indirectly owned subsidiaries

Proposals from the Board of Directors
Articles of Association

- Item 6 (d): Insertion of a new Article 17 in the Company's Articles of Association on language of company announcements
  - Board of Directors may decide whether company announcements shall be prepared in English only

Authorization of the Chairman of the AGM

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Any Other Business and Q&A

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Closing

Jørgen Kjergaard Madsen
Chairman of the AGM

Genmab