NOVEMBER 2016

Company Update

This presentation includes forward-looking statements.

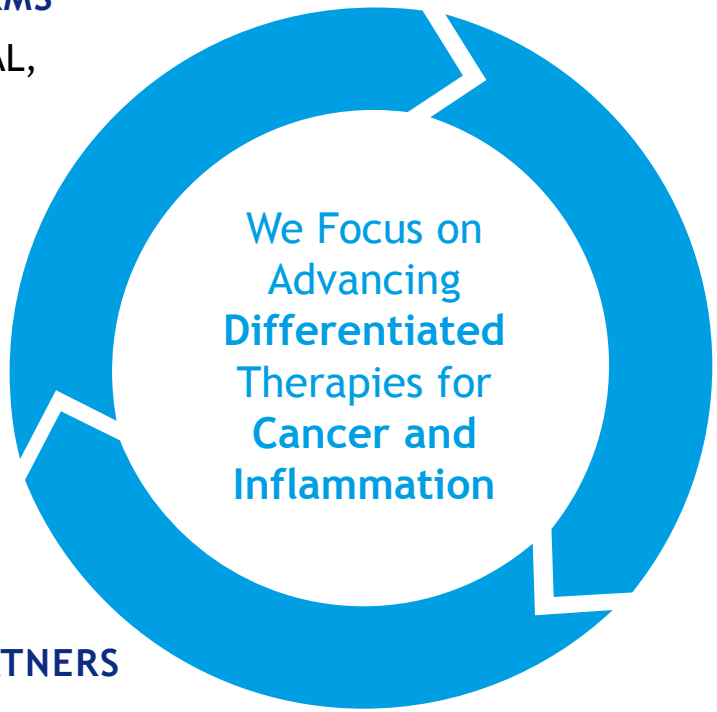
Actual results could differ materially from those included in the forward-looking statements due to various risk factors and uncertainties including changes in business, economic competitive conditions, regulatory reforms, foreign exchange rate fluctuations and the availability of financing. These and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

MorphoSys

Engineering the Medicines of Tomorrow

1 PROVEN TECHNOLOGY PLATFORMS

- Proprietary antibody libraries (HuCAL, Ylanthia) and protein optimization (Slonomics)
- Investing in innovation: e.g. bi-specifics, constrained peptides



2 DIVERSE NETWORK OF PARTNERS

- Broad roster of partnerships from academia to large pharma; target access to co-development
- Terms geared towards building a fully integrated biotech with commercial footprint in Europe

3 ROBUST R&D ENGINE DELIVERING BROAD PIPELINE

- 28 antibodies in clinical development
- Up to 39 clinical read-outs expected in 2016/2017

Business Strategy

Focus on Oncology

Using Recurring Revenues from Multiple Partnerships and a Strong Balance Sheet to Develop Highly Innovative and Valuable Drugs

DEEP ANTIBODY EXPERTISE

- Proven technology platform(s)
  - HuCAL, Ylanthia
- New formats
  - Bi-specifics
  - Lanthipeptides
- Capabilities in novel and difficult targets
  - Immuno-Oncology
  - GPCRs
  - MHC-associated targets

SUCCESSFUL PARTNER DISCOVERY

- First products nearing market
  - Guselkumab filing expected in 2016
- Significant source of revenue
  - Revenues over EUR 650m to date
  - Lucrative longer-term revenue potential from milestones & typically mid-single digit royalties

EVOLVING PROPRIETARY PIPELINE

- Clinical portfolio
  - MOR202/MOR208 nearing phase 2 inflection points
  - Focusing on new targets (MOR106, MOR107, MOR103)
- Pipeline strategy
  - Focus on oncology
  - Data driven pipeline decisions
  - Retain substantial economics
  - Selective out-licensing

