

### Better Antibodies By Design

Swiss Roadshow 14 – 15 May 2014





#### 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.



#### **Antibody Innovation Generating World Class Products**

- Focus on human antibodies to treat cancer
- Differentiated product pipeline
  - Arzerra® on the market for CLL with growing sales & two approved indications. Additional potential label expansions in the future
  - First-in-class daratumumab potential next to market
  - HuMax®-TF-ADC in Phase I
- Passion for innovation
  - Proprietary technologies DuoBody<sup>®</sup> & HexaBody<sup>™</sup>
  - Innovative pre-clinical pipeline
  - World class antibody know-how
- Collaborations with blue chip partners incl. GSK and Janssen
- Aim to build value by taking products further towards the market



#### **Innovative Pipeline**

		Development Phase					
Product	Disease Indications	Pre- clinical	1	I/II	II	III	IV
Ofatumumab 18 studies	Chronic lymphocytic leukemia (CLL)						
Target: CD20	Follicular lymphoma (FL)	[					
Partner: GSK	Diffuse large B-cell lymphoma (DLBCL)						
	Pemphigus vulgaris (PV)						
	Relapsing remitting multiple sclerosis (RRMS)						
	Waldenström's macroglobulinemia (WM)						
Daratumumab 7 studies Target: CD38 Partner: Janssen	Multiple myeloma (MM)						
<b>Teprotumumab</b> 2 studies Target: IGF-1R	Active thyroid eye disease						
Partner: River Vision	Diabetic macular edema						
HuMax-TF-ADC Target: TF Partner: Seattle Genetics	Solid cancers						
➤ 10 Active Pre-clinical Programs	HuMab, Enhanced HuMab, HuMab-ADC, DuoBody or DuoBody-ADC						4

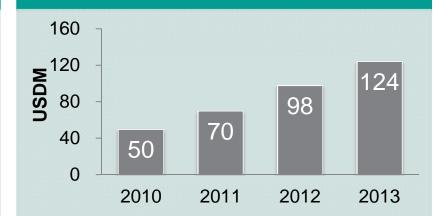


#### Arzerra® (ofatumumab)

#### **Our First Marketed Product**

- Fully human antibody targeting CD20 on cancerous B-cells
- Approved in US for frontline CLL in combo w/ chlorambucil, and in major territories for CLL pts that do not respond to current treatments (fludarabine & alemtuzumab)
- Application submitted for expanded label in 1<sup>st</sup> line CLL in EU
- 7 cancer pivotal trials ongoing
- Effectively engages immune system, binds to a unique epitope
- Differentiated to other CD20 mAbs, targets slice of > \$7 Bn market
- Potential in cancer & autoimmune diseases
- Collaboration with GSK

