May 3, 2018

Q1 Results 2018 Conference Call

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 2018, 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, and the transition of MorphoSys to a fully integrated biopharmaceutical company, the expected time of launch of MOR208, 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, 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 2018 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 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 Registration Statement on Form F-1 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 2018 & Outlook 2018

2. Financials Q1 2018 & Guidance 2018

3. Q&A Session

Operational Review Q1 2018 and Outlook 2018

Operational Highlights Q1 2018 and Beyond

MOR208
Updated interim data from the ongoing L-MIND trial in r/r DLBCL and ongoing constructive discussions with the FDA

Tremfya®
Growing royalty participation and new country approvals in Japan, Brazil, Australia and South Korea

Nasdaq IPO
Successful U.S. Nasdaq listing in April 2018, strengthening the balance sheet and broadening U.S. shareholder base

r/r DLBCL, relapsed or refractory diffuse large B cell lymphoma

Proprietary Portfolio – MOR208

Current clinical development

- L-MIND and B-MIND trials ongoing in relapsed or refractory DLBCL (r/r DLBCL)
- COSMOS trial ongoing in BTK-inhibitor-refractory or intolerant CLL/SLL

L-MIND trial

- Data presented in March 2018 based on latest cut-off (Dec 12, 2017) in line with earlier data – based on 68 patients available for efficacy assessment, median PFS rate at 12 month was 50.4 %
- Full data expected first half of 2019
- Commercial scale manufacturing ongoing, process validation efforts expected going forward
- Ongoing FDA interactions and plans for rolling submission
- Assuming a satisfactory data package, approval could be expected in first half of 2020

Further activities

- Preparations for U.S. commercialization and for U.S. affiliate ongoing
- Evaluation of development in other lines of DLBCL and in other B cell malignancies ongoing
- Continuation of the B-MIND trial with expected completion by end of next year planned
- COSMOS trial: idelalisib cohort recruitment completed; venetoclax cohort almost fully enrolled; data planned to be presented at upcoming conferences later this year

Proprietary Portfolio – MOR202

A Differentiated Antibody Targeting CD38

Multiple Myeloma (MM)

- Phase 1/2a study in r/r MM patients fully recruited, final data by end of the year expected
- Data presentation at appropriate medical conferences expected later this year
- Partnering deal with I-Mab for development in MM in Greater China since November 2017, start of clinical development by I-Mab Biopharma expected by end of the year
- Evaluation of potential partnerships to develop MOR202 in MM for other territories

Other indications

- Clinical study in NSCLC in planning

r/r, relapsed or refractory; NSCLC, non-small cell lung cancer

Proprietary Portfolio – MOR106

Antibody Targeting IL-17C

The product candidate

- Ylanthia antibody targeting IL-17C in development in clinical development for atopic dermatitis
- 50/50 co-development with Galapagos

Clinical data

- Phase 1 results with MOR106 in atopic dermatitis presented at AAD 2018
  - Generally well tolerated in the study
  - First signs of clinical activity showed: Improvement of EASI-50 at week four in 83% of patients (five out of six) at the highest dose level, durable effect of over two months seen
- Phase 2 study IGUANA started recently in atopic dermatitis
  - Planned to evaluate three different doses of intravenously administered MOR106 and in two different dosing schemes in 180 patients with moderate to severe atopic dermatitis
  - Treatment period of 12 weeks

EASI, eczema area and severity index

Partnered Discovery Programs – Highlights

More than 100 Programs in R&D, thereof 23 in Clinical Development

Tremfya®

Janssen's anti-IL-23 antibody

- Country approvals now also in Brazil, Australia and South Korea for plaque psoriasis and in Japan for psoriasis and psoriatic arthritis
- Ongoing phase 3 trials in psoriasis and psoriatic arthritis
- Start of development in Crohn's disease planned
- Primary completion of several phase 3 studies in psoriasis scheduled for 2018, thereof head-to-head comparison with Cosentyx®