Pipeline

Set to Deliver a Lot of Clinical Data

PHASE	2016	2017	
3	Guselkumab – Psoriasis (VOYAGE 1)	Guselkumab - Pustular / Erythrodermic Psoriasis	
	Guselkumab – Psoriasis (VOYAGE 2)		
	Guselkumab – Psoriasis (NAVIGATE)		
2	Guselkumab – Psoriatic Arthritis	Anetumab Ravtansine – Mesothelioma (MPM)	MOR103/GSK3196165 – RA
	LJM716 – ESCC (+ BYL716)	BI-836845 – Metastatic breast cancer	MOR103/GSK3196165 – RA
	MOR202 – Multiple Myeloma	BI-836845 – CRPC (+enzalutamide)	MOR103/GSK3196165 – Osteoarthritis
	MOR208 – CLL (IIT)	Bimagrumab – Hip fracture surgery	MOR202 – Multiple Myeloma
	MOR208 – NHL	Bimagrumab – Sarcopenia (dose ranging)	MOR208 – DLBCL (+ lenalidomide)
	VAY736 – Pemphigus Vulgaris	LFG316 – Panuveitis	Tarextumab – Small cell lung canc
		LFG316 – GA (+ CLG561)	VAY736 – Primary Sjögren's Syndrome (PD)
1	Anetumab Ravtansine – Cancer	Anetumab Ravtansine – Cancer (+ pemetrexed/cisplatin)	LJM716 – Breast cancer (+ BYL716/trastuzumab)
	Gantenerumab – Alzheimer's	Anetumab Ravtansine – Ovarian cancer (+ doxorubicin)	MOR106 – Inflammation
	LJM716 – Breast/gastric cancer	Anetumab Ravtansine – Hepatic/renal impairment	MOR209 – Prostate cancer
		BAY-1093884 – Bleeding disorders	PF-05082566 – NHL/solid tumors (+ rituximab)
		BI-836845 – EGFR mutant NSCLC	PF-05082566 – Solid tumors (+ MK-3475)
		LFG316 – Kidney Transplantation	Vantictumab – NSCLC & pancreatic cancer

Guselkumab

Primary Endpoints in Psoriasis Met

DRUG

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

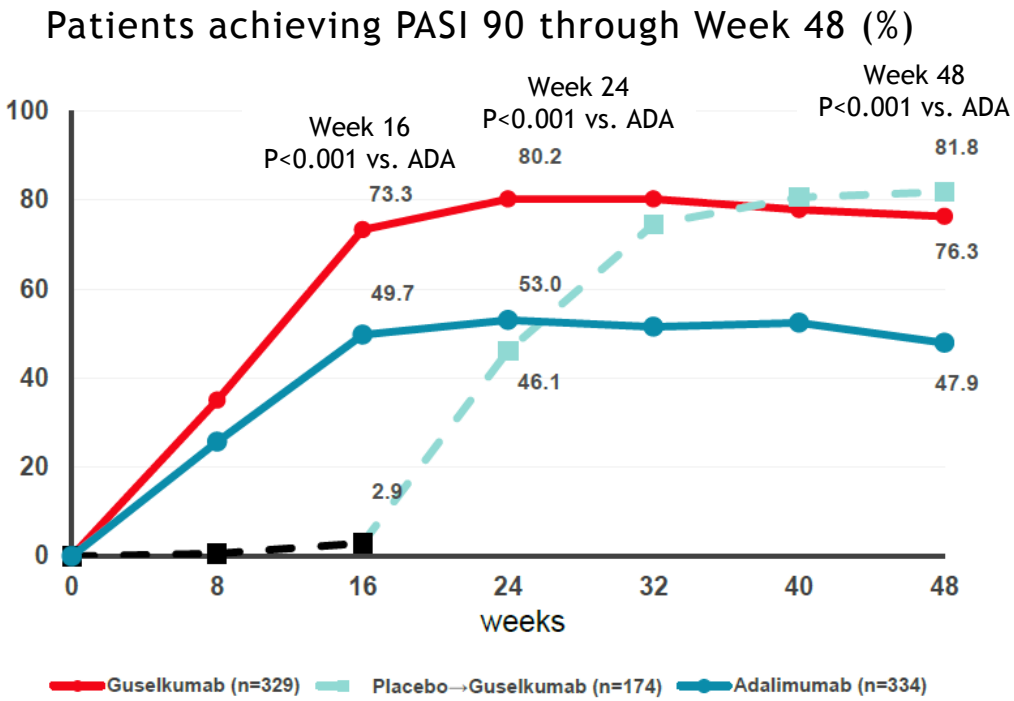
KEY FEATURES

- Potential to provide unique value to patients: High levels of complete and durable skin clearance (52.6% achieved IGA 0 by week 24)
- Less intensive dosing regimens vs. anti-IL-17 class
- Potential for similar safety profile vs. long-term blockade of IL-12 + 23 with STELARA®
- First phase 3 data at EADV: significant efficacy, superior to adalimumab