#### **Sales Growth by GSK**

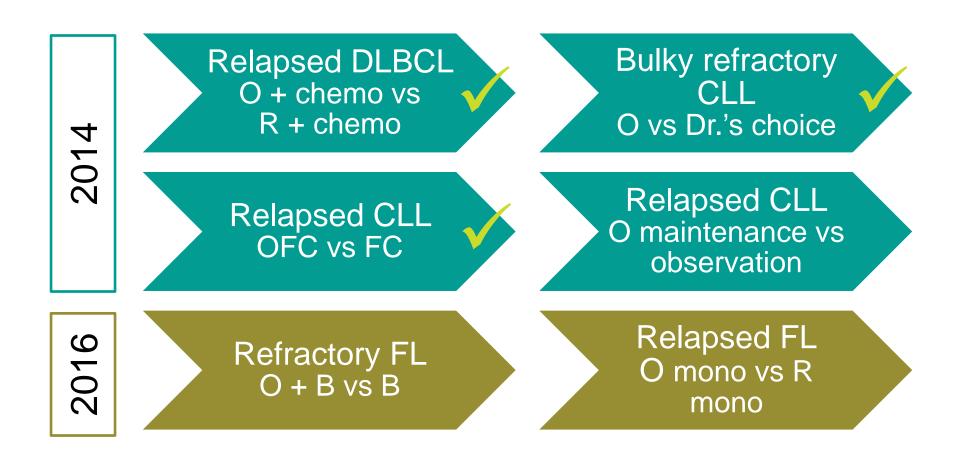


- 2013 sales GBP 74.9M (~\$124M); royalty DKK 131M
- Genmab Cancer Royalty = 20%





#### Data to Drive Ofatumumab Sales 4 Pivotal Study Readouts in 2014





## Ofatumumab + Chlorambucil Extends Progression Free Survival: Phase III Results

- Ofatumumab + chlorambucil vs. chlorambucil alone in front line CLL
- 447 patients in the study
- Met primary endpoint in the study PFS
  - 38% of CR patients in Ofa + Chl arm MRD negative
- No unexpected safety findings Most common SAEs:
  - Neutropenia (5%), anemia (4%), pneumonia (4%) and pyrexia (2%)

Voy Efficacy	IRC Assessment		Investigator Assessment		
Key Efficacy Results	Ofatumumab + chlorambucil	Chlorambucil	Ofatumumab + chlorambucil	Chlorambucil	
Median PFS	22.4 months	13.1 months	23.4 months	14.8 months	
ORR*	82%	69%	88%	81%	
CR**	14%	1%	49%	21%	

<sup>\*</sup>As per IWCLL 2008 criteria, CR includes CRi, PR includes nPR

<sup>\*\*</sup>Discrepancy IRC vs Inv due to missing / incomplete BM, or >30% BM invasion



## Daratumumab (HuMax®-CD38) First-in-Class Antibody with Broad-Spectrum Killing Activity

### First-in-Class Fully Human Antibody

- Targets CD38 molecule on multiple myeloma (MM) cells
- Potential in: MM, DLBCL, FL, Plasma Cell Leukemia, ALL, Mantle Cell Lymph., AML
- Blockbuster potential
- Promising early clinical data
- Breakthrough Therapy
   Designation, Fast Track &
   Orphan Drug status awarded
   by FDA

#### **Partner: Janssen Biotech**

- Janssen funds development
   & commercialization
- > \$1.1Bln potential deal value\*, + double-digit royalties
- Zero cost / limited risk for Genmab



<sup>\*</sup> Represents aggregate of all milestone payments and license fees that could be payable to Genmab if collaboration partner successfully initiates, develops and commercializes all programs under the collaboration



## Extensive Daratumumab Development Plans in Multiple Myeloma – 7 ongoing studies

#### **Smoldering**

New studies planned

# Front line (transplant & non-transplant)

• Ph Ib multi combo

#### Relapsed

- Ph I/II len/dex combo
- Ph III len/dex combo
- Ph III bort/dex combo

#### Relapsed-Refractory

- Ph I/II
- Ph II single agent
- Ph I (Japan)



## Daratumumab: Early Signs of Clinical Activity Phase I/II Combination Study

- Preliminary Ph I/II data for daratumumab in combination with lenalidomide and dexamethasone
- Treating patients with relapsed / refractory multiple myeloma
- Efficacy measured in 11 patients
- Treatment was well tolerated

Response Rate (Number of Patients)					
	2 mg/kg (N=3)	4 mg/kg (N=3)	8 mg/kg* (N=3)	16 mg/kg* (N=2)	Total (N=11)
CR	1	2	0	0	3
VGPR	1	1	0	0	2
PR	1	0	2	0	3
MR	0	0	1	1	2
SD	0	0	0	1	1
PD	0	0	0	0	0

<sup>\*</sup>Limited treatment exposure

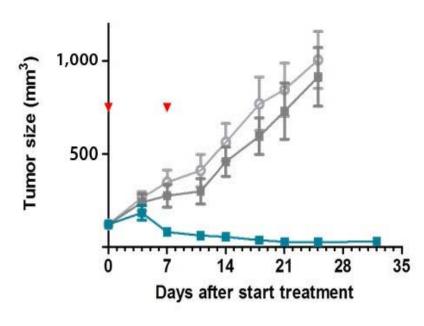


## HuMax®-Tissue Factor-ADC: In the Clinic Next Generation Therapeutics

- Fully human antibody-drug conjugate
- Targets Tissue Factor (TF)
- Ongoing Phase I study in 8 different tumors: ovary, cervix, endometrium, bladder, prostate, head & neck, esophagus, lung
- Potential also in pancreatic cancer
- Collaboration with Seattle Genetics



