

Better Antibodies By Design

Morgan Stanley Global Healthcare Conference 2014 September 10, 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 gualified 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 Cancer

- Differentiated human antibodies
- Track record breakthrough therapeutics

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Robust Product Pipeline

- Ofatumumab cancer & autoimmune potential (marketed as Arzerra® in various CLL indications)
- Daratumumab blockbuster potential
- HuMax[®]-TF-ADC in Phase I solid cancers



Passion for Innovation

- World class antibody know-how
- Proprietary technologies DuoBody[®] & HexaBody[™]
- Innovative pre-clinical pipeline



Partnerships → Product Ownership

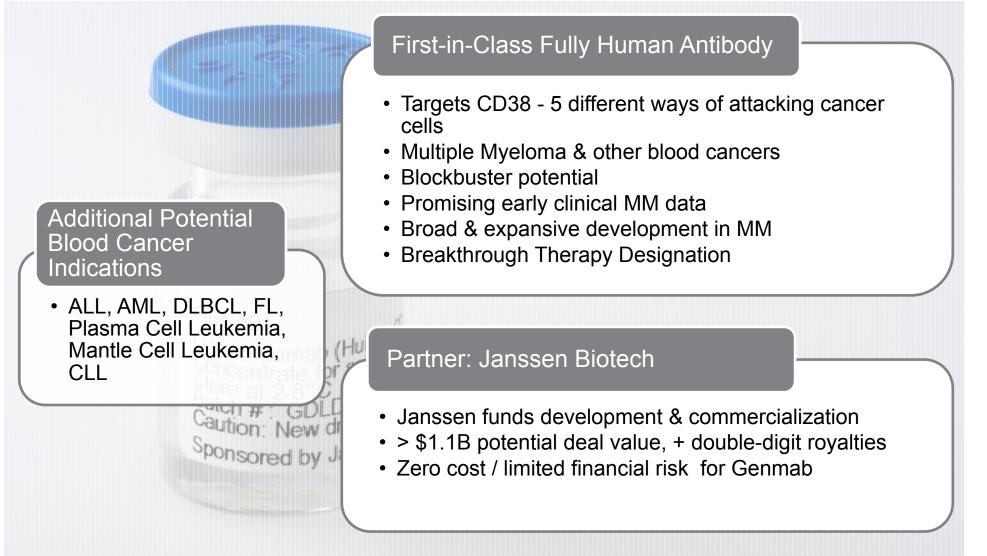
- · Key collaborations drive current pipeline
- Product opt-ins + retain products for future value
- Well capitalized



Innovative Pipeline

		Development Phase						
Product	Product Disease Indications		I	1/11	Ш	Ш		
Ofatumumab 18 studies	Chronic lymphocytic leukemia (CLL)							
Target: CD20	Follicular lymphoma (FL)							
Partner: GSK	Waldenström's macroglobulinemia (WM)							
	Pemphigus vulgaris (PV)							
	Relapsing remitting multiple sclerosis (RRMS)		۸	mnounce	d			
	Neuromyelitis optica (NMO)		Anno	unced				
Daratumumab 8 studies Target: CD38 Partner: Janssen	Multiple myeloma (MM)							
HuMax-TF-ADC Target: TF Partner: Seattle Genetics	Solid Cancers							
Teprotumumab 2 studies	Active thyroid eye disease							
Target: IGF-1R Partner: River Vision	Diabetic macular edema							
> 10 Active	Partnered programs: HuMab, DuoBody & HexaBody							
Pre-clinical Programs	Pre-clinical ProgramsProprietary programs: HuMab, HuMab-ADC, DuoBody, DuoBody-ADC & HexaBody							

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





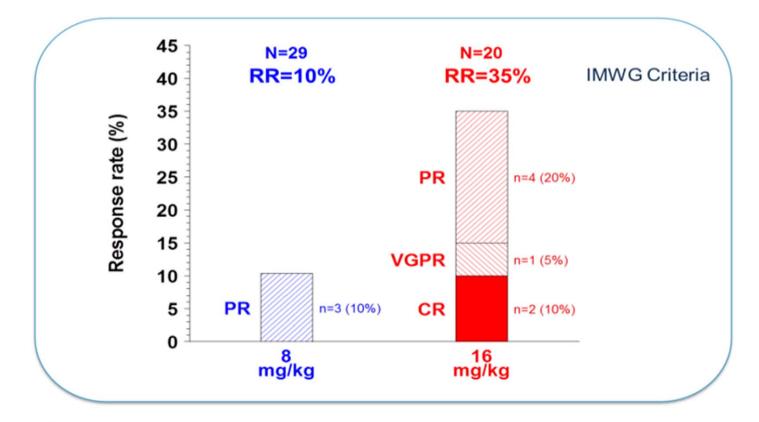
Expansive Daratumumab Development 9 Ongoing or Announced Studies in Multiple Myeloma