STATUS

- Six phase 3 clinical trials ongoing
- Anticipated filing for psoriasis in Q4 2016
- Plans to advance into phase 3 for psoriatic arthritis

VOYAGE 1: PHASE 3 PSORIASIS STUDY RESULTS



Adalimumab: 80 mg at Week 0, followed by 40 mg at Week 1 and q2w thereafter through Week 48
Source: Blauvelt, A, et al. EADV 2016. Late breaker

Data courtesy of Janssen

IGA: Investigator's Global Assessment;
EADV: European Asscociation of Dermatology and Venerology

Ones to Watch

Oncology

ANETUMAB RAVTANSINE – PHASE 2

- ADC targeting tumor-associated antigen mesothelin, and delivering toxophore DM4, which acts on proliferating cells (tubulin inhibitor)
- 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 II in metastatic pleural mesothelioma ongoing
- Estimated launch in 2019, peak sales potential over EUR 2bn
- Seven clinical trials ongoing

UTOMILUMAB (PF-05082566) – PHASE 1/2

- Utomilumab is an immunotherapy that activates T cells by signaling through 4-1BB (CD-137)
- Partnered discovery project with Pfizer

KEY FEATURES

- Preclinical studies suggest that combining utomilumab with a checkpoint inhibitor, such as anti-PD-L1, or other immunotherapies may be able to amplify the immune response

STATUS

- First data of utomilumab combined with pembrolizumab in advanced solid tumors showed six CR or PRs (out of 23 patients)
- Five clinical trials ongoing

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

The MOR Portfolio

5 Clinical Product Candidates*

PROGRAM	INDICATION	TARGET	DISCOVERY	PRECLINIC	PHASE 1	PHASE 2	PHASE 3
UNPARTNERED							
MOR208	DLBCL (B-MIND)	CD19			FTD, orphan status US & EU		
	DLBCL (L-MIND)						
	CLL (planned)				Orphan status US & EU		
	CLL (IIT)						
MOR202	Multiple Myeloma	CD38					
MOR107	Fibrosis	AT2-R					
Immuno-oncology program	Cancer	MHC-associated peptides					
6 programs	Various	Various					
CO-DEVELOPMENT AND CO-PROMOTION							
MOR209/ES414 (Aptevo)	Prostate cancer	PSMA/CD3					
MOR106 (Galapagos)	Inflammation	IL-17C					
Immuno-oncology program (Merck)	Cancer	Undisclosed					

* including MOR103, which is out-licensed to GSK

Therapeutic Antibodies in Dermatology

New Opportunities for Antibodies

MOR106 CO-DEVELOPMENT WITH GALAPAGOS

- MOR106 is the first antibody targeting IL-17C in clinical development

KEY FEATURES

- IL-17C plays an important and pro-inflammatory role in certain skin disorders

STATUS

- Phase 1 single ascending dose study in healthy volunteers complete
  - Favorable safety results
- Phase 1 multiple ascending dose study in atopic dermatitis patients ongoing
- First clinical data will be presented in 2017

ALLIANCE WITH LEO PHARMA

- Ylanthia technology will be used to generate fully human antibody candidates for dermatology
- MorphoSys will manage all activities up to the start of clinical testing
- Options
  - Co-develop and, in Europe, co-promote any programs developed for skin cancer
  - Develop and commercialize programs that may find application in other cancer indications
- Another source of future revenues through R&D funding, milestones and royalties
  - Assuming all development, regulatory and sales objectives are reached, milestone payments would sum up to EUR 111.5m per antibody program
- Potential source of new programs for our proprietary portfolio

