May 8, 2019

Results Q1 2019

MorphoSys AG

Today on the Call

Dr. Simon Moroney

Chief Executive Officer

Jens Holstein

Chief Financial Officer

This presentation includes forward-looking statements.

This communication contains certain forward-looking statements concerning the MorphoSys group of companies, including its financial guidance for 2019, the commencement, timing and results of clinical trials and release of clinical data both in respect of its proprietary product candidates and of product candidates of its collaborators, the development of commercial capabilities, in particular with respect to MOR208 (tafasitamab), and the transition of MorphoSys to a fully integrated biopharmaceutical company, the expected time of launch of MOR208 (tafasitamab), interaction with regulators, including the potential approval of MorphoSys's current or future drug candidates, including discussions with the FDA regarding the potential approval to market MOR208 (tafasitamab), and expected royalty and milestone payments in connection with MorphoSys's collaborations. The forward-looking statements contained herein represent the judgment of MorphoSys as of the date of this release and involve known and unknown risks and uncertainties, which might cause the actual results, financial condition and liquidity, performance or achievements of MorphoSys, or industry results, to be materially different from any historic or future results, financial conditions and liquidity, performance or achievements expressed or implied by such forward-looking statements. In addition, even if MorphoSys's results, performance, financial condition and liquidity, and the development of the industry in which it operates are consistent with such forward-looking statements, they may not be predictive of results or developments in future periods. Among the factors that may result in differences are that MorphoSys's expectations regarding its 2019 results of operations may be incorrect, MorphoSys's expectations regarding its development programs may be incorrect, the inherent uncertainties associated with competitive developments, clinical trial and product development activities and regulatory approval requirements (including that MorphoSys may fail to obtain regulatory approval for MOR208 (tafasitamab) and that data from MorphoSys's ongoing clinical research programs may not support registration or further development of its product candidates due to safety, efficacy or other reasons), MorphoSys's reliance on collaborations with third parties, estimating the commercial potential of its development programs and other risks indicated in the risk factors included in MorphoSys's Annual Report on Form 20-F and other filings with the US Securities and Exchange Commission. Given these uncertainties, the reader is advised not to place any undue reliance on such forward-looking statements. These forward-looking statements speak only as of the date of publication of this document. MorphoSys expressly disclaims any obligation to update any such forward-looking statements in this document to reflect any change in its expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements, unless specifically required by law or regulation.

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®).

Agenda

1. Operational Review Q1 2019 & Outlook 2019

2. Financials Q1 2019 & Guidance 2019

3. Q&A Session

Operational Review Q1 2019 and Outlook 2019

MOR208: Proprietary Antibody Against CD19

Fc-Enhanced Antibody in Development for B Cell Malignancies

Phase 2 L-MIND - (r/r DLBCL)

- Final data for all 81 patients to be presented at ICML, Lugano
- Regulatory pathway
  - U.S. FDA: Year-end completion of submission on track
  - Europe: Interactions with national regulatory authorities and EMA to explore possibilities for approval in Europe

Phase 3 B-MIND - (r/r DLBCL)

- Pre-planned, event-driven interim analysis projected for H2 2019
  Discussions with the FDA regarding assay validation procedures

Phase 2 COSMOS - (r/r CLL/SLL)

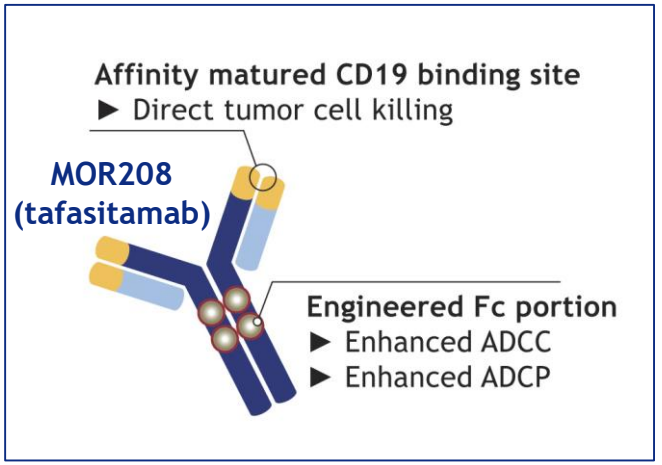
- Data expected to be presented at medical conference end of 2019

