JANUARY 2017

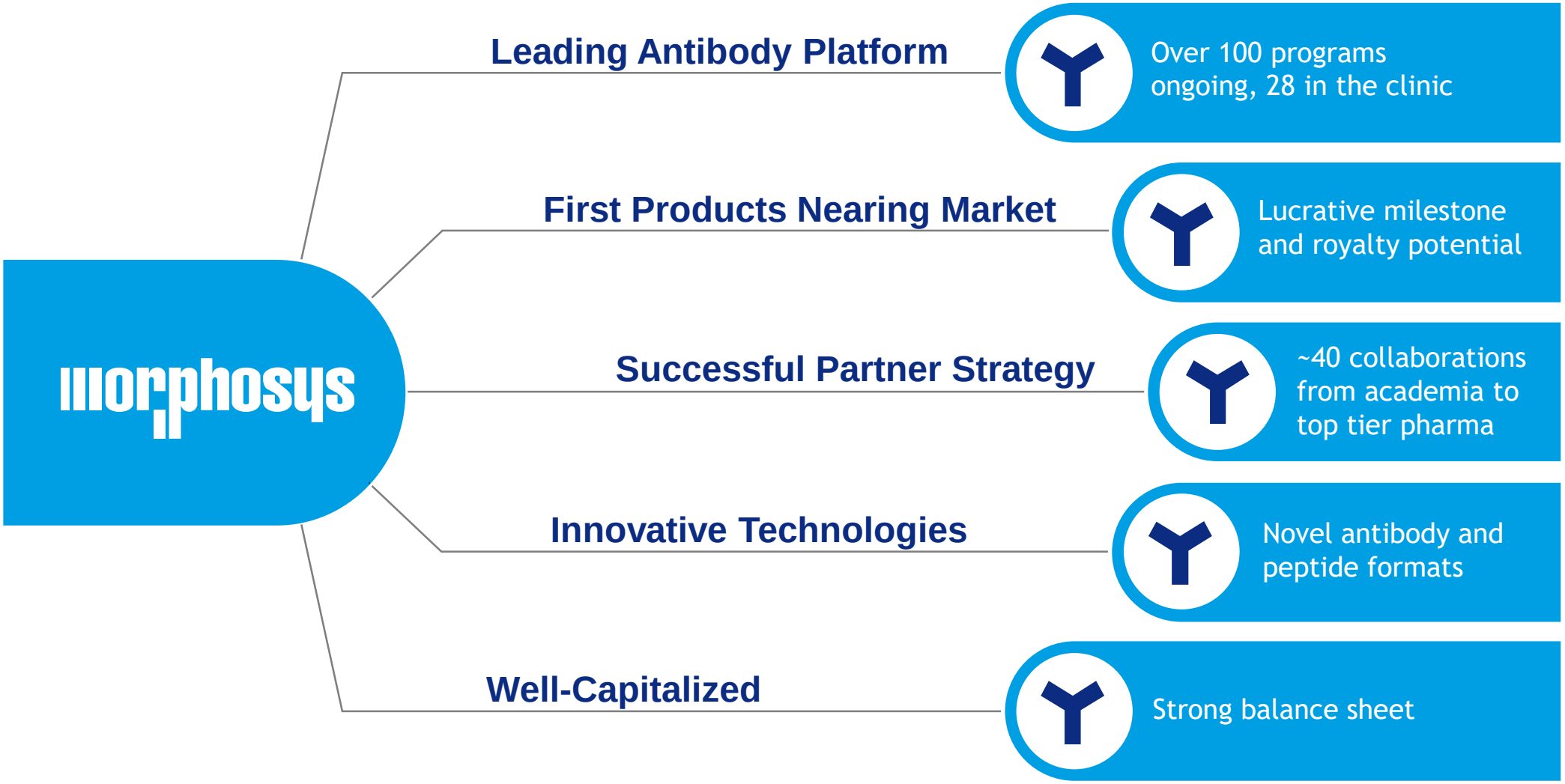
Engineering the Medicines of Tomorrow

Company Update

This presentation includes forward-looking statements.

Actual results could differ materially from those included in the forward-looking statements due to various risk factors and uncertainties including changes in business, economic competitive conditions, regulatory reforms, foreign exchange rate fluctuations and the availability of financing. These and other risks and uncertainties are detailed in the Company's Annual Report.

Investment Highlights



MorphoSys Strategy

Developing exceptional new treatments for patients suffering from serious diseases

PARTNERED DISCOVERY PROGRAMS

- Maximising utilization of the technology
- Lucrative source of revenue from license fees and royalties

PROPRIETARY DEVELOPMENT PROGRAMS

- Focus on oncology/inflammation
- Selective co-development programs
- Retained rights translate into higher revenue potential