MOR208 - Overview

Fc-enhanced Antibody to Treat B Cell Lymphoma

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

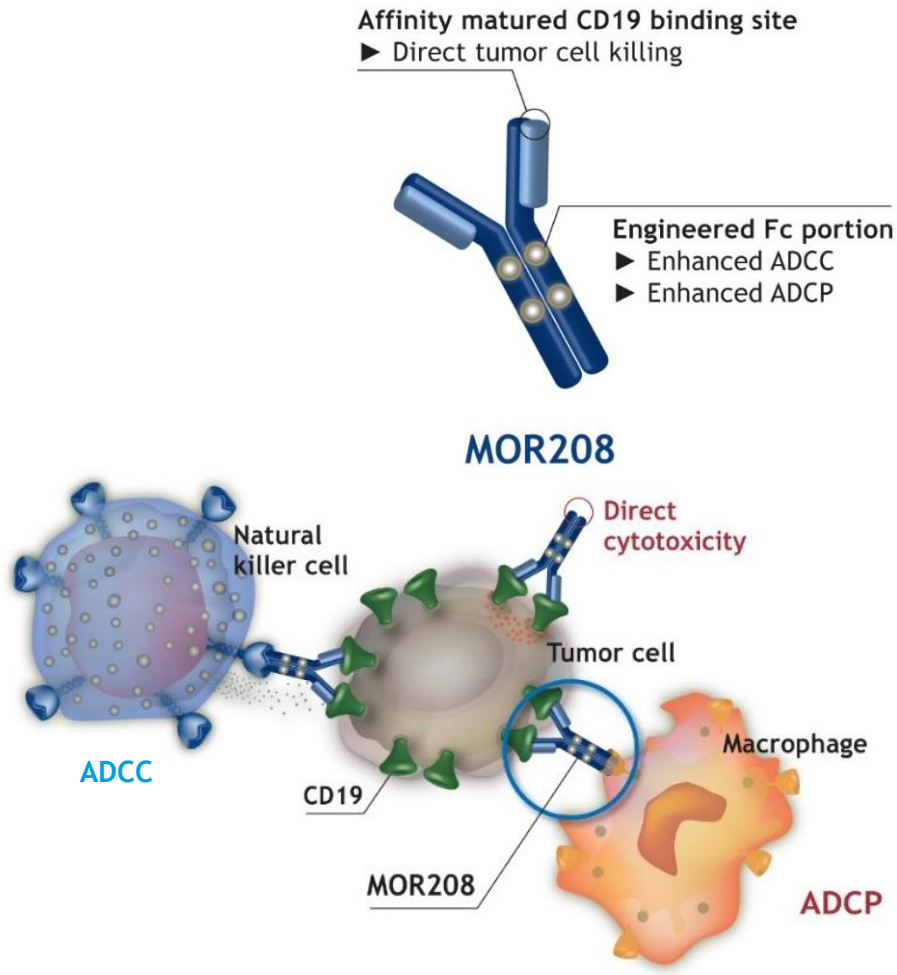
- CD19 preserved after treatment with B cell targeted therapies
- Fc modification dramatically enhances B cell depletion by ADCC, ADCP and direct cytotoxicity

KEY FEATURES

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

STATUS / NEXT DATA

- R/R DLBCL: Two phase 2 trials ongoing
- Ibrutinib-refractory CLL: Phase 2 about to start
- CLL: IIT with Ohio State University ongoing
- Updates at ASH 2016



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

MOR208 – Results from CLL and NHL Trials

Strong Single Agent Efficacy

Phase 2 Trial in R/R NHL

RESPONSE RATE	DLBCL (12 MG/KG)	INHL (12 MG/KG)
In evaluable patients n (%)	n=35	incl. FL n=45
Disease Control Rate (DCR)	14 (40%)	33 (73%)
Overall Response (ORR)	9 (36%)	13 (33%)
Complete response (CR)	2 (6%)	5 (11%)
Partial response (PR)	7 (20%)	8 (18%)
Stable disease (SD)	5 (14%)	20 (44%)

Phase 1 in R/R CLL (dose-escalation)

RESPONSE RATE*	0.3 - 9 MG/KG	12 MG/KG	TOTAL
* Response by IWCLL 2008 criteria (CT scan)	n=11	n=16	n=27
Overall Response (ORR)	2 (18%)	6 (38%)	8 (30%)
Complete Response (CR)	0	0	0
Partial Response (PR)	2 (18%)	6 (38%)	8 (30%)
Stable Disease (SD)	7 (64%)	10 (62%)	17 (63%)
Progressive Disease	2 (18%)	0	2 (7%)

MOR208

Comprehensive Clinical Development Plan

INDICATION	2016	2017	2018
NHL	MOR208 (12 mg/kg; N=92		
DLBCL	**L-MIND** Lenalidomide + MOR208 (12mg/kg) in 2nd line R/R DLBCL; N=80		
	B-MIND Safety evaluation leading into anticipated pivotal study Bendamustine + MOR208 (12 mg/kg) in 2nd line R/R DLBCL vs. rituximab + bendamustine; N~330		
CLL	**COSMOS** MOR208 (12 mg/kg) + idelalisib in CLL BTKi-failures MOR208 (12 mg/kg) + combo partner in CLL BTKi-failures		
	MOR208 (9mg/kg) + lenalidomide; R/R, naive & Richter's Transformation MOR208 + ibrutinib in ibrutinib failures	N=80	