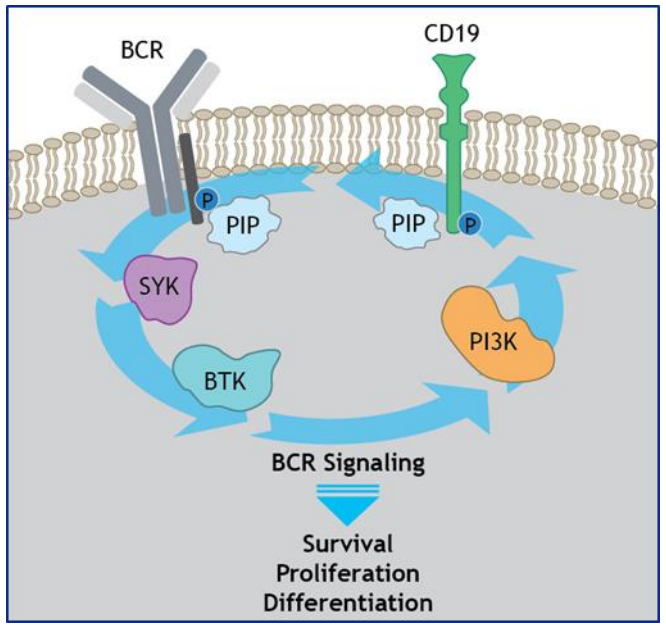
Frontline development

- Start of a phase 1b trial in H2 2019

Commercial preparations

- Build-up of U.S. organization with highly experienced staff
- Tafasitamab approved by USAN and WHO as new INN for MOR208





EMA, European Medicines Agency; USAN, United States Adopted Names; WHO, World Health Organization; INN, International Nonproprietary Name

MOR106: Proprietary Antibody Against IL-17C

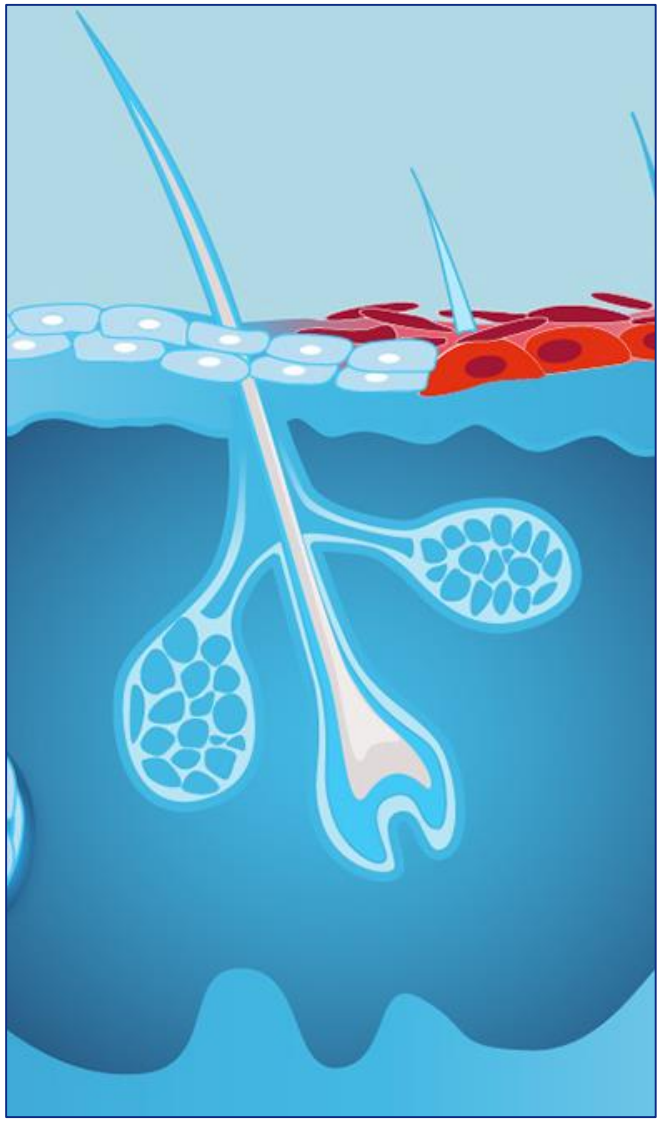
Ylanthia Antibody Developed in Atopic Dermatitis (AtD)