TECHNOLOGY PLATFORMS: HuCAL & Ylanthia; Lanthipeptides; Novel Targets

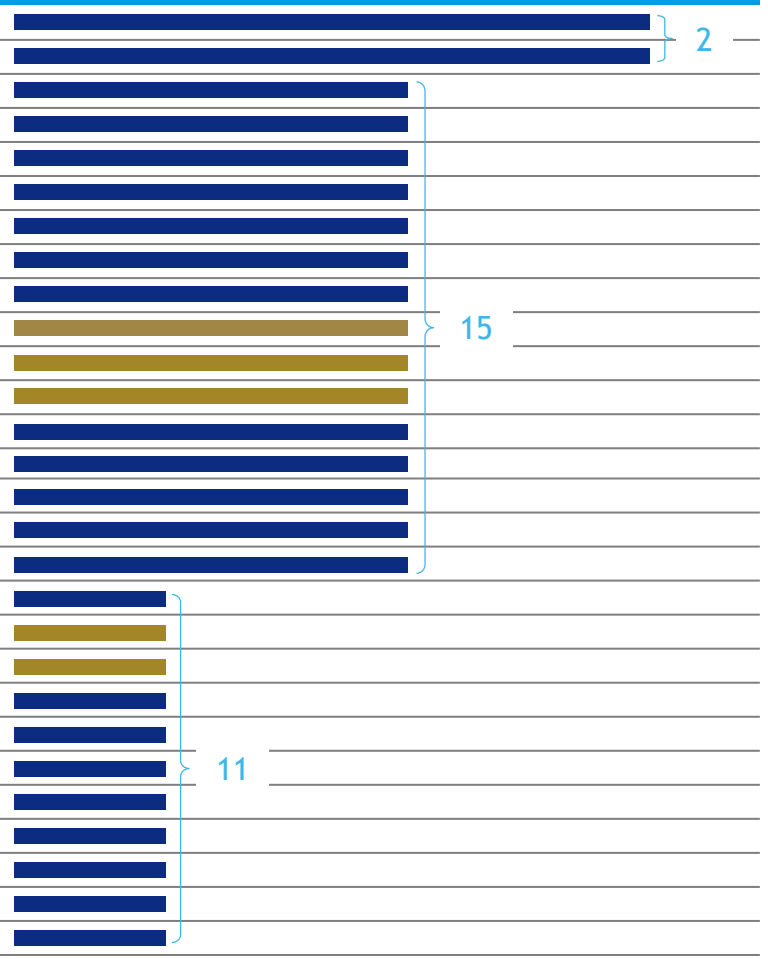
Recent Newsflow

NEW CHIEF DEVELOPMENT OFFICER	**January 2017** Dr. Malte Peters appointed as new CDO as of March 1, 2017 joining from Sandoz with deep operational and medical experience in oncology
START OF MOR208 CLL TRIAL	**December 2016** First patient dosed in phase 2 COSMOS trial with MOR208 plus idelalisib in relapsed/refractory CLL patients after discontinuation of BTKi (e.g. ibrutinib) therapy
CLINICAL UPDATES AT ASH	**December 2016** Updated response rates reported in relapsed/refractory multiple myeloma at higher doses of MOR202 plus LEN/POM and updates from phase 2 studies in NHL and CLL
FIRST PRODUCT APPLICATION SUBMITTED BY PARTNER	**November 2016** Guselkumab in moderate to severe plaque psoriasis: Biologics License Application submitted by Janssen
SUCCESSFUL CAPITAL INCREASE	**November 2016** Capital increase of EUR 115 million successfully closed to support further pipeline development

The MorphoSys Pipeline

28 Clinical Product Candidates

PROGRAM	PARTNER	TARGET	DISEASE AREA
Guselkumab (CNTO1959)	Janssen	IL23p19	Psoriasis
Gantenerumab	Roche	Amyloid-ß	Alzheimer's disease
Anetumab Ravtansine (BAY94-9343)	Bayer	Mesothelin (ADC)	Solid tumors
BHQ880	Novartis	DKK-1	Multiple myeloma
BI-836845	BI	IGF-1	Solid tumors
Bimagrumab (BYM338)	Novartis	ActRIIB	Musculoskeletal diseases
BPS804	Mereo/Novartis	Sclerostin	Brittle bone syndrome
CNTO3157	Janssen	-	Inflammation
CNTO6785	Janssen	-	Inflammation
MOR103/GSK3196165	GSK	GM-CSF	Inflammation
MOR202	-	CD38	Multiple myeloma
MOR208	-	CD19	ALL, CLL, NHL
Elgemtumab (LJM716)	Novartis	HER3	Cancer
Tarextumab (OMP-59R5)	OncoMed	Notch 2	Cancer
Tesidolumab (LFG316)	Novartis	C5	Eye diseases
Utomilumab (PF-05082566)	Pfizer	4-1BB	Solid tumors
VAY736	Novartis	BAFF-R	Inflammation
BAY1093884	Bayer	TFPI	Hemophilia
MOR209/ES414	Aptevo	PSMA/CD3	Prostate cancer
MOR106	Galapagos	IL-17C	Inflammation
NOV-7	Novartis	-	Eye diseases
NOV-8	Novartis	-	Inflammation
NOV-9	Novartis	-	Diabetic eye diseases
NOV-10	Novartis	-	Cancer
NOV-11	Novartis	-	Blood disorders
NOV-12	Novartis	-	Prevention of thrombosis
NOV-13	Novartis	-	Cancer
Vantictumab (OMP-18R5)	OncoMed	Fzd 7	Solid tumors



Partnered Discovery Programs
MOR Proprietary Programs

Proprietary Portfolio: Snapshot of MOR208

An Fc-enhanced Antibody to Treat B Cell Lymphoma

FC-ENHANCED ANTIBODY TARGETING CD19 – A CRUCIAL CELL SURVIVAL MOLECULE ON B CELLS

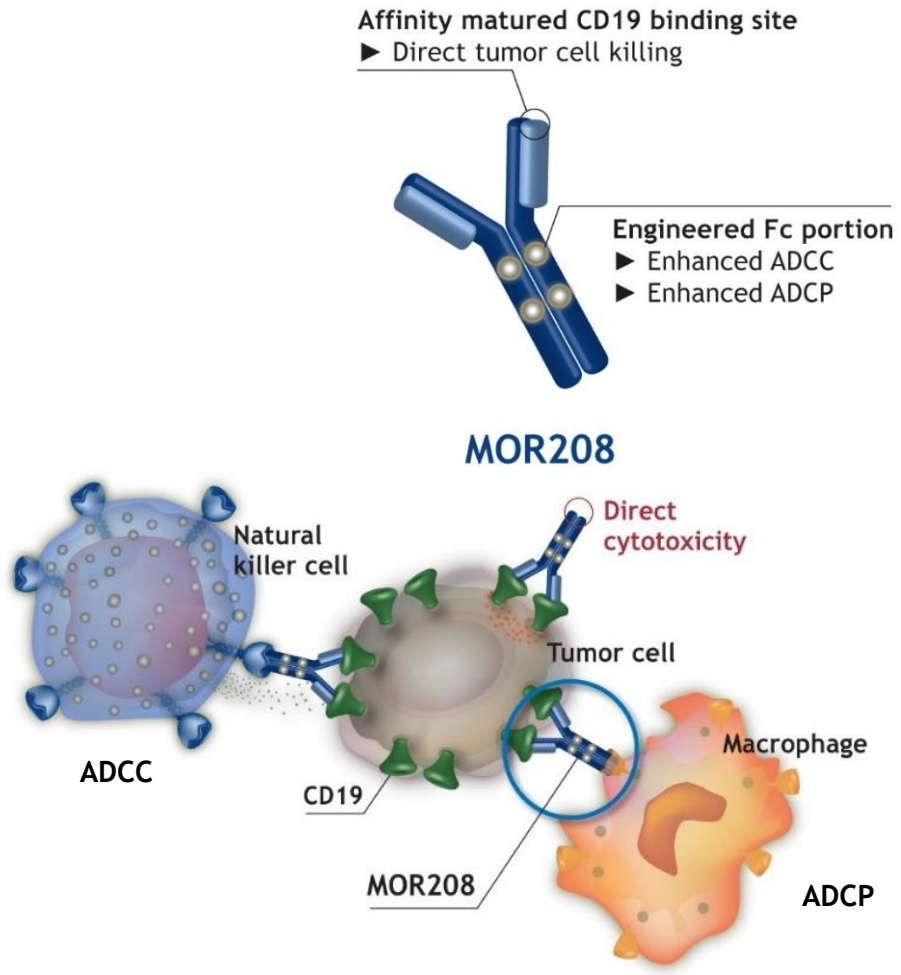
- CD19 preserved after treatment with B cell targeted therapies
- Fc modification dramatically enhances B cell depletion by ADCC, ADCP and direct cytotoxicity