### Pre-clinical Cervical Cancer Model



- Isotype control
- Isotype control-ADC
- HuMax-TF-ADC
- Treatment



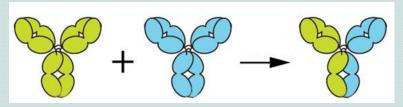
#### DuoBody® Platform Innovative Technology for Bispecific Antibodies

### **O** DuoBody

- Dual-targeting, potential to improve specificity, efficacy
- Large scale manufacturing
  - Minimal protein engineering
  - Excellent quality antibodies at very high yields
- Differentiated from competitor platforms
  - Proper in vivo half-life
  - Fc-effector functions
  - Good manufacturability

#### **Major Collaborations**

- Novartis
  - 2 programs, \$175M potential deal value, plus royalties
- Janssen Biotech
  - 20 programs, \$3.6B potential deal value, plus royalties
- Kirin (KHK) research deal
- Lilly research deal

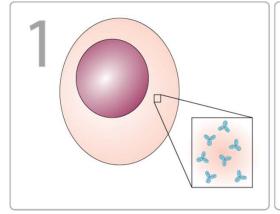


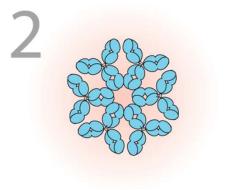


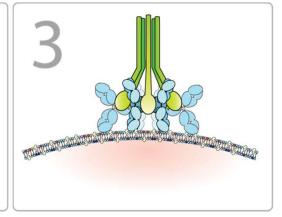
#### HexaBody<sup>TM</sup> Technology Enhancing Multiple Natural Killing Mechanisms

- Builds on natural antibody biology minimal engineering required
- Enables antibodies to more readily form clusters of 6 (hexamers)
- Induces & enhances target cell killing after binding via CDC
  - CDC capability to essentially any antibody
- Potential to create novel, differentiated products in cancer & infectious disease
  - Repurpose / rescue drug candidates that failed in Phase II/III
  - Life cycle management









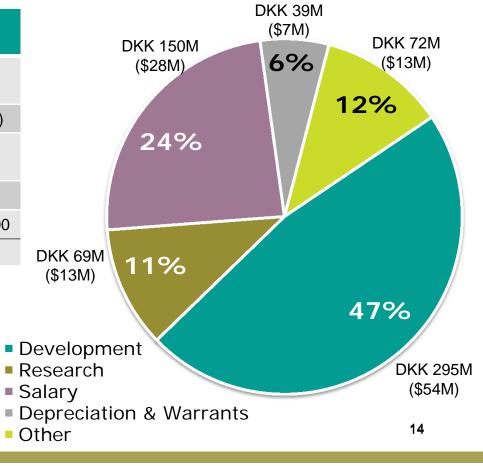


#### 2014 Guidance

Income Statement (DKKM)	Revised Guidance	Previous Guidance	
Revenue	775 - 825	725 - 775	
Operating expenses	(600) – (650)	(600) – (650)	
Operating income	140 – 210	90 – 160	

Cash Position (DKKM)	Revised Guidance	Previous Guidance	
Cash position beginning of year*	1,557	1,557	
Cash used in operations	0 – (50)	(50) - (100)	
Proceeds from private placement	972	972	
Warrant exercises	28	-	
Cash position at end of year*	2,450 - 2,550	2,400 - 2,500	
*Cash, cash equivalents and marketable securities			

