May 6, 2021

Q1 Results

Forward-Looking Statements

This communication contains certain forward-looking statements concerning the MorphoSys group of companies, including the expectations regarding Monjuvi's ability to treat patients with relapsed or refractory diffuse large B-cell lymphoma, the further clinical development of tafasitamab, including ongoing confirmatory trials, additional interactions with regulatory authorities and expectations regarding future regulatory filings and possible additional approvals for tafasitamab as well as the commercial performance of Monjuvi. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "would," "could," "potential," "possible," "hope" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. 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' 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 MorphoSys' expectations regarding risks and uncertainties related to the impact of the COVID-19 pandemic to MorphoSys' business, operations, strategy, goals and anticipated milestones, including its ongoing and planned research activities, ability to conduct ongoing and planned clinical trials, clinical supply of current or future drug candidates, commercial supply of current or future approved products, and launching, marketing and selling current or future approved products, the global collaboration and license agreement for tafasitamab, the further clinical development of tafasitamab, including ongoing confirmatory trials, and MorphoSys' ability to obtain and maintain requisite regulatory approvals and to enroll patients in its planned clinical trials, additional interactions with regulatory authorities and expectations regarding future regulatory filings and possible additional approvals for tafasitamab as well as the commercial performance of Monjuvi, MorphoSys' 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' Annual Report on Form 20-F and other filings with the U.S. 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 Medicines Agency (EMA) or any other regulatory authority (except for tafasitamab/Monjuvi® and guselkumab/Tremfya®). There is no guarantee any investigational product will be approved.

Q1 2021 Results Conference Call

Agenda

Highlights Q1 2021 and 2021 Outlook	**Jean-Paul Kress, M.D., CEO**
Commercial Update	**Roland Wandeler, Ph.D., COO**
Financial Results Q1 2021	**Sung Lee, CFO**
Q&A	**Jean-Paul Kress, Sung Lee, Roland Wandeler, Malte Peters**

Highlights Q1 2021
Outlook 2021
Jean-Paul Kress, M.D., CEO

2021 Focus

Key Priorities for 2021

MONJUVI®
tafasitamab-cxix

Monjuvi Launch

- Continued execution of the Monjuvi launch in the U.S.

Tafasitamab Development and Backbone Strategy

- Expand tafasitamab opportunity by initiating pivotal studies in 1st line DLBCL, r/r indolent lymphomas (FL/MZL) as well as combination studies
- European Marketing Authorization Application is currently under review

Expanding the Pipeline

- Progress the development of felzartamab in autoimmune diseases

Broad Tafasitamab Clinical Program to Maximize Value for Patients

Multiple opportunities to address significant unmet needs in non-Hodgkin lymphomas

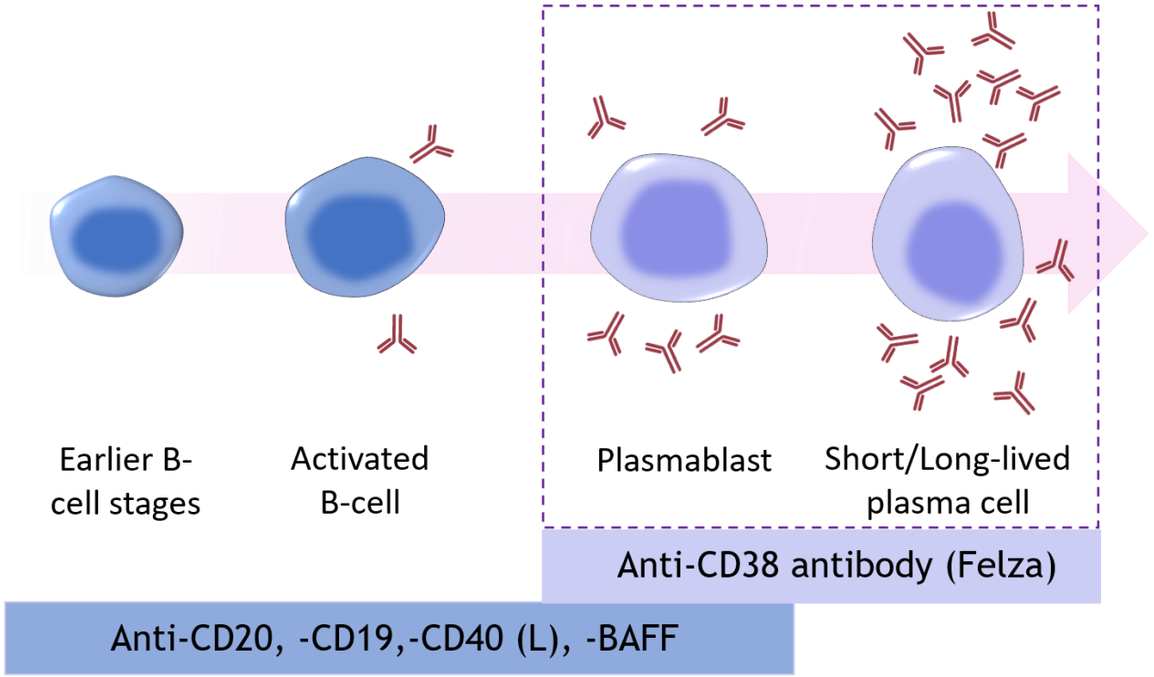
Study	Indication	Status	Ph 1	Ph 2	Ph 3	Market
L-MIND	r/r DLBCL	FDA approved in 2L				MONJUVI® tafasitamab-cxix | 200mg for injection, for intravenous use
B-MIND	r/r DLBCL	Ongoing				
firstMIND	1L DLBCL	Ongoing				
frontMIND	1L DLBCL	Trial initiation expected H1 2021				
inMIND	r/r FL / MZL	Ongoing				
topMIND	r/r B-cell malignancies	Parsaclisib[1)] combination trial initiation expected 2021				
CD20xCD3 combination	r/r DLBCL 1L DLBCL r/r FL	First trial expected to start e/o 2021 / early 2022			Studies sponsored by Xencor	
J-MIND (Japan)	r/r DLBCL and others	Ongoing				