KEY FEATURES

- Deep and long lasting efficacy responses
- Excellent safety profile, providing opportunity for MOR208 to be used with multiple combination partners
- Straightforward manufacturing

REGULATORY STATUS

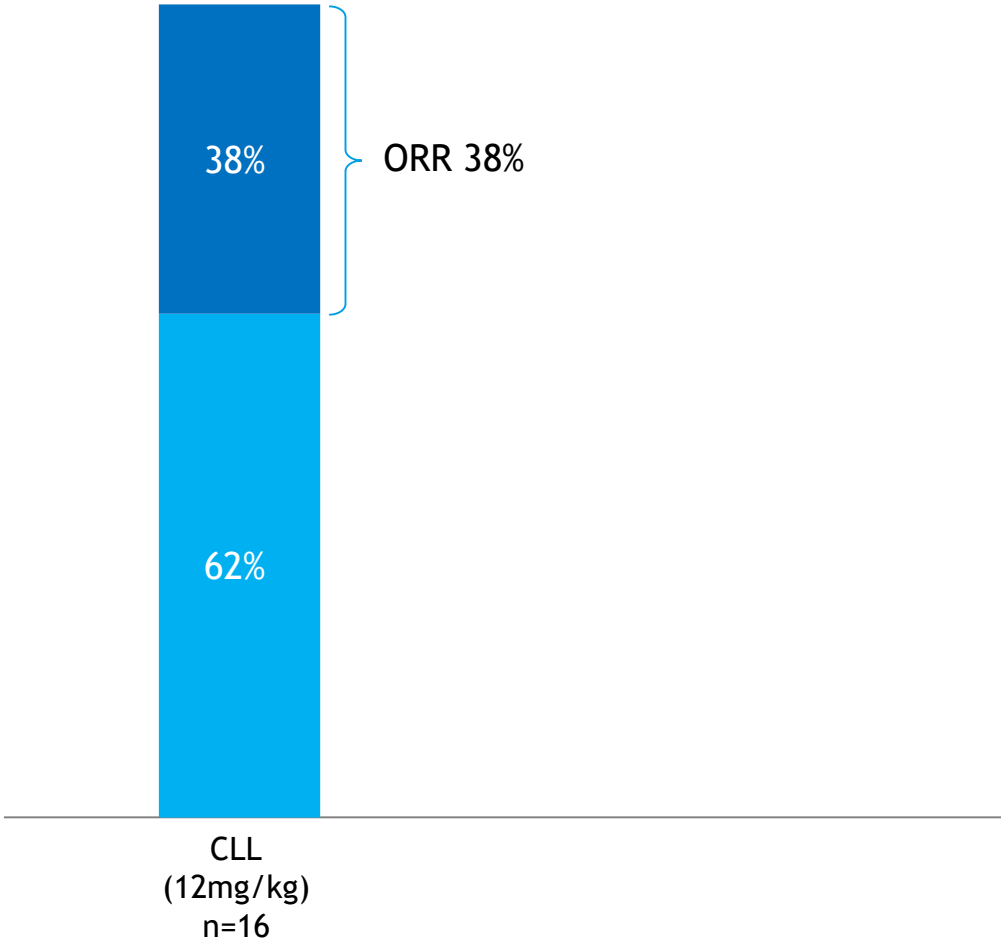
- Fast track designation for DLBCL
- Orphan drug status in the US and Europe for DLBCL and CLL



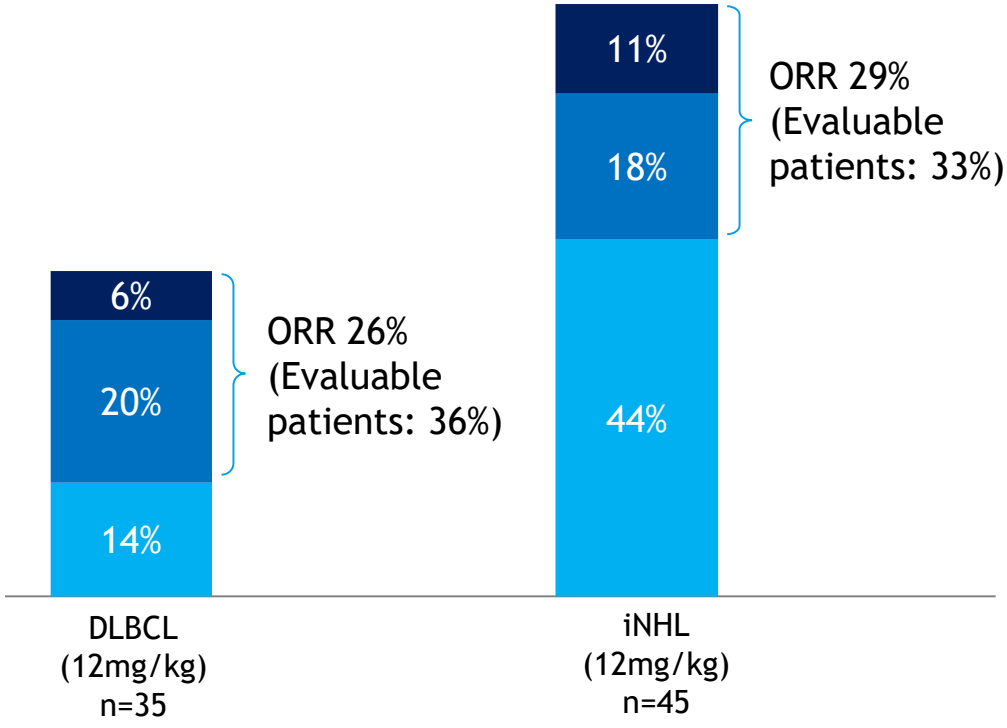
ADCC: Antibody-Dependent Cell-Mediated Cytotoxicity;
ADCP: Antibody-Dependent Cell-Mediated Phagocytosis

MOR208 – Clinical Data in B cell Malignancies

PHASE 1 TRIAL IN R/R CLL



PHASE 2 TRIAL IN R/R NHL



Complete response Partial response Stable disease ORR = Overall response rate

MOR208: Comprehensive Phase 2 Development Plan

INDICATION		2016	2017	2018
NHL		MOR208 monotherapy in R/R NHL (12mg/kg); N=92		
DLBCL	L-MIND	Lenalidomide + MOR208 (12mg/kg) in R/R DLBCL; N=80		
	B-MIND	Bendamustine + MOR208 (12mg/kg) vs. rituximab + bendamustine in R/R DLBCL; N~330 Safety evaluation leading into anticipated phase 3 pivotal study in 2017		
CLL	COSMOS	MOR208 (12mg/kg) + idelalisib in R/R CLL BTKi-failures MOR208 (12mg/kg) + combo partner in R/R CLL BTKi-failures (planned)		
		MOR208 (9mg/kg) + lenalidomide; in CLL (R/R, naïve, Richter's Transformation) MOR208 + ibrutinib in ibrutinib-resistant CLL (molecular relapse)		

