morphosys

February 14+15, 2018

Engineering the Medicines of Tomorrow

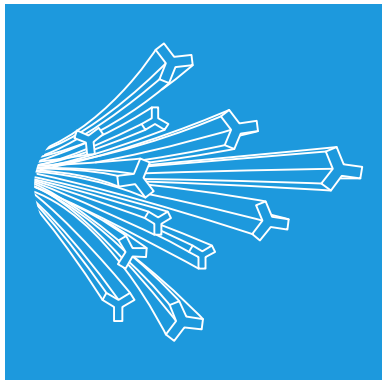
Company Update

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.

The compounds discussed in this slide presentation are investigational products being developed by MorphoSys and its partners and are not currently approved by the U.S. Food and Drug Administration (FDA), European Medicine Agency (EMA) or any other regulatory authority (except for guselkumab/Tremfya®).

Investment Highlights



Pipeline

Leading antibody platform: over 100 active programs*, 28 in clinic

Tremfya®

Potential blockbuster, offers lucrative royalty opportunity

MOR208

Late-stage, proprietary candidate with promising data in DLBCL

*Probability of success cannot be predicted

Business Model

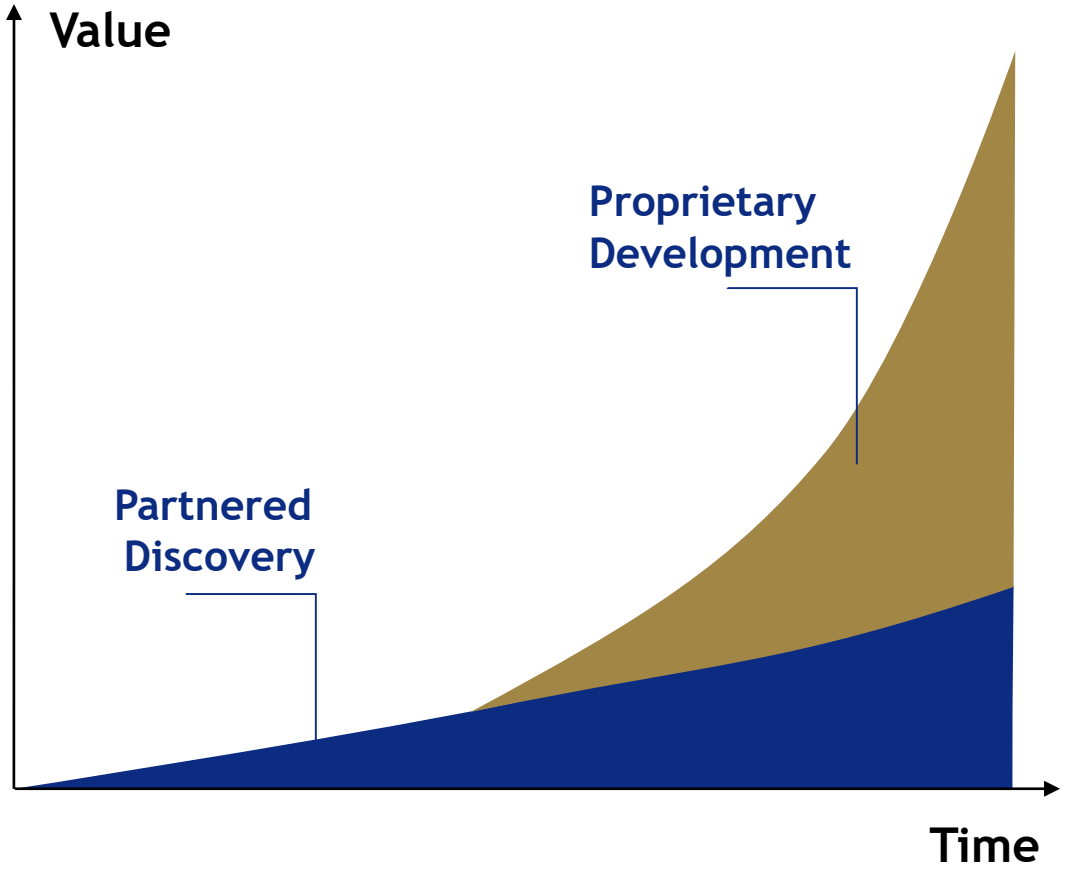
Building a Commercial, Product-Based Biopharmaceutical Company