1) Parsaclisib: PI3Kδ inhibitor owned by Incyte; The clinical development program does not guarantee a regulatory approval; r/r: relapsed or refractory; DLBCL: diffuse large B-cell lymphoma; FL: follicular lymphoma; MZL: marginal zone lymphoma

Exploring Felzartamab in Autoimmune Diseases

CD38 Antibody in Clinical Development

Different B-cell stages produce autoantibodies which damage organ tissue in autoimmune diseases



Clinical Development

Autoimmune Membranous Nephropathy (aMN)

- 10,000 addressable patients in the U.S.
- High unmet need, 30%–50% of patients progress to end-stage renal disease (ESRD) within 10–15 years[1)2)]
- M-PLACE and New-PLACE studies ongoing

IgA Nephropathy (IGAN)

- Second autoimmune indication for felzartamab
- Most common glomerular disease worldwide
- High unmet need, ~20% of patients progress to end-stage renal disease (ESRD) within 10 years[3)]
- IGNAZ trial to be initiated mid-2021

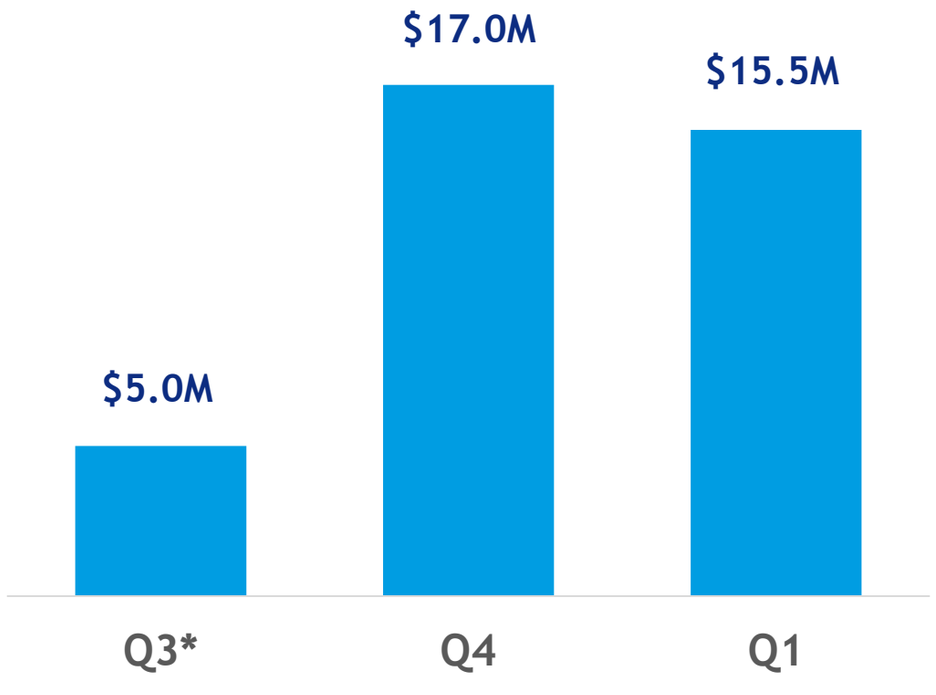
1. Trujillo H *et al. Port J Nephrol Hypert* 2019; 33 (1): 19-27. 2. Passerini P *et al. Front Immunol* 2019; 10: 1326. 3. Physician interviews; ClearView analysis