□ Proprietary program trial □ IIT: Investigator-initiated trial, John Byrd, Ohio State University

Proprietary Portfolio: Snapshot of MOR202

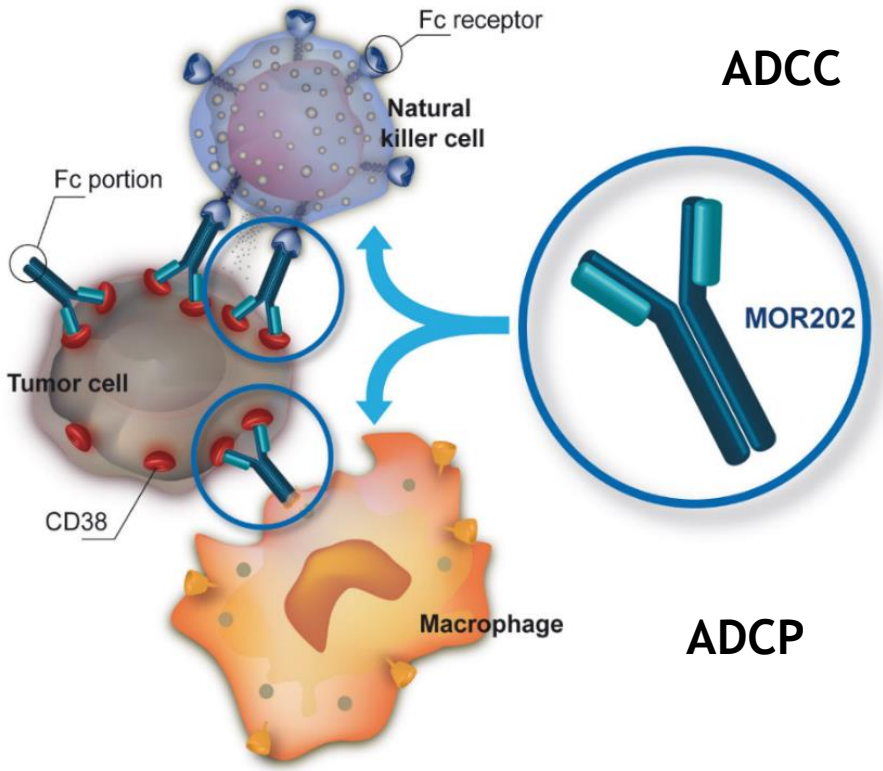
A Differentiated Antibody for Multiple Myeloma

A UNIQUE ANTI-CD38 ANTIBODY FOR THE TREATMENT OF MULTIPLE MYELOMA (MM)

- Targeting a unique epitope of CD38
- Inducing potent immune effector mechanisms ADCC and ADCP

KEY CLINICAL FEATURES*:

- Low incidence of infusion related reactions (IRRs): 7% IRR rate, IRRs of grade 1 and 2 only
- Favorable tolerability profile
- Enduring & deepening clinical responses:
  - 16 of 19 responses ongoing
  - Longest time on study with ongoing response: 20 months
- Biomarker analysis shows preservation of CD38 expression during MOR202 treatment



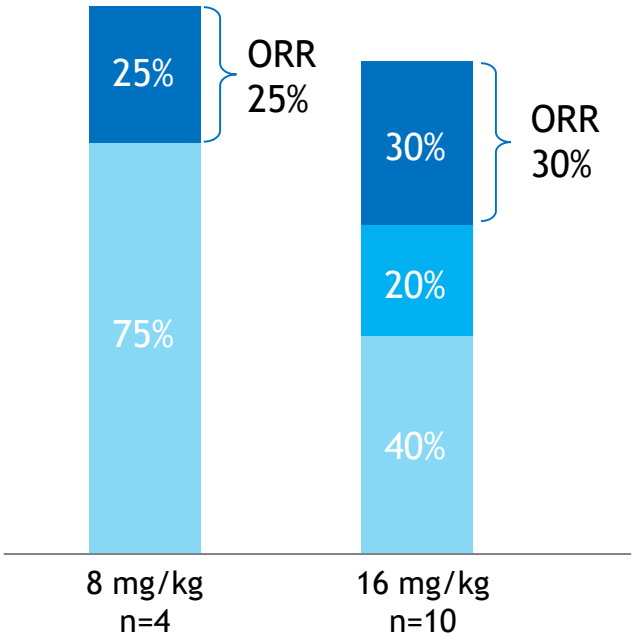
ADCC: Antibody-Dependent Cell-Mediated Cytotoxicity;
ADCP: Antibody-Dependent Cell-Mediated Phagocytosis

*From ongoing phase 1/2a trial: Raab et al., oral presentation at ASH 2016 Annual Meeting, December 5, 2016: Abstract #1152

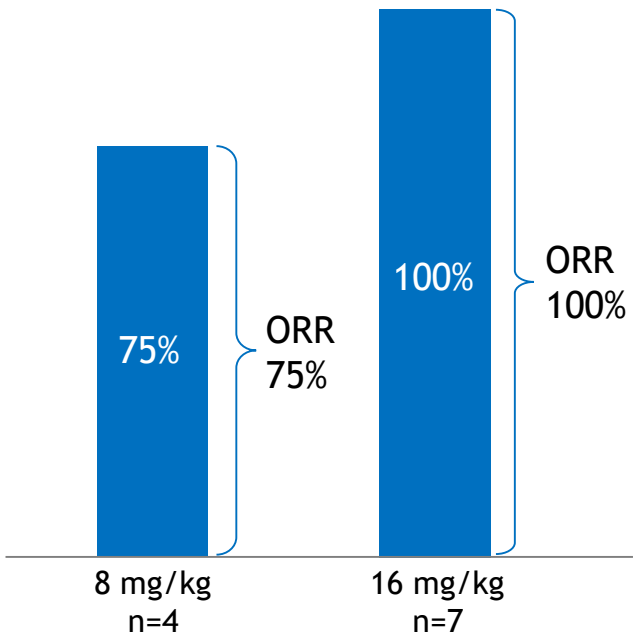
MOR202: Preliminary Phase 1/2a Data (1)