MOR & Galapagos worldwide, exclusive partnership with Novartis

- Up-front: EUR 95m
- Milestones: up to approx. EUR 850m
- Royalties: tiered, low teens to low twenties
- Novartis assumes all R&D, manufacturing & commercialization costs

Update on clinical developments

- Currently ongoing studies with MOR106 in AtD
  - Ph2 IGUANA: Patient enrollment to be completed end of 2019
  - Ph1 bridging study with subcutaneous formulation: Primary completion of the trial expected end of 2019
  - Ph2 GECKO: Expanding clinical development to the U.S. and Canada
- Preparations for a Japanese ethno-bridging study to start in H2 2019
- Under the terms of the agreement, Novartis will explore the potential of MOR106 in additional indications other than AtD



MOR202: Proprietary Antibody Against CD38

A HuCAL Antibody with Opportunities in Oncology & Autoimmune Diseases

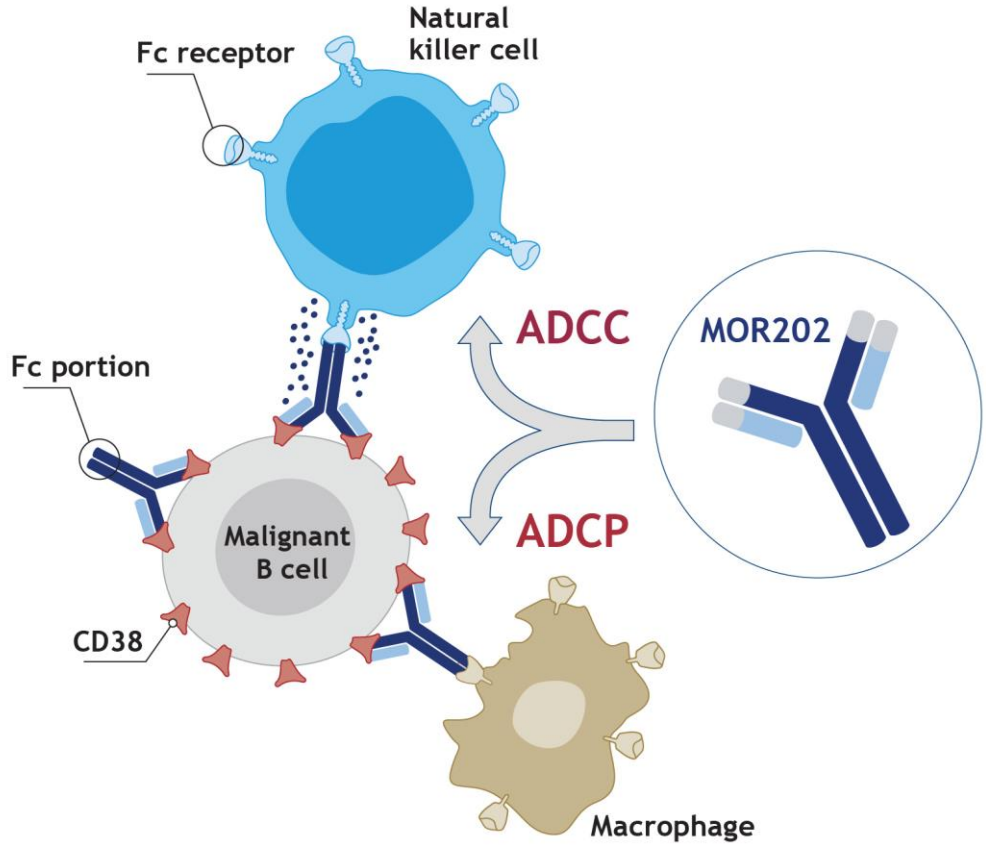
Partnered with I-Mab for development and commercialization in China, Taiwan, Hong Kong and Macao