Phase 2 Phase 2/3 IIT: Investigator-initiated trial, John Byrd, Ohio State University

MOR202

A Differentiated Antibody for Multiple Myeloma

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

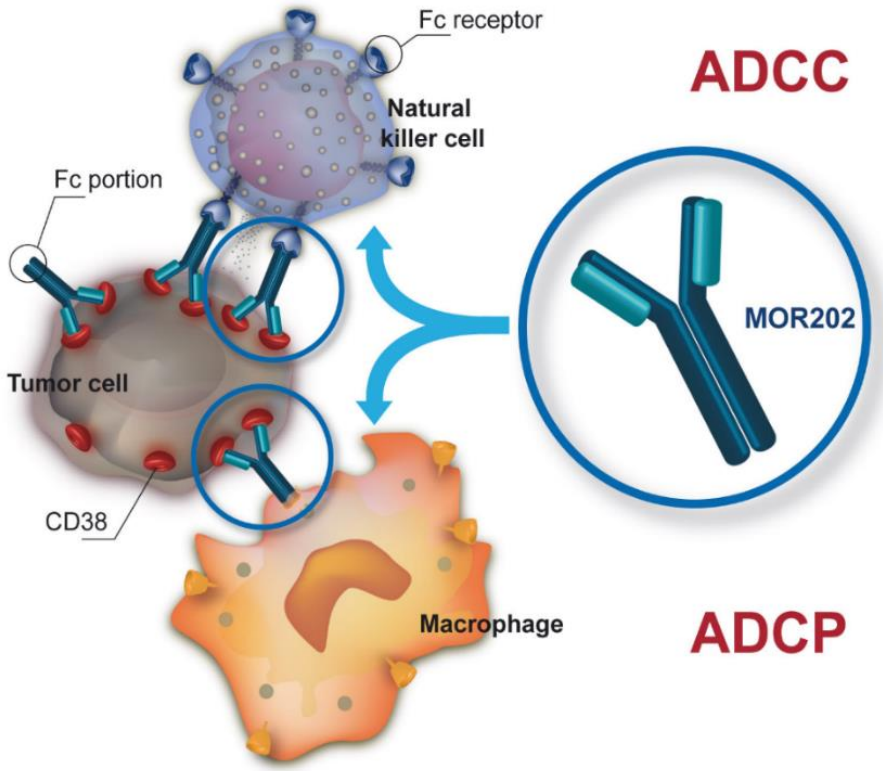
- Targeting a unique epitope of CD38
- Inducing potent immune effector mechanisms ADCC and ADCP

KEY FEATURES

- Preliminary data of an ongoing Phase 1/2a study of MOR202 in patients with rrMM demonstrate best-in-class infusion tolerability, favorable safety and encouraging clinical efficacy
- Pre-clinical data showing preservation of NK cells and maintenance of CD38 expression hint at longer duration of response