Responses Continue to Deepen in Ongoing Cohorts

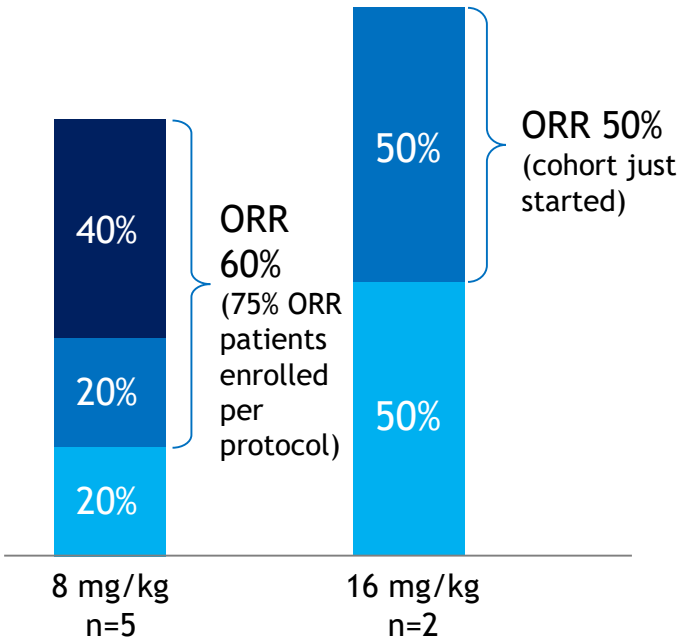
MOR202 + DEX



MOR202 + LEN/DEX



MOR202 + POM/DEX



Complete response | Partial response & very good partial response | ORR = Overall response rate

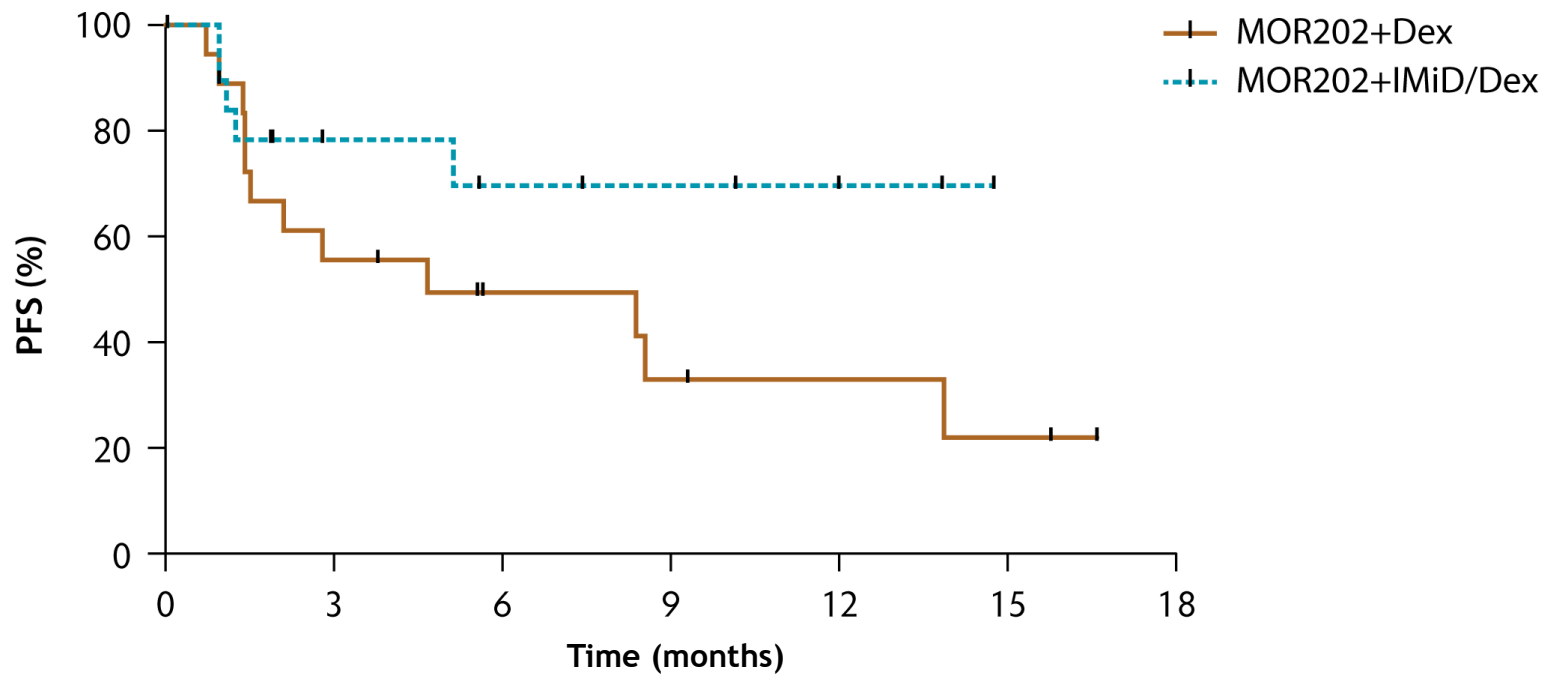
Minimal response | Stable disease

Raab et al., oral presentation at ASH 2016 Annual Meeting, December 5, 2016: Abstract #1152

MOR202: Preliminary Phase 1/2a Data (2)

Promising Progression-Free Survival

DATA FROM ONGOING DOSE ESCALATION TRIAL



MEDIAN PFS

- MOR202 + Dex: 4.7 months
- MOR202 + IMiD/Dex: not yet reached

MEDIAN FOLLOW-UP

- MOR202 + Dex: 15.8 months
- MOR202 + IMiD/Dex: 5.6 months

Raab et al., oral presentation at ASH 2016 Annual Meeting, December 5, 2016: Abstract #1152