			Development Phase						
Indication	Disease Stage	Therapy	Pre- I I/II II III IV clinical						
Multiple Myeloma	Front line (transplant & non- transplant)	Dara + VMP*							
		Dara + Revlimid + Dex*							
		Multi combo 1 Study							
	Relapsed or Refractory	Dara + Revlimid + Dex 2 Studies							
		Dara + Velcade + Dex 1 Study							
		Mono, Japan							
		Mono, safety							
	Double Refractory	Mono, BTD population							
	Smoldering		In planning						
	Maintenance		Integrated into some study protocols						
Non-MM	Various	Potential in: ALL, AML, DLBCL, FL, Plasma Cell Leukemia, Mantle Cell Leukemia, CLL							

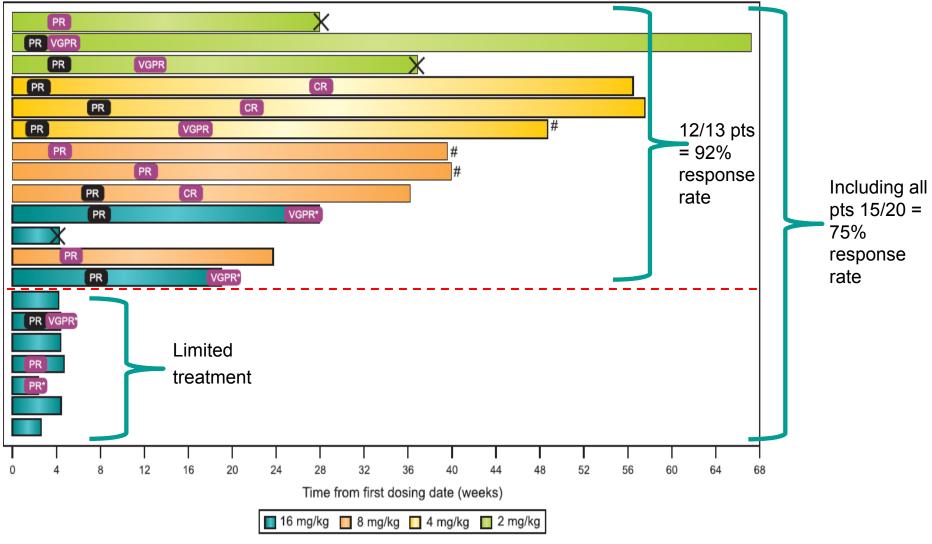
*Phase III studies announced but not yet started.

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

- Relapsed and refractory multiple myeloma, ASCO 2014
- Safety & efficacy in 49 patients
- 35% response rate at 16 mg/kg
- Treatment well tolerated



Daratumumab: Early Signs of Clinical Activity Ph I/II Revlimid Combo Study in Multiple Myeloma



Arzerra[®] (ofatumumab)

Sales Growth by GSK

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



Our First Marketed Product

- Fully human antibody targeting CD20 on cancerous **B**-cells
- Differentiated vs other CD20 mAb, targets slice of > \$7B market

Cancer

- Approved*
 - US 1st Line CLL in combo w/ chlorambucil
 - EU 1st Line CLL in combo w/ chlorambucil or bendamustine
 - Fludarabine and alemtuzumab refractory CLL
- 7** Phase III trials in CLL & FL
- Novartis potential partner 2015 (subject to GSK / Novartis deal close)

Autoimmune diseases (unapproved)

- Phase III trial ongoing in PV
- Relapsing remitting MS Ph IIIs & pivotal NMO trial announced

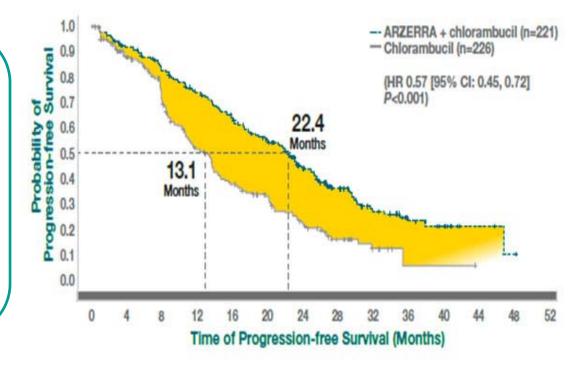
Partnered with GSK

*In US approved in combination with chlorambucil for the treatment of previously untreated patients with CLL for whom fludarabine-based therapy is considered inappropriate as well as for the treatment of patients with CLL refractory to fludarabine and alemtuzumab.