STATUS / NEXT DATA

- Phase 1/2a dose escalation study ongoing
- Updated clinical data at ASH 2016

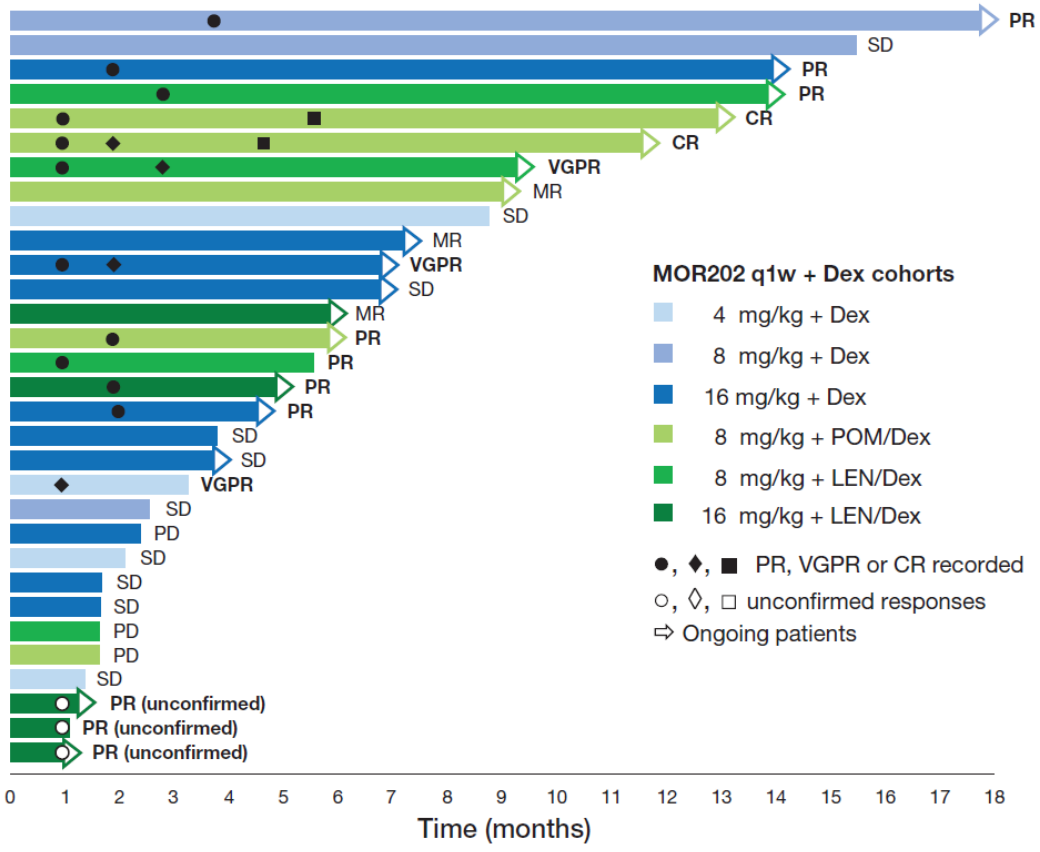


ADCC: Antibody-Dependent Cell-Mediated Cytotoxicity;
ADCP: Antibody-Dependent Cell-Mediated Phagocytosis

MOR202: Preliminary Phase 1/2a Data

Time on Study and Best Response

MOR202 Q1W + DEX COHORTS



Raab et al., Annual Meeting of DGHO, ÖGHO, SGMO and SGH October 14-18, 2016: Abstract P235

CLINICAL RESULTS

RESPONSE RATE	MOR202 +Dex	MOR202 +POM/Dex	MOR202 +LEN/Dex
In evaluable patients n (%)	n=17	n=4*	n=9
Clinical Benefit Rate (DCR)	16 (94%)	3 (75%)	8 (89%)
Overall Response (ORR)	5 (29%)	3 (75%)	7 (78%)
Complete response (CR)	0	2 (50%)	0
Partial response (PR) & very good partial response (VGPR)	5 (29%)	1 (25%)	7 (78%)
Minimal Response (MR)	1 (6%)	0	1 (11%)
Stable disease (SD)	10 (59%)	0	0
Progressive Disease (PD)	1 (6%)	1 (25%)	1 (11%)

* treated per protocol

ENDURING RESPONSES

- 12/15 responses are ongoing

LONG MAXIMUM DURATION OF RESPONSE

- MOR202: 12 months+ (PR)
- MOR202+POM/Dex: 11 months+ (CR)
- MOR202+LEN/Dex: 10 months+ (PR)

FAVORABLE TOLERABILITY PROFILE

MOR202 administered in doses of up to 16 mg/kg as a 2-hour intravenous infusion with low incidence of infusion-related reactions

Financial Strength

to Support Long-term Growth

CONTINUE TO INVEST IN INNOVATIVE PROPRIETARY PIPELINE

- Disciplined allocation based on highly differentiated product profiles
- Opportunistic to in-licensing of complementary assets and/or novel technology

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

Objectives 2016

Bimagrumab	sIBM	Data from pivotal trial and regulatory filing expected	✗
Guselkumab	Psoriasis	Data from 3 pivotal trials and regulatory filing expected	✓
MOR208	DLBCL	■ Phase 2 lenalidomide combo trial L-MIND starts ■ Phase 2 bendamustine combo trial B-MIND: – Safety evaluation to start mid 2016 – Pivotal study planned for 2017	✓ ✓ ✓
	CLL	Phase 2 combo trial in planning	
MOR202	MM	Updated data from phase 1/2a trial at ASCO 2016	✓
MOR209	Prostate cancer	Continuation of phase 1 trial under amended protocol, clinical data in 2017	
MOR106	Inflammation	Start of phase 1 with Galapagos in H1 2016	✓
MOR107	Fibrosis	Start of phase 1 in Q4 2016	
MOR103	Osteoarthritis RA	■ Start of phase 1b/2a in osteoarthritis of the hand ■ Data from the phase 2b in RA in 2017	✓
Pipeline		■ Up to 5 new program starts ■ Around 5 clinical milestones	✓✓✓✓✓ ✓✓✓✓