Partnered Discovery Program: Guselkumab

Regulatory Filing for Plaque Psoriasis Submitted to FDA and EMA

DRUG

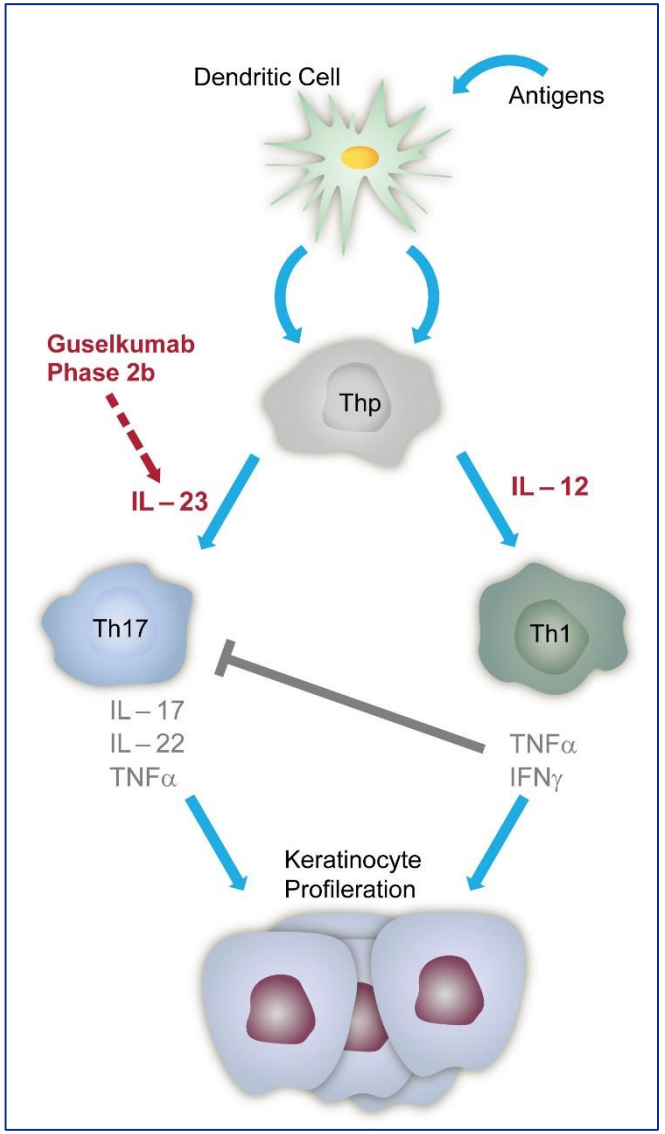
- First in class IL-23 specific antibody being developed in psoriasis and psoriatic arthritis
- Partnered discovery project with Janssen (J&J)

KEY FEATURES

- Potential to provide unique value to patients: High levels of complete or almost complete skin clearance in phase 3 VOYAGE 1 trial (PASI 90 in week 16: 73.3%)
- Less intensive dosing regimens vs. anti-IL-17 class
- Potential for similar safety profile vs. long-term blockade of IL-12 + IL-23 with STELARA®

STATUS

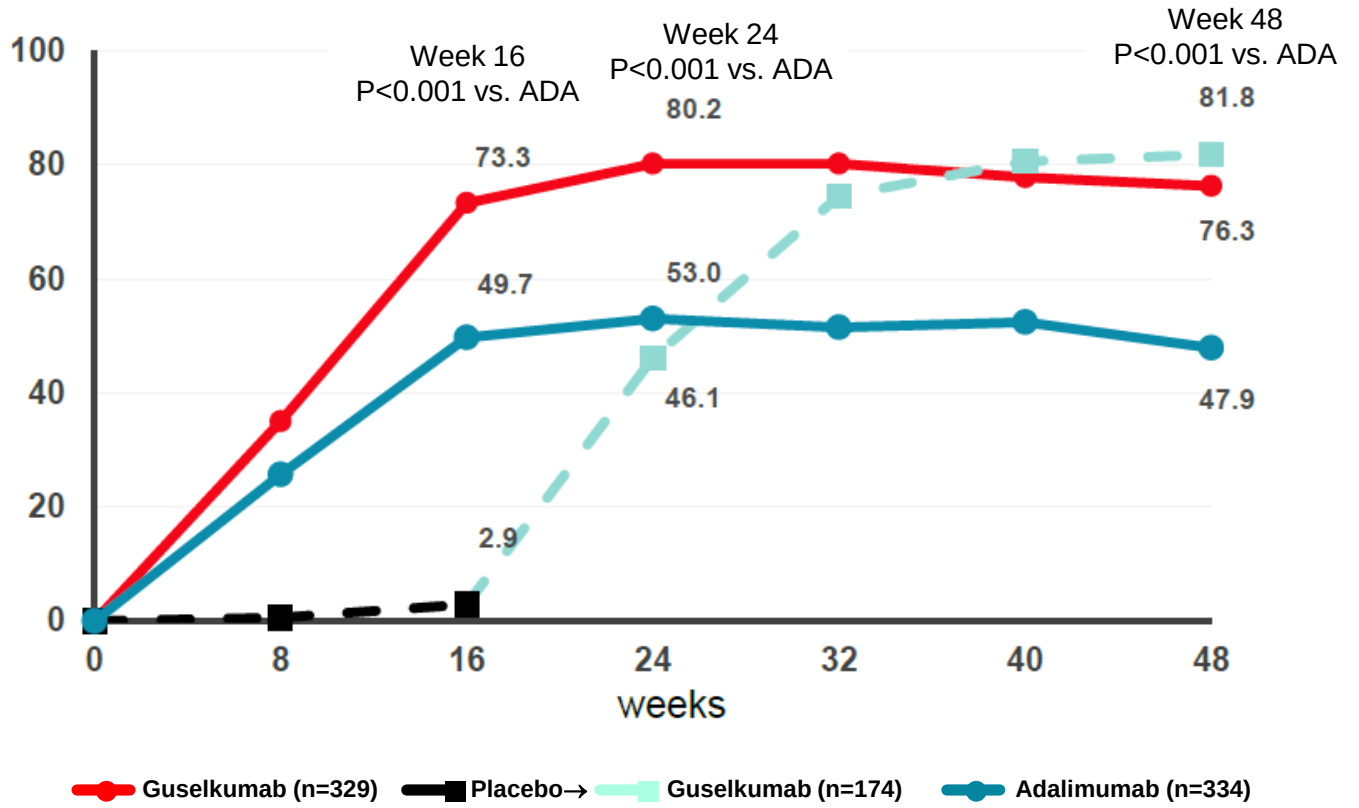
- Filing for psoriasis submitted to FDA and EMA based on one phase 2 and three phase 3 studies
- Phase 2 study in psoriatic arthritis met primary endpoint in Nov. 2016, plans to advance into phase 3



Partnered Discovery Program: Guselkumab

Compelling Efficacy in Phase 3 Trial

VOYAGE 1: PHASE 3 PSORIASIS STUDY RESULTS



Guselkumab:
100 mg at weeks 0, 4, 12 and q8w thereafter through week 148

Adalimumab (Humira®):
80 mg at week 0, followed by 40 mg at week 1 and q2w thereafter through week 48