2014 Expense Base DKK 625M (\$115M)





#### 2014 Goals: Fueling Growth Through Our Platforms & Products

Priority	✓	Targeted Milestone
Maximize value of ofatumumab		<ul> <li>» Ph III relapsed CLL ofa + FC data</li> <li>» Ph III maintenance CLL data</li> <li>» Ph III bulky refractory CLL ofa vs physician's choice data</li> <li>» Ph III relapsed DLBCL; ofa + chemo vs RTX + chemo data</li> <li>» Update progress sc autoimmune development</li> </ul>
Expansion Arzerra	<b>✓</b>	<ul><li>» CLL front line label expansion and launch</li><li>» Launch &amp; reimbursement in new countries</li></ul>
Fully exploit the potential of daratumumab	<b>✓</b>	<ul> <li>» Ph I/II MM monotherapy matured efficacy data</li> <li>» Ph I/II MM dara + Revlimid safety &amp; efficacy data</li> <li>» Ph II MM monotherapy preliminary data</li> <li>» Ph Ib MM multi combo data</li> <li>» Start multiple new MM trials</li> <li>» Progress non-MM indications</li> </ul>
Expand pipeline		<ul> <li>» Progress Ph I HuMax-TF-ADC study</li> <li>» Report progress pre-clin. ADC, DuoBody &amp; HexaBody projects</li> </ul>
Next generation technologies	<b>✓</b>	<ul> <li>Enter new DuoBody technology collaborations</li> <li>Report progress DuoBody collaborations</li> <li>Start HexaBody technology collaborations</li> </ul>
Partnerships	<b>✓</b>	<ul><li>» Report progress partnered programs</li><li>» Enter new collaboration</li></ul>
Disciplined financial management	<b>✓</b>	<ul> <li>» Significant daratumumab milestones</li> <li>» No significant increase in cost base</li> <li>» Increase operating income and reduce cash burn</li> </ul>

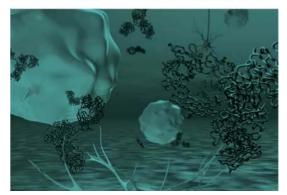


## On Track to a Sustainably Profitable Future

- World class antibody know-how
- Next generation antibody technologies
- Arzerra pivotal trials and further label expansion
- Expansive daratumumab development with Janssen Biotech
- HuMax-TF-ADC in Phase I solid cancers
- Broad pre-clinical pipeline includes multiple DuoBody & ADC programs
- New partnership deals
- Disciplined spending & selectively invest









### Better Antibodies By Design

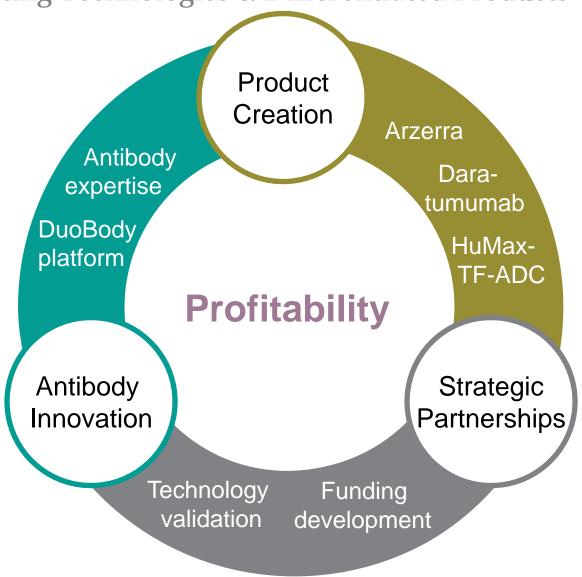
**Appendix** 





### Hybrid Business Model

**Trend-Setting Technologies & Differentiated Products** 





#### Leveraging Our Assets

#### Creative partnerships for new product opportunities

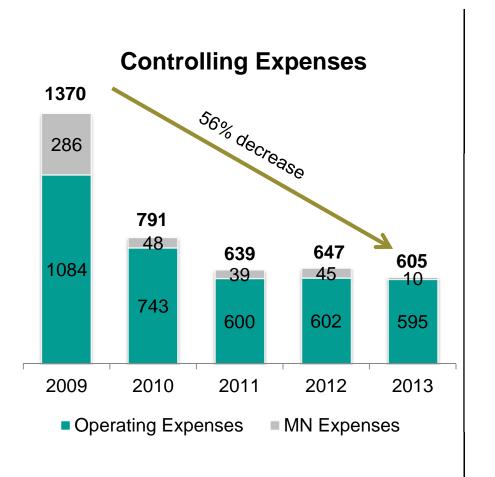
- HuMax-TAC-ADC (target: IL-2R) ADC Therapeutics
- HuMax-IL8 (target: Interleukin-8) Cormorant Pharmaceuticals
- HuMax-IL8 + undisclosed target, DuoBody research collaboration – Cormorant Pharmaceuticals