Partnered Discovery

- Maximizing utilization of technology
- Lucrative source of revenue from licence fees, milestones & royalties

Proprietary Development

- Focus on oncology/inflammation
- Retained rights translate into greater revenue potential



Our Clinical Pipeline

28 Product Candidates in Clinical Development, First Product Launched

Program	Partner	Target	Disease area	Phase 1	Phase 2	Phase 3	Launched
Tremfya® (Guselkumab)*	Janssen	IL-23p19	Psoriasis				✓
Gantenerumab	Roche	Amyloid-ß	Alzheimer's disease				
MOR208	-	CD19	Hematological malignancies				
Anetumab Ravtansine (BAY94-9343)	Bayer	Mesothelin (ADC)	Solid tumors				
BHQ880	Novartis	DKK-1	Multiple myeloma				
Bimagrumab (BYM338)	Novartis	ActRIIB	Musculoskeletal diseases				
CNTO6785	Janssen	-	Inflammation				
Elgemtumab (LJM716)	Novartis	HER3	Cancer				
MOR103/GSK3196165**	GSK	GM-CSF	Inflammation				
MOR202	I-Mab Biopharma***	CD38	Multiple myeloma				
Setrusumab (BPS804)	Mereo/Novartis	Sclerostin	Brittle bone syndrome				
Tesidolumab (LFG316)	Novartis	C5	Eye diseases				
Utomilumab (PF-05082566)	Pfizer	4-1BB	Cancer				
VAY736	Novartis	BAFF-R	Inflammation				
Xentuzumab (BI-836845)	BI	IGF-1	Solid tumors				
BAY1093884	Bayer	TFPI	Hemophilia				
MOR106	Galapagos	IL-17C	Inflammation				
MOR107 (LP2-3)****	-	AT2-R	Not disclosed				
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				
NOV-14	Novartis	-	Asthma				
PRV-300 (CNTO3157)	ProventionBio	TLR-3	Inflammation				
Vantictumab (OMP-18R5)	OncoMed	Fzd 7	Solid tumors				

2

12

13

Partnered Discovery Programs
Proprietary Development Programs

* We still consider Tremfya® a phase 3 compound due to ongoing studies in various indications.
** MOR103/GSK3196165 is fully outlicensed to GSK.
*** For development in the Greater China market (China, Hong Kong, Taiwan, Macao).
**** A phase 1 study in healthy volunteers was completed. MOR107 is currently in preclinical investigation with a focus on oncology indications.