Update on clinical developments by I-Mab

- Recently started pivotal trials in Taiwan
  - Ph2 study in third line multiple myeloma
  - Ph3 study in second line multiple myeloma

Further clinical development by MOR

- Start of a phase 2 study in an autoimmune disorder in Q3 2019



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

Partnered Discovery Programs - Tremfya® (Guselkumab)

Janssen's Anti-IL-23 for Immune-Mediated Diseases

The drug

- First-in-class anti-IL-23 human monoclonal antibody
- First marketed drug based on MorphoSys's antibody technology

Growing royalty stream

- Royalty income 2019 expected between EUR 23 to 30m
- Continously growing sales reported by Janssen

Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
$72m	$126m	$171m	$175m	$217m

Broad clinical development

Phase 1	Phase 2	Phase 3	Approved/ Launched
▪ Familial adenomatous polyposis	▪ Crohn's disease ▪ Hidradenitis suppurativa ▪ Ulcerative colitis	▪ Plaque psoriasis (adults & pediatric patients) ▪ Pustular/erythrodermic psoriasis ▪ Psoriatic arthritis	▪ Psoriasis (U.S., EU, Canada, Brazil, Australia, Japan) ▪ Psoriatic arthritis (Japan) ▪ Palmoplantar pustulosis (Japan)

Our Clinical Pipeline

29 Product Candidates in Clinical Development, One Product Launched

Most advanced development stage

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 (tafasitamab)	-	CD19	Hematological malignancies				3
MOR202	I-Mab Biopharma	CD38	Multiple myeloma				
Anetumab ravtansine (BAY94-9343)	Bayer	Mesothelin (ADC)	Solid tumors				
BAY1093884	Bayer	TFPI	Hemophilia				
BHQ880	Novartis	DKK-1	Multiple myeloma				
Bimagrumab (BYM338)	Novartis	ActRIIB	Metabolic diseases				
CNTO6785	Janssen	-	Inflammation				
Ianalumab (VAY736)	Novartis	BAFF-R	Inflammation				
MOR103/GSK3196165	GSK	GM-CSF	Inflammation				13
MOR106	Novartis/Galapagos	IL-17C	Inflammation				
MAA868	Anthos Therapeutics	Factor XI	Cardiovascular diseases				
Setrusumab (BPS804)	Mereo/Novartis	Sclerostin	Brittle bone syndrome				
Tesidolumab (LFG316)	Novartis	C5	Eye diseases				
Utomilumab (PF-05082566)	Pfizer	4-1BB	Cancer				
Xentuzumab (BI-836845)	BI	IGF-1	Solid tumors				
BAY2287411	Bayer	Mesothelin	Cancer				
Elgemtumab (LJM716)	Novartis	HER3	Cancer				
MOR107 (LP2-3)*	-	AT2-R	Not disclosed				
NOV-7 (CLG561)	Novartis	-	Eye diseases				
NOV-8	Novartis	-	Inflammation				
NOV-9 (LKA651)	Novartis	-	Diabetic eye diseases				
NOV-10 (PCA062)	Novartis	-	Cancer				12
NOV-11	Novartis	-	Blood disorders				
NOV-13 (HKT288)	Novartis	-	Cancer				
NOV-14	Novartis	-	Asthma				
PRV-300 (CNTO3157)	ProventionBio	TLR-3	Inflammation				
Vantictumab (OMP-18R5)	OncoMed	Fzd 7	Cancer				

Partnered Discovery Programs
Proprietary Development Programs
Out-licensed Proprietary Development Programs

* Phase 1 in healthy volunteers completed; currently in preclinical investigation