In EU approved in combination with chlorambucil or bendamustine for the treatment of patients with CLL who have not received prior therapy and who are not eligible for fludarabinebased therapy, as well as for the treatment of patients with CLL refractory to fludarabine and alemtuzumab. **Source: clinicaltrials.gov

Arzerra Label Expansion: Phase III Data Ofatumumab + Chlorambucil Extends Progression Free Survival

- Ofa + chlorambucil vs.
 chlorambucil in front line CLL
- 71% improvement in PFS
- No unexpected safety findings - Most common SAEs:
 - Neutropenia (5%), anemia (4%), pneumonia (4%) and pyrexia (2%)

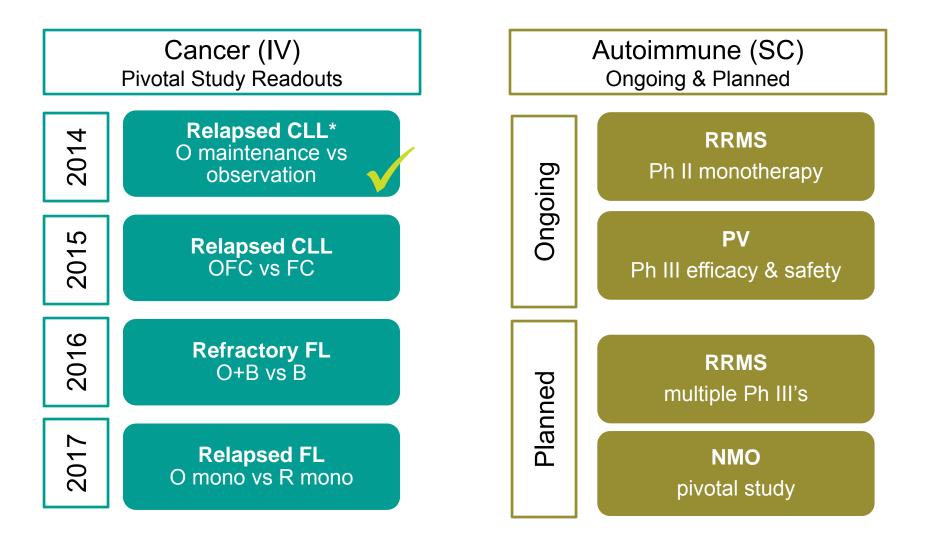


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ARZERRA plus Chlorambucil	221	192	169	148	125	104	70	46	28	15	9	3	1
Chlorambucil	226	173	130	92	67	52	33	17	6	1	1		

HR=hazard ratio; Cl=confidence interval.

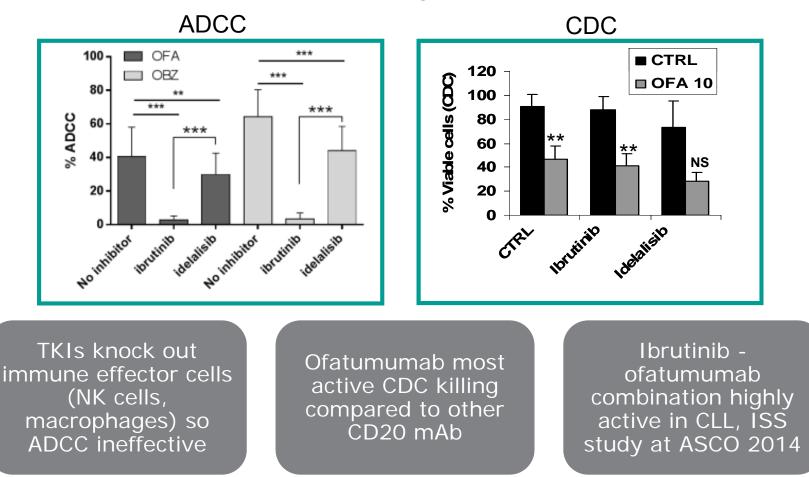
Genmab

Ofatumumab: Planned & Ongoing Trials



Ofatumumab:

Potential to Combine with Tyrosine Kinase Inhibitors



Sources:

Da Roit et al. "Ibrutinib interferes with the cell-mediated anti-tumor activities of therapeutic CD20 antibodies: implications for combination therapy." Abstract. EHA 2014

Jaglowski et al. "A Phase Ib/II study evaluating activity and tolerability of the BTK inhibitor ibrutinib in combination with ofatumumab in patients with chronic lymphocytic leukemia / small lymphocytic lymphoma (CLL/SLL) and related diseases." ASCO 2014