Data courtesy of

Partnered Discovery Program: Anetumab Ravtansine

Currently in Registrational Phase 2 Study in Mesothelioma

ANETUMAB RAVTANSINE - PHASE 2

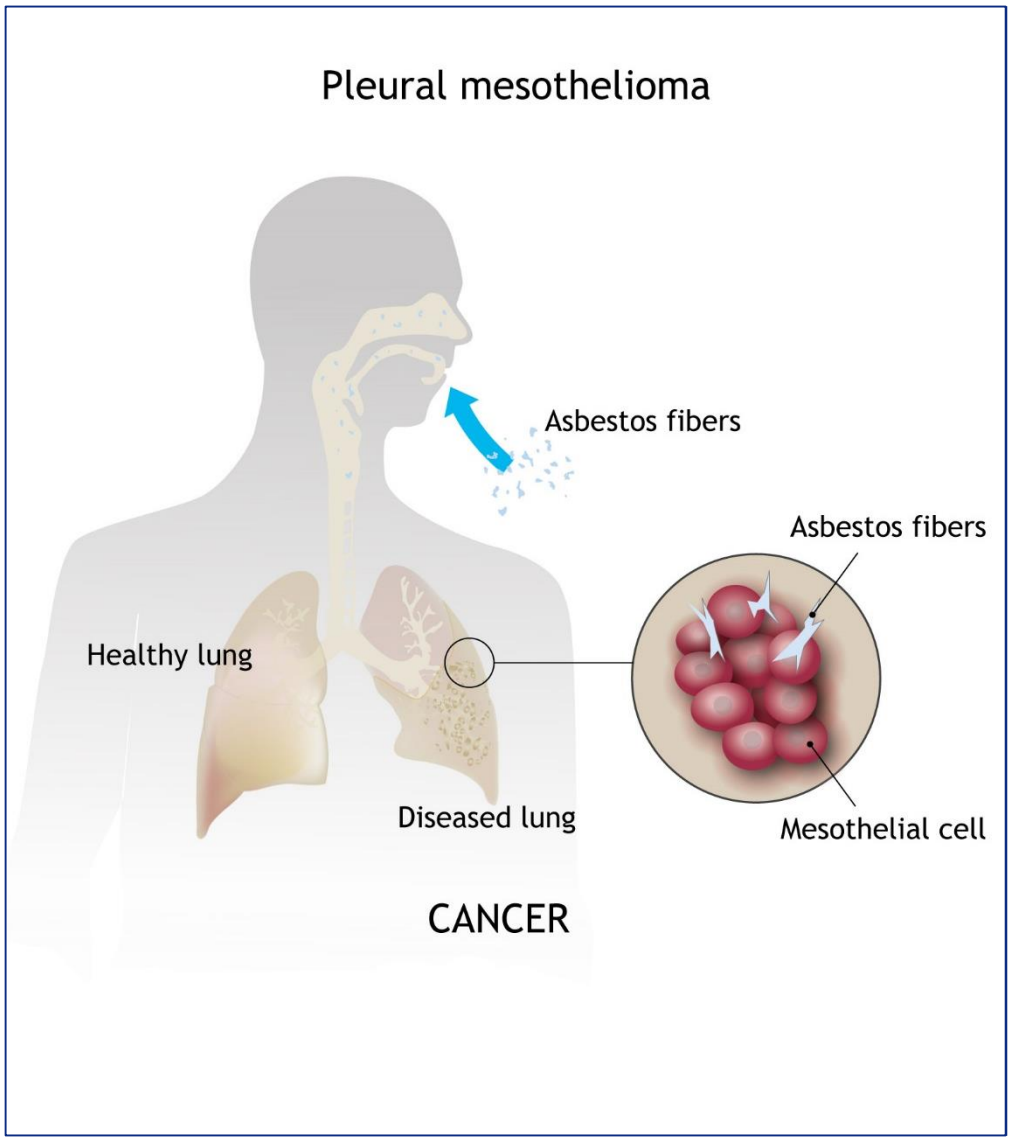
- ADC targeting tumor-associated antigen mesothelin, and delivering toxin DM4, which acts on proliferating cells
- Partnered discovery project with Bayer

KEY FEATURES

- Potential spectrum of indications:
  - mesotheliomas (100%)
  - pancreatic cancer (~80-100%) and
  - ovarian adenocarcinomas (~80%)

STATUS

- Phase 1* with promising results including duration of treatment of > 1,000 days, 31% ORR
- Registrational phase 2 trial in metastatic pleural mesothelioma ongoing
- Seven clinical trials ongoing
- Estimated launch in 2019, peak sales potential over EUR 2bn



* Blumenschein et al. ASCO 2016; ADC: antibody drug conjugate

Selected Other Clinical Assets

Targeting Multiple Diseases with High Medical Need

COMPOUND	PARTNER	TARGET	DISEASE AREA	STATUS
Gantenerumab	Roche	Amyloid-ß	Alzheimer‘s disease	Phase 3
Utomilumab (PF-05082566)	Pfizer	4-1BB	Solid tumors	Phase 2
MOR103/GSK3196165	GSK	GM-CSF	Rheumatoid arthritis Hand osteoarthritis	Phase 2
BI-836845	BI	IGF-1	Solid tumors	Phase 2
Bimagrumab	Novartis	ActRIIB	Hip Fracture Surgery, Sarcopenia	Phase 2
Elgemtumab (LJM716)	Novartis	HER3	Cancer	Phase 2
MOR106	Galapagos	IL-17C	Atopic Dermatitis	Phase 1

Partnered Discovery Programs
Proprietary Development Programs

Expected Pipeline Newsflow

Up to 38 Clinical Data Points Expected in 2017*

PHASE 1	
Anetumab Ravtansine Cancer	**Anetumab Ravtansine** Cancer (+ pemetrexed/cisplatin)
Anetumab Ravtansine Ovarian cancer (+ doxorubicin)	**Anetumab Ravtansine** Hepatic/renal impairment
BAY-1093884 Bleeding disorders	**BI-836845** EGFR mutant NSCLC
Gantenerumab Alzheimer's	**Elgemtumab (LJM716)** Breast cancer (+ BYL716/trastuzumab)
Tesidolumab (LFG316) Kidney Transplantation	**MOR106** Inflammation
Elgemtumab (LJM716) Breast/gastric cancer	**NOV-7** Eye diseases
Utomilumab (PF-05082566) NHL/solid tumors (+ rituximab)	**Utomilumab (PF-05082566)** Solid tumors (+ MK-3475)
Vantictumab (OMP-18R5) NSCLC	**Vantictumab (OMP-18R5)** Pancreatic cancer

PHASE 2	
Anetumab Ravtansine Mesothelioma (MPM)	**BI-836845** Metastatic breast cancer
BI-836845 CRPC (+enzalutamide)	**Guselkumab** Active psoriatic arthritis
Tesidolumab (LFG316) Panuveitis	**Tesidolumab (LFG316)** GA (+ CLG561)
Elgemtumab (LJM716) ESCC (+ BYL716)	**MOR103/GSK3196165** RA
MOR103/GSK3196165 RA	**MOR103/GSK3196165** Osteoarthritis
MOR202 Multiple Myeloma	**MOR208** DLBCL (+ lenalidomide)
Tarextumab (OMP-59R5) Small cell lung canc	**VAY736** Rheumatoid arthritis
VAY736 Primary Sjögren's Syndrome (PD)	**VAY736** Pemphigus Vulgaris

PHASE 3
Guselkumab Psoriasis (VOYAGE 2)
Guselkumab Psoriasis (NAVIGATE)
Guselkumab Pustular / Erythrodermic Psoriasis
Guselkumab Moderate to severe plaque psoriasis (POLARIS)
Guselkumab Severe plaque psoriasis