Financials Q1 2019
& Guidance 2019

Q1 2019: Consolidated Statement of Profit or Loss (IFRS)*

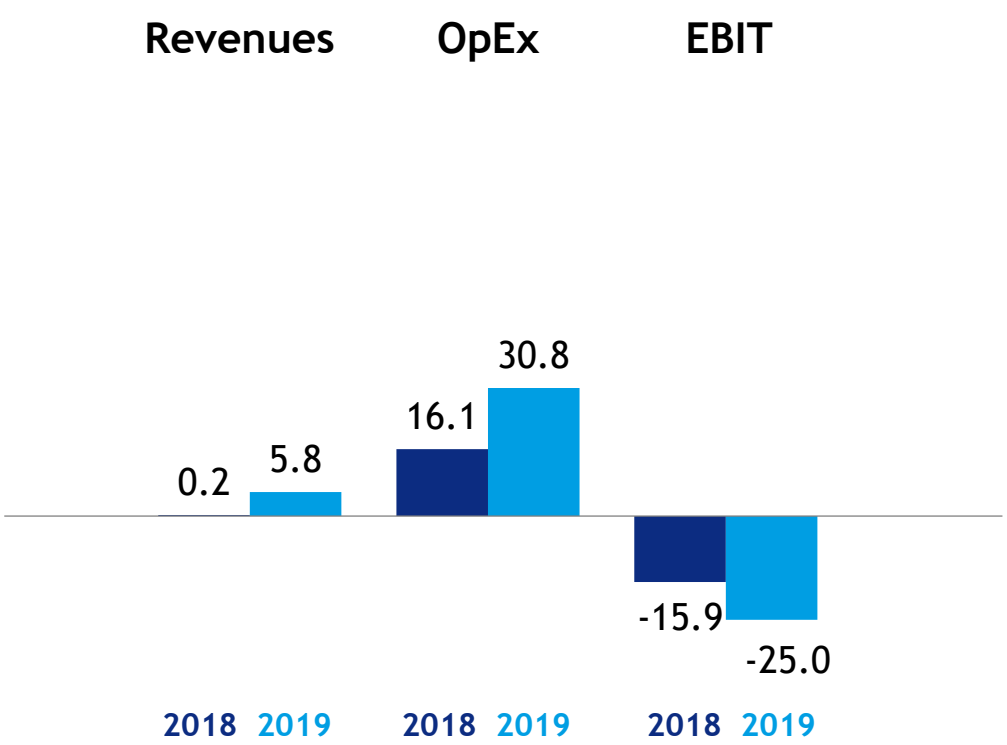
In EUR million	Q1 2019	Q1 2018	△
Revenues	**13.5**	**2.8**	>100%
Operating Expenses			
Cost of Sales	(5.0)	0.0	n/a
Research and Development	(24.7)	(17.2)	44%
Selling	(1.7)	(0.8)	>100%
General and Administrative	(5.9)	(3.9)	51%
Total Operating Expenses	**(37.3)**	**(21.9)**	**70%**
Other Income / Expenses	0.1	0.1	0
Earnings before Interest and Taxes (EBIT)	**(23.6)**	**(19.0)**	**24%**
Finance Income	0.9	0.0	n/a
Finance Expenses	(0.2)	(0.3)	(33%)
Income from Reversals of Impairment Losses / (Impairment Losses) on Financial Assets	0.6	(0.1)	>(100%)
Income Tax Benefit (Expenses)	(0.3)	(0.1)	>100%
Consolidated Net Profit / (Loss)	**(22.7)**	**(19.5)**	**16%**
Earnings per share, basic and diluted (in EUR)	**(0.72)**	**(0.67)**	**(7%)**