Ofatumumab - Future in Autoimmune

Multiple Ph III Trials to Start in Autoimmune Indications

Relapsing Remitting Multiple Sclerosis (RRMS)

- Phase III's in RRMS expected to begin in 2015
 - Follow encouraging Phase II data
 - Sustained reduction cumulative number new brain lesions over 12 week period
 - No unexpected safety findings
- MS market forecast to peak at \$18.5B in 2018*

Neuromyelitis Optica (NMO)

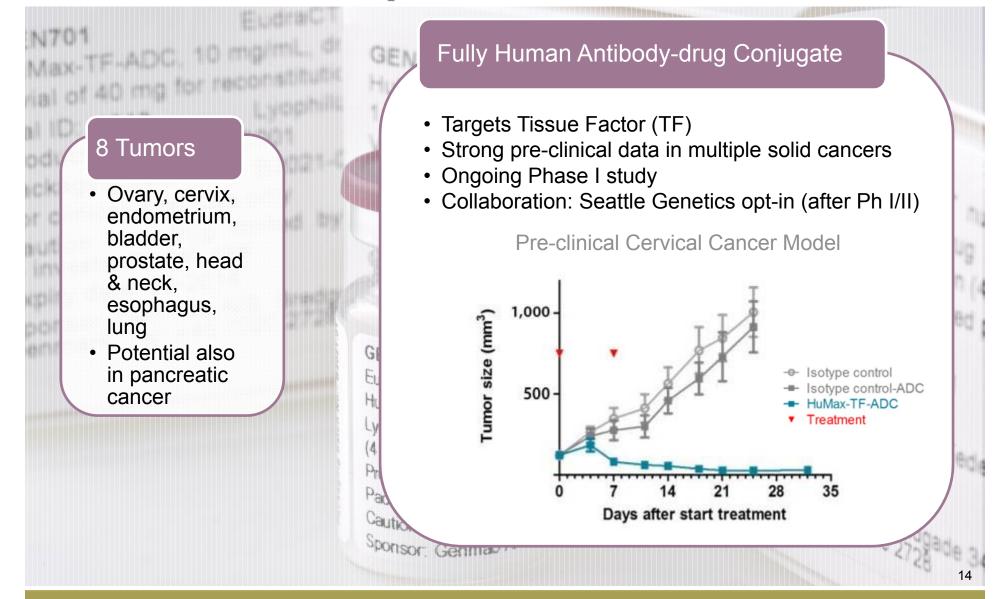
- GSK plans IND for potential pivotal study in NMO in 2014
 - NMO, a rare autoimmune disorder
 - No licensed therapy for NMO
 - Orphan indication

Pemphigus Vulgaris (PV)

- Phase III study ongoing
- Orphan indication



HuMax[®]-TF-ADC: In the Clinic Next Generation Therapeutics





DuoBody[®] Technology Efficient & Versatile Platform for Bispecific Antibodies

DuoBody

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

Ongoing Collaborations

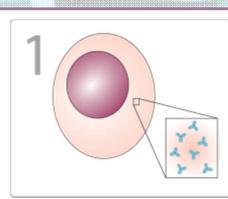
- 2 Commercial deals
 - Novartis (2 programs, \$175M potential deal value + royalties)
 - Janssen Biotech (20 programs, \$3.6B potential deal value + royalties)
- 6 Research deals
 - Lilly, Kirin, Cormorant, undisclosed major Biotech, Agenus, BioNovion



HexaBodyTM Technology Robust Effector Function Enhanced Antibodies

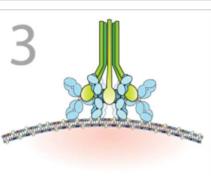
HexaBody

- 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
- Builds on natural antibody biology minimal engineering
- Create novel, differentiated products in cancer & infectious disease
- Repurpose / rescue drug candidates that failed in Phase II/III
- Life cycle management
- First collaboration with undiscl. major Biotech, June 2014