MOR208: Proprietary Antibody in Hematological Cancers

An Investigational Anti-CD19 Program for B Cell Malignancies

The Drug Candidate

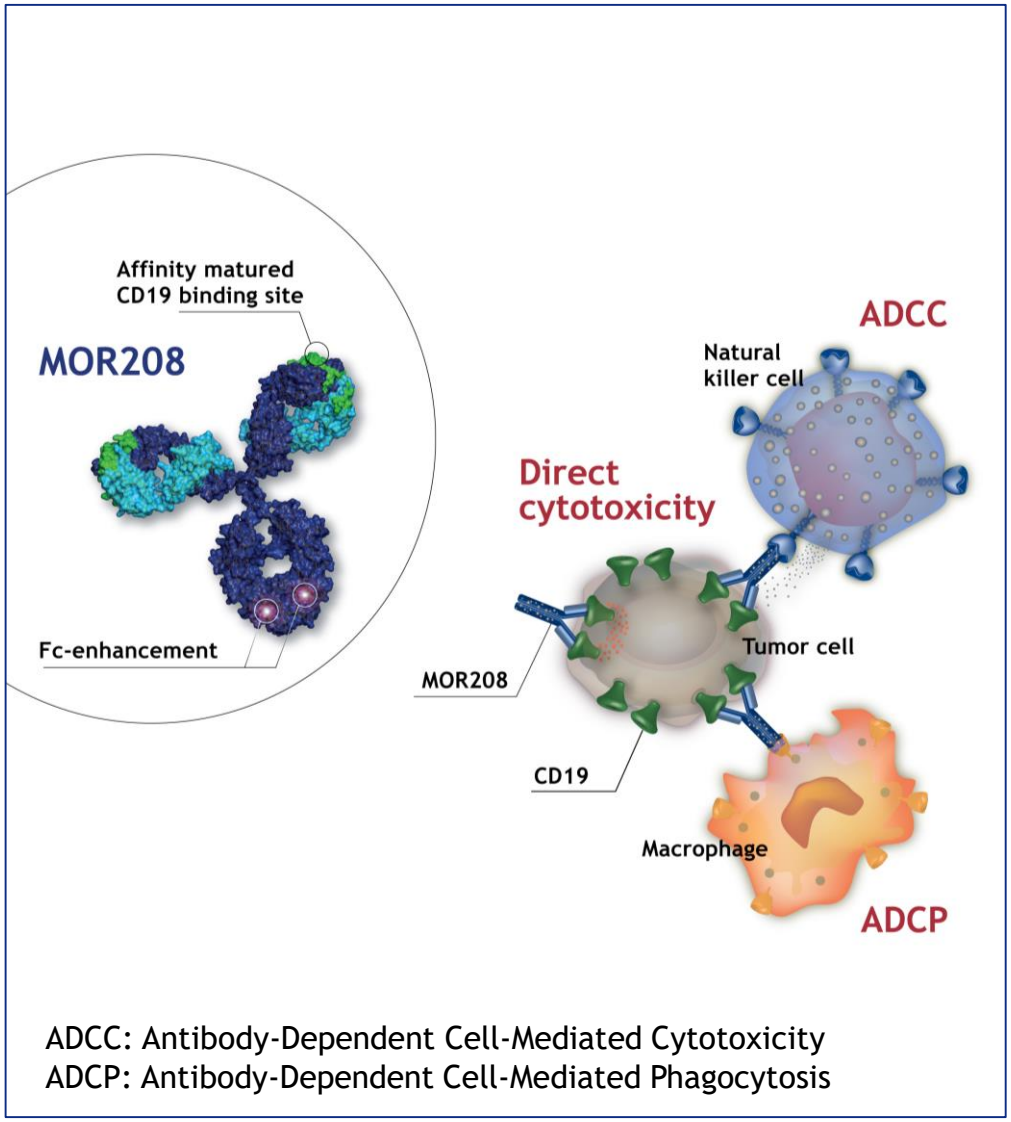
- IgG1 kappa antibody targeting CD19
- In-licensed from Xencor
- Fc-engineered to enhance target cell-killing

Mode of Action

- ADCC, phagocytosis, direct cytotoxicity

Strong Preclinical Package

- Depletes B cells in *in vitro* and *in vivo* models
- Rationale for multiple combination therapies