#### Top class antibody knowhow

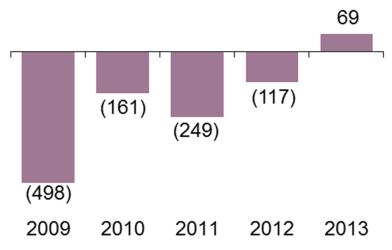
- 2001/2 Roche agreement
  - Inclacumab (target: P-selectin) PoC establised for reduction myocardial injury. Available for outlicensing
  - Teprotumumab (target: IgF1R) outlicensed to River Vision, in Phase II for Graves' orbitopathy & Ph I for DME
- 2012 Janssen DuoBody agreement
  - EM1-mAb, EGFrxcMet bispecific (targets: EGFr & cMet)



#### Progress Towards a Sustainable Future



#### **Operating Result**

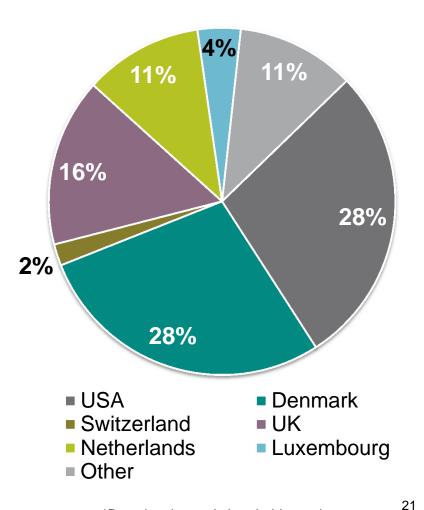




#### **International Shareholder Base**

- Major shareholders >5%
  - Johnson & Johnson
     Development Corporation
  - Glaxo Group Ltd.
  - ATP and AES
  - Hendrikus Stienstra
  - FMR (Fidelity)
- ADR program in US
  - Ticker: GMXAY
  - Sponsored level 1
  - Ratio: 2 ADR: 1 ordinary share
  - Depositary Deutsche Bank
  - Info at www.adr.db.com

### Geographical Shareholder Distribution January 31, 2014\*





#### Hematological Cancer Market Size Estimated Prevalence in 7 Major Markets

Disease	Estimated Incidence in 7 Major Markets	Estimated Prevalence
CLL	32,000	250,000
DLBCL	38,000	300,000
FL	32,000	260,000
MM	55,000	190,000



## Positive Phase II Ofatumumab + Bendamustine Data in CLL

- 97 CLL patients in study
- Previously untreated CLL
  - 44 patients
  - 95% Overall response rate (ORR)
  - 43% Complete response rate (CR)
    - 56% of these achieved MRD negativity in Bone Marrow
- Relapsed CLL
  - 53 patients
  - 74% ORR
  - 11% CR





## Robust Technology & IND Engine to Produce Better Cancer Therapeutic Antibodies

#### **UltiMAb® Platform**

- Validated technology
  - 5 approved products
  - 29 in development
- Naked & potency-enhanced antibodies

#### **DuoBody® Platform**

- Genmab proprietary -
- Creates bispecific antibodies with ability to bind to 2 targets
- Potential in: cancer, infectious disease, autoimmune & CNS
- Collaborations with Novartis,
   Janssen, Eli Lilly, Cormorant & KHK

#### **Antibody-Drug Conjugates**

- Major new advancement in antibody technology
- Collaboration with Seattle Genetics
- Collaboration with ADC Therapeutics

#### HexaBody™ Platform

- Genmab proprietary -
- Enhances natural killing ability of antibodies
- Creates novel, differentiated products
- Potential in: cancer & infectious disease



### Better Antibodies By Design