* Differences due to rounding

Segment Reporting Q1 2019*

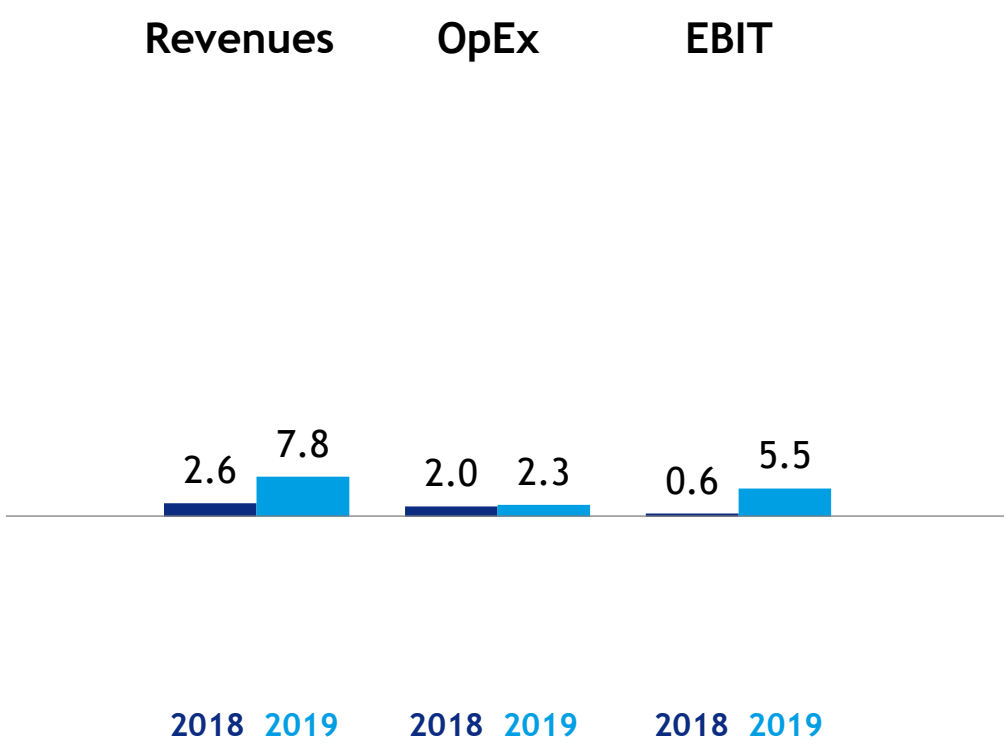
Proprietary Development

In EUR million



Partnered Discovery

In EUR million



* Differences due to rounding

Consolidated Balance Sheet (IFRS) March 31, 2019*

In EUR million	March 31, 2019	Dec 31, 2018
Assets		
Current Assets		
Cash and Cash Equivalents	48.5	45.5
Financial Assets at Fair Value trough Profit or Loss	37.5	44.6
Other Financial Assets at Amortized Cost	249.4	268.9
Other Current Assets	31.6	29.9
Total Current Assets	**367.0**	**388.9**
Non-current Assets		
Other Financial Assets at Amortized Cost, Net of current portion	95.8	95.7
Other Non-current Assets	93.5	54.1
Total Non-current Assets	**189.3**	**149.9**
Total Assets	**556.3**	**538.8**
Liabilities & Stockholders' Equity		
Total Current Liabilities	**47.4**	**45.9**
Total Non-current Liabilities	**42.5**	**4.5**
Total Stockholders' Equity	**466.4**	**488.4**
Total Liabilities & Stockholders' Equity	**556.3**	**538.8**

* Differences due to rounding

Financial Guidance 2019

Re-affirmation

In EUR million	Guidance 2018 (Updated July 19, 2018)	Reported FY 2018 (March 13, 2019)	Guidance 2019 (Issued March 13, 2019)
Group Revenues	**67 to 72**	**76.4**	**43 to 50***
Proprietary R&D Expenses (incl. Technology Development)	87 to 97	98.3	**95 to 105**
EBIT	**-55 to -65**	**-59.1**	**-127 to -137**

Cash Position as of March 31, 2019: EUR 431.2 million.

Total ordinary shares issued as of March 31, 2019: 31,839,572.

*Revenues are expected to include royalty income from Tremfya® ranging from EUR 23-30 million on constant USD currency

Q&A

Thank You

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

www.morphosys.com