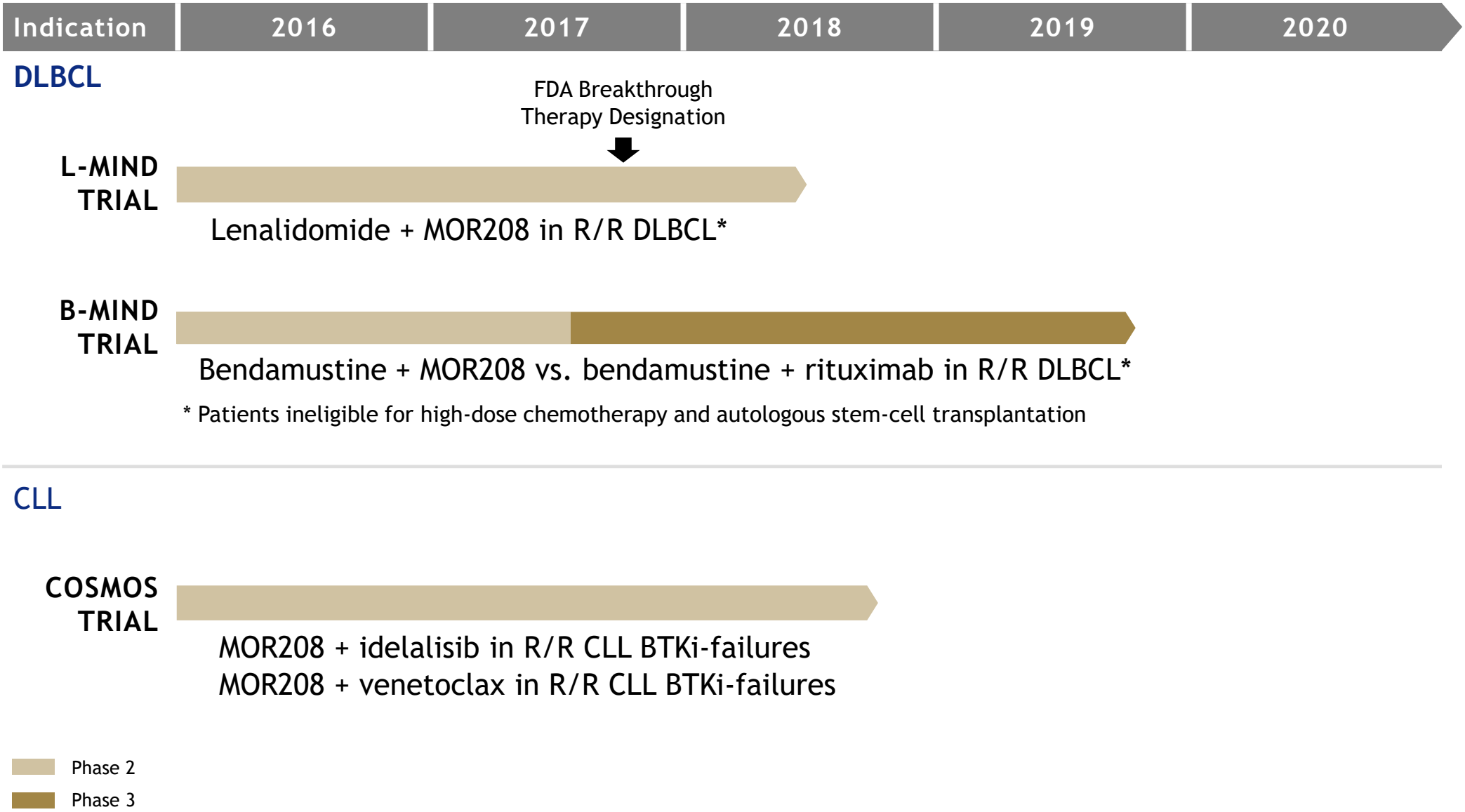


ADCC: Antibody-Dependent Cell-Mediated Cytotoxicity
ADCP: Antibody-Dependent Cell-Mediated Phagocytosis

W Jurczak et al.; ASH 2016

MOR208: Clinical Development Plan

Opportunity Across Spectrum of B Cell Malignancies



Existing and Upcoming Approaches in R/R DLBCL

Please Note Limitations of Cross-trial Comparisons to Literature Data

Parameter	L-MIND Salles et al., 2017*	Dang et al., 2014	Sehn et al., 2017	Scholar-1 Crump et al., 2017	Juliet Schuster et al., 2017	Zuma-1 Neelapu et al., 2017
Compound(s)	MOR208 + lenalidomide	RTX + bendamustine	Polatuzumab + RTX + bendamustine	Salvage chemotherapies + radiation	Tisagenlecleucel (CTL019)	Axi-CEL (CD19 CAR-T)
Phase	II	III	II	Retrospective study	II	II
Evaluable patient population	R/R DLBCL n=44	R/R DLBCL n=137	R/R DLBCL n=40	R/R DLBCL n=636	R/R DLBCL n=81	DLBCL,FL, PMBCL n=101 (DLBCL n=77)
Objective response rate	52%	49%	70%	26%	53%/37% Best/@6 mo	82%/48% Best/@6 mo
Complete response rate	32%	18%	58%	7%	40%/30% Best/@6 mo	58%/46% Best/@6 mo
Median PFS, months	**11.3** (preliminary)	4.2	6.7	n/a	NR**	5.8
Median overall survival, months	NR**	9.5	11.8	6.3	NR**	NR**