A Vision for the Future

TODAY

- First products nearing market
- Investing in proprietary pipeline
- Strong technology platform delivering differentiated drug candidates

THE FUTURE

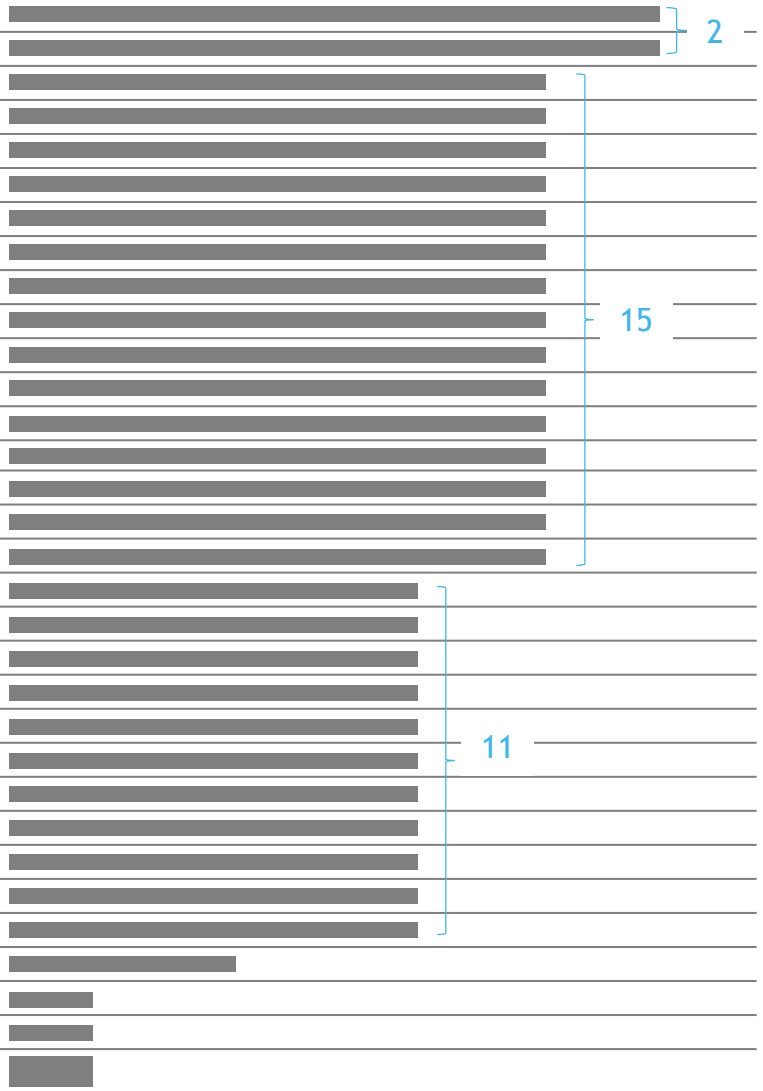
- Fully-integrated biotech
- Commercial footprint in EU
- Sustainable income from partner royalties
- Fuels pipeline and R&D engine

Appendix

The MorphoSys Pipeline

28 Clinical Product Candidates, 104 Total

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	-	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
MOR107 (LP2)	-	AT2-R	Fibrosis
Immuno-oncology program	Merck	-	Cancer
Immuno-oncology program	Immatics	-	Cancer
6 MOR programs	-	-	Various



In addition, 23 partnered programs in preclinic, and 44 partnered programs in discovery

Clinical Programs

Ongoing Clinical Trials (1)