Gantenerumab

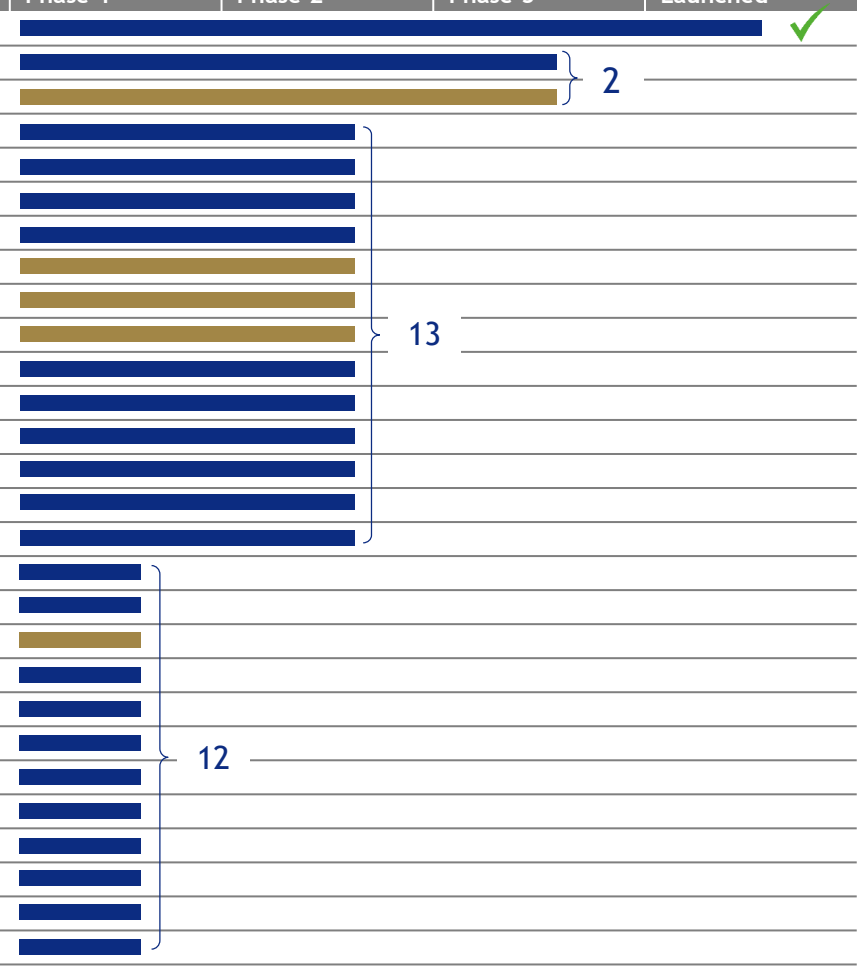
Roche's antibody to treat Alzheimer's disease

- Data from open label extension trials presented at AAT conference in March 2018
- Higher doses of gantenerumab showed greater and consistent removal of amyloid-beta in the brain after one year of treatment
- New phase 3 studies planned to start in 2018 in patients with prodromal and mild Alzheimer's disease with higher dosing (GRADUATE-1 and GRADUATE-2)

Our Clinical Pipeline

28 Product Candidates in Clinical Development with First Product Launched

Program	Partner	Target	Disease area
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
MOR103/GSK3196165**	GSK	GM-CSF	Inflammation
MOR106	Galapagos	IL-17C	Inflammation
MOR202	I-Mab Biopharma***	CD38	Multiple myeloma
NOV-12 (MAA868)	Novartis	Factor XI	Prevention of thrombosis
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
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
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	Solid tumors



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

Financials Q1 2018 & Guidance 2018

Income Statement* Q1 2018

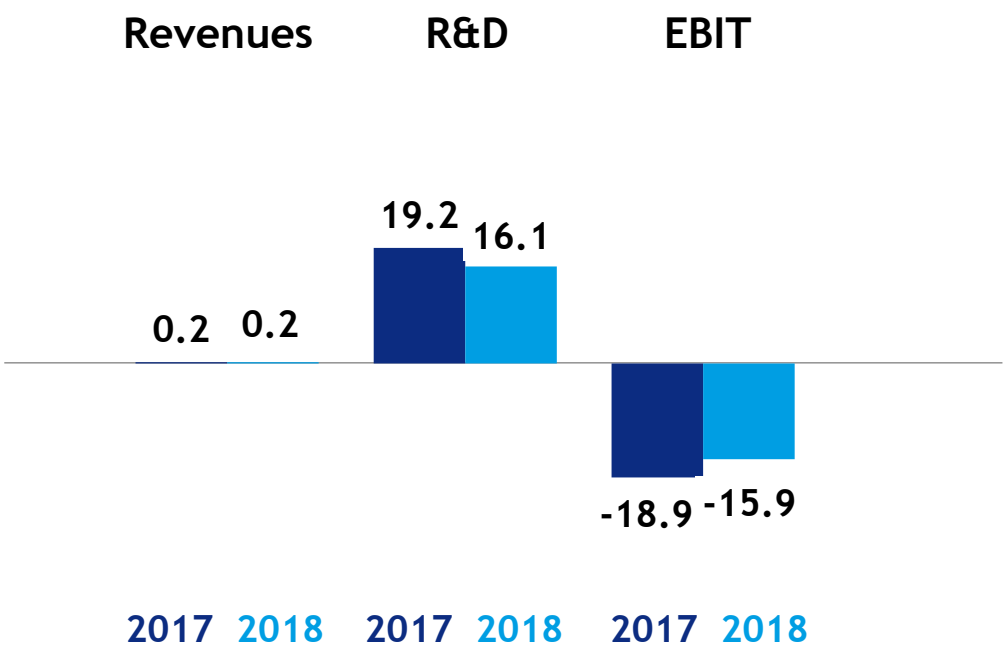
In € million	Q1 2018	Q1 2017	△
Revenues	**2.8**	**11.8**	**(76%)**
Research and Development Expenses	17.2	22.9	(25%)
Selling Expenses	0.8	0.6	33%
General and Administrative Expenses	3.9	3.4	15%
Total Operating Expenses	**21.9**	**26.9**	**(19%)**
Other Income / Expenses	0.1	0.1	-
EBIT	**(19.0)**	**(14.9)**	**>(28%)**
Finance Income	0.0	0.1	(100%)
Finance Expenses	(0.3)	(0.1)	>(100%)
Impairment Losses on Financial Assets**	(0.1)	0.0	>(100%)
Income Tax (Expenses)	(0.1)	(0.2)	**50%**
Consolidated Net Loss	**(19.5)**	**(15.0)**	**(30%)**
Earnings per Share, basic and diluted (in €)	**(0.67)**	**(0.52)**	**(29%)**

* Differences due to rounding.
** New item line due to application of IFRS 9 *Financial Instruments* since January 1, 2018, for expected twelve-months loss for financial instruments.