* Data cut-off June 13th, 2017; ** NR, not reached. n/a, no information available. R/R, relapsed/refractory; DLBCL, Diffuse Large B-cell Lymphoma; RTX, rituximab; OBI, obinutuzumab; CR, complete response; ORR, objective response rate; PFS, progression-free survival

MOR202: Proprietary Anti-CD38 Antibody

An Antibody for Multiple Myeloma & Potentially Other Cancers

The Drug Candidate

- Developed to target a unique epitope on CD38
- ADCC & ADCP cell-killing mechanisms
- Low NK cell depletion, which may translate into longer duration of response

Clinical*

- Efficacy
  - Patient with longest time on study in RRMM with ongoing response: >22 months
- Convenience
  - Infusion time of 2h
  - Shorter infusion time being explored
- Potentially opportunities in other oncology indications and auto-immune diseases

Efficacy*	Objective Response Rate (ORR)
MOR202+DEX	28%
MOR202+LEN/DEX	71%
MOR202+POM/DEX	46%

Safety**	Infusion Related Reactions (Grade 1+2)
MOR202+DEX	11%
MOR202+LEN/DEX	6%
MOR202+POM/DEX	0%

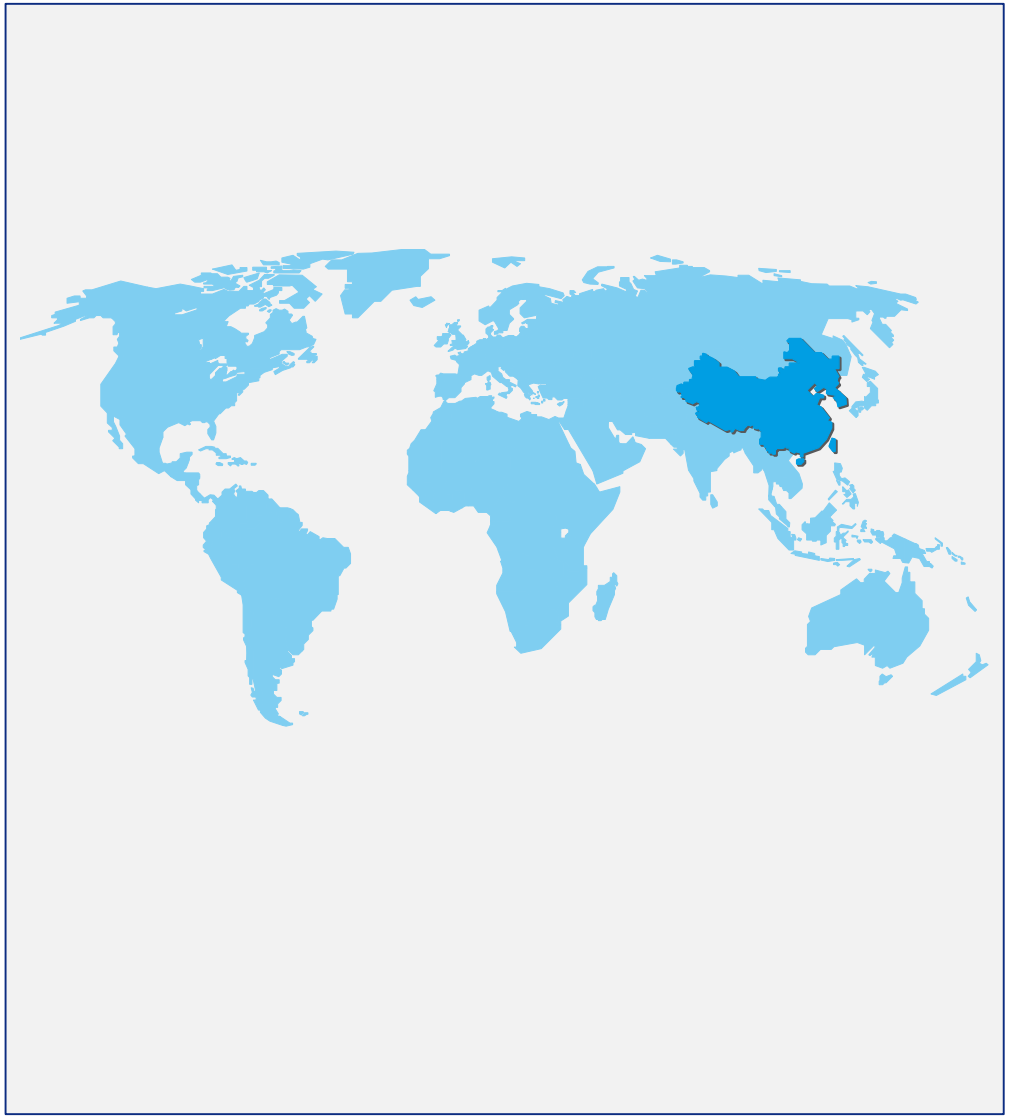
*From ongoing phase 1/2a trial in RRMM: Raab et al., Poster presentation at ASCO, June 5, 2017: Abstract #8024