*HexaBod

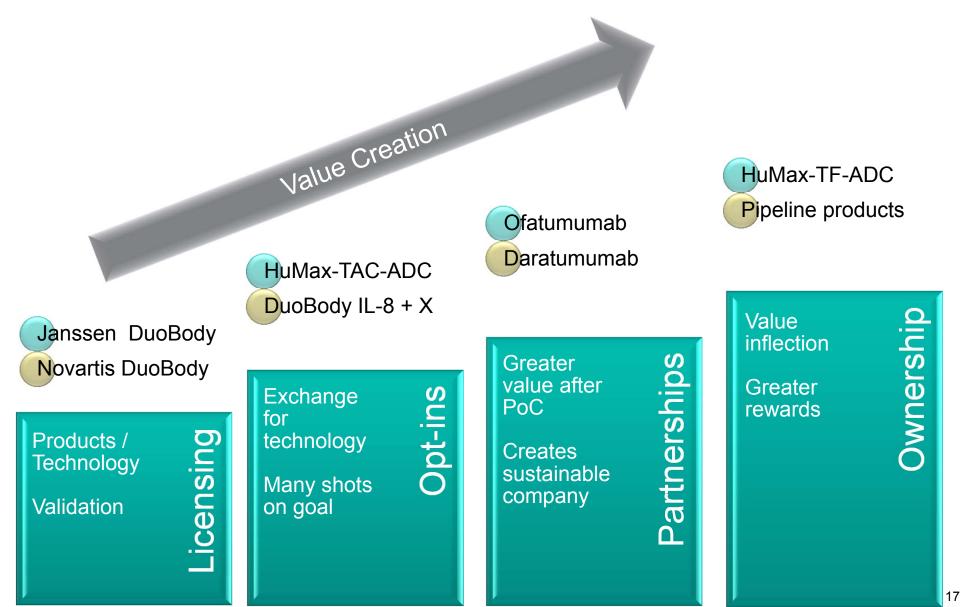




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Creating Value With Our Technologies

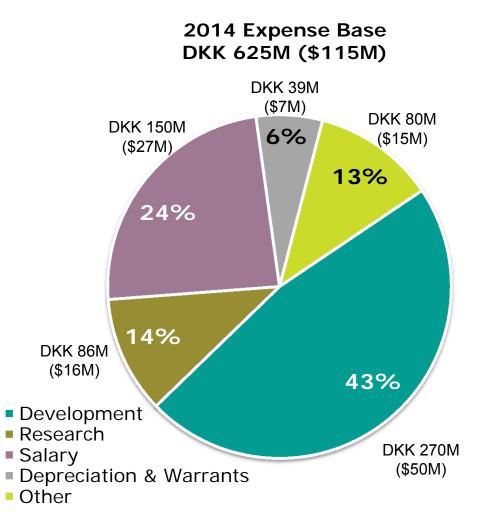


Well-Capitalized Biotech – 2014 Guidance

Income Statement	DKKM	USDM*		
Revenue	800 - 875	147 - 160		
Operating expenses	(600) – (650)	(110) – (119)		
Operating income	175 – 250	32 - 46		

Cash Position	DKKM	USDM*		
Cash position beginning of year**	1,557	285		
Cash used in operations	0 – (50)	0 - (9)		
Proceeds from private placement	972	178		
Warrant exercises	33	6		
Cash position at end of year**	2,450 - 2,550	449 - 467		

*USD 1.00 = DKK 5.4589 **Cash, cash equivalents and marketable securities



2014 Goals: Fueling Growth Through Our Platforms & Products

Priority	\checkmark	Targeted Milestone
Maximize value of ofatumumab	2015 ✓ X X ✓	 » Ph III relapsed CLL ofa + FC data » Ph III maintenance CLL data » Ph III bulky refractory CLL ofa vs physician's choice data » Ph III relapsed DLBCL; ofa + chemo vs RTX + chemo data » Update progress sc autoimmune development
Expansion Arzerra	\checkmark	 » CLL front line label expansion and launch » Launch & reimbursement in new countries
Fully exploit the potential of daratumumab	✓ ✓ ✓	 » Ph I/II MM monotherapy matured efficacy data » Ph I/II MM dara + Revlimid safety & efficacy data » Ph II MM monotherapy preliminary data » Ph Ib MM multi combo data » Start multiple new MM trials » Progress non-MM indications
Expand pipeline		 » Progress Ph I HuMax-TF-ADC study » Report progress pre-clin. ADC, DuoBody & HexaBody projects
Next generation technologies	 ✓ ✓ 	 » Enter new DuoBody technology collaborations » Report progress DuoBody collaborations » Start HexaBody technology collaborations
Partnerships	✓	» Report progress partnered programs» Enter new collaboration
Disciplined financial management	√	 » Significant daratumumab milestones » No significant increase in cost base » Increase operating income and reduce cash burn



On Track to a Sustainably Profitable Future



- Robust differentiated product pipeline
 - Daratumumab, ofatumumab, HuMax-TF-ADC
 - Innovative pre-clinical pipeline
- Proprietary technologies -DuoBody & HexaBody
- Partnerships → Product ownership
 - Well capitalized
- Positioned for success
 - For patients & shareholders



Better Antibodies By Design