REGISTRATION
Guselkumab Psoriasis

Partnered Discovery Programs

Proprietary Development Programs

* Anticipated primary completion dates, according to clinicaltrials.gov

Financial Strength

Guidance Confirmed

IN € MILLION	2015	9-MONTHS 2016	GUIDANCE 2016
Group Revenues	**106.2**	**36.7**	**47 to 52**
Proprietary R&D Expenses (incl. Technology Development)	56.6	46.2	76 to 83
EBIT	**17.2**	**-32.3**	**-58 to -68**

IN € MILLION	DEC 31, 2015	SEP 30, 2016
Cash, cash equivalents & marketable securities as well as other short-term and long-term financial assets	298.4	267.2*

*MorphoSys raised additional gross proceeds of EUR 115 million in a capital increase on November 15, 2016

Our Future

TODAY

- First product candidate in registration in the US and Europe
- Maturing clinical pipeline set to deliver a lot of data
- Powerful technology platform delivering differentiated drug candidates

OUR FUTURE

- Marketed products delivering lucrative royalty stream
- Revenues fuel pipeline and R&D engine
- First commercial footprint in Europe established

Appendix

Clinical Programs

Ongoing Clinical Trials (1)

PROGRAM	PARTNER	TARGET	INDICATION	PHASE 1	PHASE 2	PHASE 3
Guselkumab (CNTO1959)	Janssen/J&J	IL23p19	Plaque psoriasis (VOYAGE 1)			
			Plaque psoriasis (VOYAGE 2)			
			Plaque psoriasis (NAVIGATE)			
			Pustular/Erythrodermic psoriasis			
			Plaque psoriasis			
			Plaque psoriasis (POLARIS)			
			Palmoplantar pustulosis			
			Psoriatic arthritis (PsA)			
Gantenerumab	Roche	Amyloid-ß	Mild Alzheimer's disease (Marguerite RoAD)			
			Prodromal Alzheimer‘s disease			
			Genetically predisposed for Alzheimer‘s disease (DIAN)			
			Safety, tolerability, and pharmacokinetics (sc)			
Anetumab Ravtansine (BAY94-9343)	Bayer	Mesothelin	Mesothelioma (MPM)			
			Mesothelin-expressing lung adenocarcinoma			
			Solid tumors			
			Advanced malignancies (Japan)			
			Ovarian cancer (combo with doxorubicin)			
			Solid tumors with hepatic/renal impairment			
			ECG & drug interaction (combo with itraconazole)			
BHQ880	Novartis	DKK-1	Multiple myeloma (MM) (renal insufficiency)			
			Smoldering multiple myeloma			
BI-836845	BI	IGF-1	Breast cancer			
			Castration-resistant prostate cancer (CRPC) (combo with enzalutamide)			
			Solid tumors (Japan)			
			EGFR mutant non-small cell lung cancer (NSCLC)			
Bimagrumab (BYM338)	Novartis	ActRIIB	Muscular atrophy hip fracture surgery			
			Sarcopenia (dose-ranging)			
			Sarcopenia (withdrawal extension study)			
			Type 2 diabetes			
BPS804	Mereo/Novartis	Sclerostin	Osteoporosis			
			Hypophosphatasia (HPP)			
			Brittle bone disease			
CNTO3157	Janssen/J&J		Asthma			
			Safety and pharmacokinetic			
CNTO6785	Janssen/J&J		Chronic obstructive pulmonary disease (COPD)			
			Rheumatoid arthritis (RA)			
Elgemtumab (LJM716)	Novartis	HER3	ESCC (combo with BYL719)			
			HER2+ cancer (combo with BYL719 & trastuzumab)			
			HER2+ cancer (combo with trastuzumab)			

Clinical Programs

Ongoing Clinical Trials (2)

PROGRAM	PARTNER	TARGET	INDICATION	PHASE 1	PHASE 2	PHASE 3
MOR103/GSK3196165	GSK	GM-CSF	Rheumatoid arthritis (RA)			
			Rheumatoid arthritis (RA) (mechanistic study)			
			Hand osteoarthritis			
MOR202	-	CD38	Multiple myeloma (MM)			
MOR208	-	CD19	Chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL) (COSMOS)			
			Diffuse large B cell lymphoma (DLBCL) (B-MIND)			
			Diffuse large B cell lymphoma (DLBCL) (L-Mind)			
			Chronic lymphocytic leukemia (CLL) (IIT study)			
Tarextumab (OMP-59R5)	Oncomed/GSK	Notch 2	Small cell lung cancer (SCLC) (PINNACLE)			
			Solid tumors			
Tesidolumab (LFG316)	Novartis	C5	Age-related geographic atrophy			
			Geographic atrophy (combo with CLG561)			
			Panuveitis			
			Paroxysmal nocturnal hemoglobinuria			
			Transplant associated microangiopathy (TAM)			
			Renal disease patients awaiting kidney transplant			
Utomilumab (PF-05082566)	Pfizer	4-1BB	Solid tumors (JAVELIN medley) (combo with avelumab)			
			Solid tumors, NHL (combo with rituximab)			
			Solid tumors (combo with pembrolizumab)			
			Solid tumors (combo with mogamulizumab)			
			Solid tumors (combo with PF04518600)			
VAY736	Novartis	BAFF-R	Pemphigus vulgaris			
			Primary Sjögren's syndrome			
			Rheumatoid arthritis (RA)			
BAY1093884	Bayer	TFPI	Hemophilia			
MOR106	Galapagos	IL-17C	Atopic dermatitis			
MOR209	Aptevo	n.d.	Prostate cancer			
NOV-7	Novartis	n.d.	Eye disease			
NOV-8	Novartis	n.d.	Inflammation			
NOV-9	Novartis	n.d.	Diabetic eye disease			
NOV-10	Novartis	n.d.	Cancer			
NOV-11	Novartis	n.d.	Blood disorders			
NOV-12	Novartis	n.d.	Prevention of thrombosis			
NOV-13	Novartis	n.d.	Cancer			
Vantictumab (OMP-18R5)	Oncomed/Bayer	Fzd 7	Breast cancer			
			Pancreatic cancer (combo)			
			Non-small-cell lung carcinoma (NSCL)			

Partnered Discovery Programs

MOR Proprietary Programs

Covering Analysts

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Oddo Seydler	Igor Kim

Financial Calendar 2017

DATE	TITLE
March 9, 2017	Publication of year-end results 2016
May 3, 2017	Publication of first quarter interim statement 2017
May 17, 2017	Annual General Meeting 2017
August 3, 2017	Publication of half-year report 2017
November 7, 2017	Publication of third quarter interim statement 2017

Thank You

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