*Modified from Raab et al, ASCO 2017; ITT population shown
**Raab et al., Poster Presentation at ASCO, June 5, 2017: Abstract #8024

MOR202: First Partnering Deal

Agreement with I-Mab Biopharma for Greater Chinese Market

- Agreement signed November 30, 2017
- I-Mab receives exclusive development and commercialization rights in China, Taiwan, Hong Kong and Macao
- Payments to MorphoSys
  - $20 million upfront
  - Up to $100 million milestones
  - Tiered, double digit royalties
- I-Mab's head of R&D was formerly responsible for the clinical development of Daratumumab in China as Janssen China's head of development



Partnered Discovery Program: Tremfya® (Guselkumab)

Janssen's novel biologic being developed for immune-mediated diseases

The Drug

- First-in-class anti-IL-23 human monoclonal antibody
- Generated using MorphoSys's HuCAL technology

Status

- Approved in U.S., EU, Canada for moderate-to-severe plaque psoriasis
- First royalties will be reflected in FY 2017 results

Differentiation

- Compelling clinical efficacy
- Convenience: 8-weekly s.c. dosing

Phase 3 Trials

- Head-to-head vs. Cosentyx® in plaque psoriasis: ongoing
- Psoriatic arthritis: 2 trials ongoing
- Crohn's disease: planned

Tremfya®
(guselkumab)

janssen
PHARMACEUTICAL COMPANIES OF Johnson & Johnson

Financial Guidance 2017*

Updated November 30, 2017

In € million	Q1-Q3 2017	Guidance 2017 (Issued March 9, 2017)	Guidance 2017 (Updated Nov. 30, 2017)
Group Revenues	**38.6**	**46 to 51**	**63 to 66**
Proprietary R&D Expenses (incl. Technology Development)	80.5	**85 to 95**	**96 to 100**
EBIT	**(53.8)**	**(75) to (85)**	**(66) to (71)**
Cash, cash equivalents & marketable securities as well as other short-term and long-term financial assets (end of reporting period)	**319.5**		

Total shares issued (as of January 31, 2018): 29,420,785
MorphoSys is listed on the Frankfurt Stock Exchange under the symbol MOR

*Guidance for revenues and EBIT includes royalty income on Tremfya® sales in Q3 2017. Royalty income based on Tremfya® sales in Q4 2017 will be booked in Q1 2018.

Proprietary Portfolio: Expected Newsflow 2018

Compound	Indication	Expected Newsflow
MOR208	DLBCL	**L-MIND:** Updated development plan following BTD interactions with FDA, Q1 2018
	CLL	**COSMOS**: Updates at medical conferences 2018
MOR202 (I-Mab Biopharma*)	Multiple myeloma	■ Further partnering discussions ongoing ■ Final data phase 1/2a study – late 2018
MOR106	Atopic dermatitis	Start of phase 2 trial – Q2 2018
MOR103/ GSK3196165**	Rheumatoid arthritis	Data from phase 2b trial
	Hand osteoarthritis	Data from phase 2a trial

* For development in Greater Chinese Market (China, Hong Kong, Taiwan, Macao) **MOR103/GSK3196165 is fully outlicensed to GSK.