PROGRAM	PARTNER	TARGET	INDICATION	PHASE 1	PHASE 2	PHASE 3
Guselkumab (CNTO1959)	Janssen/J&J	IL23p19	Psoriasis (VOYAGE 1)			
			Psoriasis (VOYAGE 2)			
			Psoriasis (NAVIGATE)			
			Pustular/Erythrodermic psoriasis			
			Moderate to severe plaque-type psoriasis			
			Palmoplantar pustulosis			
			Active psoriatic arthritis			
Gantenerumab	Roche	Amyloid-ß	Mild Alzheimer‘s disease			
			Prodromal Alzheimer‘s disease			
			Genetically predisposed			
			Safety, Tolerability, and PK (sc)			
Anetumab Ravtansine (BAY94-9343)	Bayer	Mesothelin	Mesothelioma (MPM)			
			Adenocarcinoma			
			Solid tumors, with pemetrexed and cisplatin			
			Advanced malignancies (Japan)			
			Ovarian cancer, with doxorubicin			
			Solid tumors with hepatic/renal impairment			
			ECG & drug interaction (with itraconazole)			
BI-836845	BI	IGF-1	Metastatic breast cancer			
			CRPC + enzalutamide			
			Solid tumors, Japanese patients			
			EGFR mutant NSCLC			
BHQ880	Novartis	DKK-1	MM (renal insufficiency)			
			Smoldering MM			
Bimagrumab (BYM338)	Novartis	ActRIIB	Hip fracture surgery			
			Sarcopenia (dose-ranging)			
			Sarcopenia (withdrawal extension study)			
BPS804	Mereo/Novartis	Sclerostin	Osteoporosis			
			Hypophosphatasia (HPP)			
			Osteogenesis Imperfecta			

Clinical Programs

Ongoing Clinical Trials (2)

PROGRAM	PARTNER	TARGET	INDICATION	PHASE 1	PHASE 2	PHASE 3
CNTO3157	Janssen/J&J		Asthma			
			Safety/Pharmacokinetic			
CNTO6785	Janssen/J&J		COPD			
			Rheumatoid arthritis			
LFG316 (tesidolumab)	Novartis	C5	Age-related geographic atrophy			
			Geographic atrophy (combo with CLG561)			
			Panuveitis			
			Paroxysmal nocturnal hemoglobinuria			
			Transplant associated microangiopathy (TAM)			
			Kidney transplantation			
LJM716 (elgemtumab)	Novartis	HER3	ESCC (combo with BYL719)			
			HER2+ cancer (combo BYL719 & trastuzumab)			
			HER2+ cancer, combo with trastuzumab			
MOR103	GSK	GM-CSF	Rheumatoid arthritis			
			Rheumatoid arthritis (mechanistic study)			
			Osteoarthritis of the hand			
MOR202	-	CD38	Multiple myeloma			
MOR208			DLBCL (B-Mind)			
			DLBCL (B-Mind)			
			CLL (IIT, combo with lenalidomide)			
Tarextumab (OMP-59R5)	Oncomed/GSK	Notch 2	Small cell lung cancer (Pinnacle)			
			Solid tumors			
VAY736	Novartis	BAFF-R	Pemphigus vulgaris			
			Primary Sjögren's syndrome			
			Rheumatoid arthritis			
BAY1093884	Bayer	TFPI	Bleeding disorders			
MOR106	Galapagos	n.d.	Inflammation			
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			
Utomilumab (PF-05082566)	Pfizer	4-1BB	JAVELIN medley			
			Solid tumors, NHL (+rituximab)			
			Solid tumors, with pembrolizumab			
			Advanced solid tumors, with mogamulizumab			
			Solid tumors, with PF04518600 (OX-40)			
Vantictumab (OMP-18R5)	Oncomed/Bayer	Fzd 7	Metastatic breast cancer			
			Pancreatic cancer (combo)			
			NSCL			

Covering Analysts

INSTITUTION	CONTACT
Baader Helvea	Bruno Bulic
Bryan Garnier	Mickael Chane-Du
Commerzbank	Daniel Wendorff
Deutsche Bank	Gunnar Romer
Edison	Maxim Jacobs
Goldman Sachs	Tim Woodward
HSBC	Julie Mead
Independent Research GmbH	Bernhard Weininger
J.P. Morgan Cazenove	James Gordon
Kempen & Co.	Anastasia Karpova
Landesbank Baden-Württemberg	Timo Kürschner
Oddo Seydler	Igor Kim

Thank You

Anke Linnartz
Head of Corporate Communications & IR
Phone +49 (0)89 / 899 27-404
Fax +49 (0)89 / 899 27-5404
Email investors@morphosys.com

www.morphosys.com