Segment Reporting Q1 2018

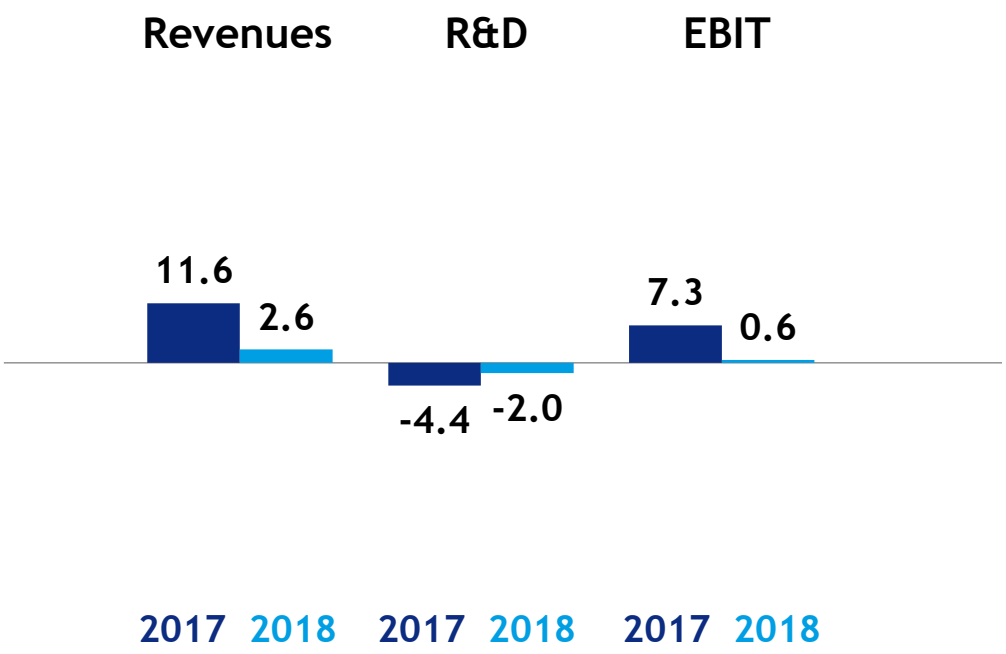
Proprietary Development

in € million



Partnered Discovery

in € million



Balance Sheet* (March 31, 2018)

In € million	March 31, 2018	Dec 31, 2017
Assets		
Cash and Cash Equivalents	57.4	76.6
Available-for-sale Financial Assets**	0.0	86.5
Financial Assets classified as Loans & Receivables**	0.0	149.1
Financial Assets at Fair Value through Profit or Loss**	80.5	0.0
Other Financial Assets at Amortized Cost	147.8	0.0
Other Current Assets	32.3	28.5
Total Current Assets	**318.1**	**340.7**
Other Non-current Assets	74.1	74.7
Total Non-current Assets	**74.1**	**74.7**
Total Assets	**392.2**	**415.4**
Liabilities & Stockholders' Equity		
Total Current Liabilities	**42.7**	**47.7**
Total Non-current Liabilities	**8.9**	**9.0**
Total Stockholders' Equity	**340.6**	**358.7**
Total Liabilities & Stockholders' Equity	**392.2**	**415.4**

* Differences due to rounding.
** New classifications for financial instruments due to application of IFRS 9 *Financial Instruments* since January 1, 2018.

Nasdaq Initial Public Offering

Nasdaq IPO closed in April 2018

- Sale of 8,300,000 American Depositary Shares (ADSs) representing 2,075,000 underlying ordinary MorphoSys shares as base offering
- Underwriter's option fully exercised – 1,245,000 additional ADSs, representing 311,250 additional new ordinary shares
- Each ADS represents ¼ of a MorphoSys ordinary share
- In total, this represents approximately 8.1% of the registered share capital of MorphoSys prior to the consummation of the offering
- Total net proceeds of appr. € 177 million
- Increasing exposure to new U.S. investors

Photography by Libby GreeneNasdaq, Inc.

Financial Guidance 2018

Re-confirmation

In € million	Reported FY2017	Guidance FY2018
Group Revenues	**66.8**	**20 - 25***
Proprietary R&D Expenses (incl. Technology Development)	99.1	**95 - 105**
EBIT	**(67.6)**	**(110) - (120)**

*Revenues are expected to include royalty income from Tremfya® ranging from € 12-17 million on constant USD currency.

Q&A Session

Thank You

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