Partnered Pipeline: Expected Primary Completion Dates

Up to 19 Clinical Phase 2 and 3 Read-outs Potentially Due in 2018*

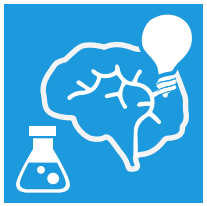
Phase 2		Phase 3
Setrusumab (BSP804; Sclerostin) Type I, III or IV Osteogenesis Imperfecta (ASTEROID)	**Setrusumab (BSP804; Sclerostin)** Type I, III or IV Osteogenesis Imperfecta (METEOROID)	**Gantenerumab (Amyloid-ß)** Mild Alzheimer's disease (open label extension)
Bimagrumab (BYM338; ActRIIB) Muscular atrophy after hip fracture surgery	**Bimagrumab (BYM338; ActRIIB)** Sarcopenia	**Guselkumab (IL-23p19)** Pustular or Erythrodermic Psoriasis
Tesidolumab (LFG316; C5) Geographic atrophy (+ CLG561)	**Tesidolumab (LFG316; C5)** Panuveitis	**Guselkumab (IL-23p19)** Moderate to severe plaque psoriasis
Tesidolumab (LFG316; C5) Paroxysmal nocturnal hemoglobinuria	**VAY736 (BAFF-R)** Rheumatoid arthritis	**Guselkumab (IL-23p19)** Moderate to severe plaque psoriasis (ECLIPSE; Head-to-head with Cosentyx®)
VAY736 (BAFF-R) Primary Sjögren's syndrome	**VAY736 (BAFF-R)** Pemphigus Vulgaris	**Guselkumab (IL-23p19)** Moderate to severe plaque psoriasis (POLARIS; Comparison to Fumaric Acid Esters)
Xentuzumab (BI-836845; IGF-1) Prostate cancer (+ enzalutamide)	**Xentuzumab (BI-836845; IGF-1)** Breast cancer	**Guselkumab (IL-23p19)** Palmoplantar Pustulosis
		Guselkumab (IL-23p19) Severe plaque psoriasis

*Anticipated primary completion dates, according to clinicaltrials.gov

Our Future

Lucrative milestone & royalty streams from deep partnered pipeline

Commercializing own products in selected geographies



Innovative science and technology driving expansion of proprietary portfolio

Attractive partner for big pharma and biotech

A fully-integrated biopharmaceutical company

Appendix

Clinical Programs

Ongoing Clinical Trials (1)

Program	Partner	Target	Indication	Phase 1	Phase 2	Phase 3	Launched
Guselkumab (CNTO1959)	Janssen/J&J	IL23p19	Plaque psoriasis				
			Plaque psoriasis (VOYAGE 1)				
			Plaque psoriasis (VOYAGE 2)				
			Pustular/Erythrodermic psoriasis				
			Plaque psoriasis				
			Plaque psoriasis (POLARIS)				
			Palmoplantar pustulosis				
			Moderate to severe plaque psoriasis (efficacy & safety)				
			Moderate to severe plaque psoriasis (ECLIPSE)				
			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)				
			Pain, tolerability, safety and pharmacokinetics (sc)				
			Bioavailability (sc)				
MOR208	-	CD19	Diffuse large B cell lymphoma (DLBCL) (B-MIND)				
			Chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL) (COSMOS)				
			Diffuse large B cell lymphoma (DLBCL) (L-MIND)				
Anetumab Ravtansine (BAY94-9343)	Bayer	Mesothelin	Mesothelioma (MPM)				
			Cancer multi-indications				
BHQ880	Novartis	DKK-1	Multiple myeloma (MM) (renal insufficiency)				
			Smoldering multiple myeloma				
Bimagrumab (BYM338)	Novartis	ActRIIB	Muscular atrophy hip fracture surgery				
			Sarcopenia (dose-ranging)				
			Sarcopenia (withdrawal extension study)				
			Type 2 diabetes				
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)				

Partnered Discovery Programs
Proprietary Development Programs

Clinical Programs

Ongoing Clinical Trials (2)

Program	Partner	Target	Indication	Phase 1	Phase 2	Phase 3	Launched
MOR103/GSK3196165*	GSK	GM-CSF	Rheumatoid arthritis (RA)				
			Rheumatoid arthritis (RA) (mechanistic study)				
			Hand osteoarthritis				
			Rheumatoid arthritis (RA) (combo with methotrexate)				
MOR202	I-Mab Biopharma**	CD38	Multiple myeloma (MM)				
Setrusumab (BPS804)	Mereo/Novartis	Sclerostin	Osteoporosis				
			Hypophosphatasia (HPP)				
			Brittle bone disease				
			Brittle bone disease (Type I, III, IV) (ASTEROID)				
			Brittle bone disease (Type I, III, IV) (METEOROID)				
Tesidolumab (LFG316)	Novartis	C5	Age-related geographic atrophy				
			Geographic atrophy (combo with CLG561)				
			Panuveitis				
			Paroxysmal nocturnal hemoglobinuria				
			Renal disease patients awaiting kidney transplant				
Utomilumab (PF-05082566)	Pfizer	4-1BB	Solid tumors (JAVELIN medley) (combo with avelumab)				
			Advanced Malignancies (combo with avelumab and PF-04518600)				
			Solid tumors (combo with ISA101b Vaccination)				
			Solid tumors, NHL (combo with rituximab)				
			Solid tumors (combo with mogamulizumab)				
			Solid tumors (combo with PF04518600)				
			Diffuse large B cell lymphoma (DLBCL) (combo with avelumab)				
VAY736	Novartis	BAFF-R	Pemphigus vulgaris				
			Primary Sjögren's syndrome				
			Rheumatoid arthritis (RA)				
			ADCC Mediated B Cell Depletion and BAFF-R Blockade (AMBER)				
			Primary Sjögren's syndrome (efficacy & safety)				

Partnered Discovery Programs
Proprietary Development Programs

*MOR103/GSK3196165 is fully outlicensed to GSK. ** For development in Greater Chinese Market (China, Hong Kong, Taiwan, Macao)

Clinical Programs

Ongoing Clinical Trials (3)

Program	Partner	Target	Indication	Phase 1	Phase 2	Phase 3	Launched
Xentuzumab (BI-836845)	BI	IGF-1	Breast cancer				
			Castration-resistant prostate cancer (CRPC)(combo with enzalutamide)				
			Solid tumors (Japan)				
			Solid tumors (combo with abemaciclib)				
			EGFR mutant non-small cell lung cancer (NSCLC)				
BAY1093884	Bayer	TFPI	Hemophilia				
MOR106	Galapagos	IL-17C	Atopic dermatitis				
MOR107 (LP2-3)***	-	AT2-R	Not disclosed				
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				
NOV-14	Novartis	n.d.	Asthma				
PRV-300 (CNTO3157)	ProventionBio	TLR-3	Colitis				
Vantictumab (OMP-18R5)	Oncomed/Bayer	Fzd 7	Breast cancer (combo with paclitaxel)				
			Pancreatic cancer (combo with nap-paclitaxel & gemcitabine)				
			Non-small-cell lung carcinoma (NSCLC) (combo with docetaxel)				

Partnered Discovery Programs
Proprietary Development Programs

*** A phase 1 study in healthy volunteers was completed. MOR107 is currently in preclinical investigation with a focus on oncology indications

Covering Analysts

Institution	Contact
Berenberg	Klara Fernandes
Bloomberg Intelligence	Cinney Zhang
Bryan Garnier	Jamila El Bougrini
Commerzbank	Daniel Wendorff
Deutsche Bank	Gunnar Romer
Goldman Sachs	Keyur Parekh
HSBC	Julie Mead
Independent Research GmbH	Bernhard Weininger
J.P. Morgan Cazenove	James Gordon
Kempen & Co.	Anastasia Karpova
Landesbank Baden-Württemberg	Timo Kürschner
Oddo BHF	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