Commercial Update
Roland Wandeler, Ph.D., COO

Monjuvi Launch Update

Monjuvi Sales

$15.5M Net Sales Q1 2021



* partial quarter

MONJUVI® tafasitamab-cxix

Q1 Headwinds

- COVID-19 and transitory winter storm
- Q4 2020 benefitted from inventory dynamics and clinical trial purchases

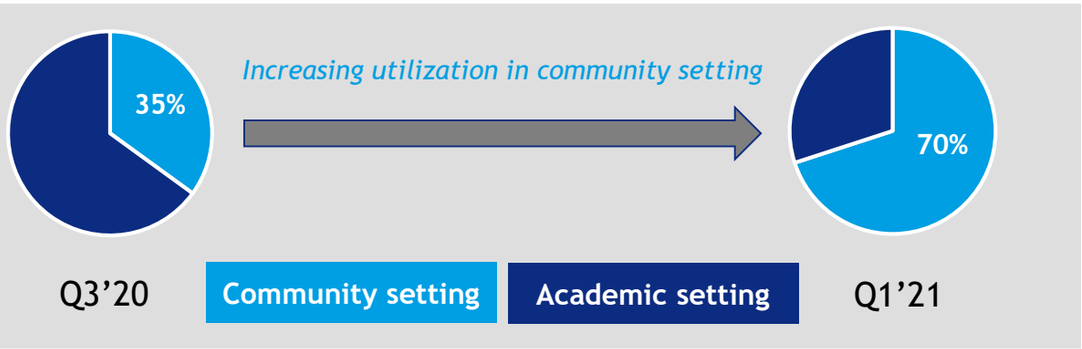
Underlying Trends

- Ongoing COVID-19 impact in H1
- Patient demand slightly higher sequentially
- Continued positive HCP feedback
- Increase in account growth (>500 accounts as of the end of Q1 2021)

Foundation for Long-Term Growth

Building Account Momentum

Cumulative sites of care >500 end of March



Focus on Driving Uptake in 2L DLBCL

Driving a Paradigm Shift in DLBCL

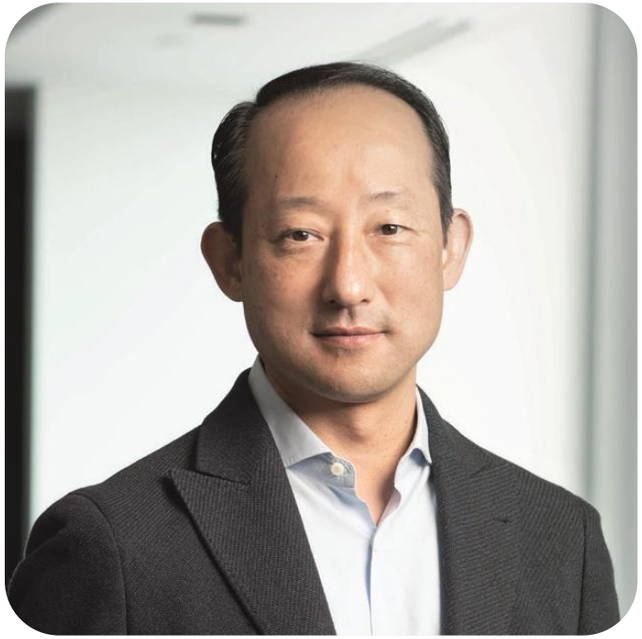
- Monjuvi's safety, tolerability and long duration of response
- Treat patients to progression

Positive HCP feedback and leveraging LT data

- L-MIND 2-year data presented in 2020 at EHA and ASH
- Upcoming 3-year L-MIND data to be presented at ASCO, EHA, ICML conferences

Source: Integrichain 867 report April, 30, 2021. SOC represents Project LASeR algined SOC accounts. Utilization represents Community vs. Academic settings.

Financial Results
Q1 2021
Sung Lee, CFO



Q1 2021: Profit or Loss Statement*

In € million	Q1 2021	Q1 2020	△
Revenues	**47.2**	**251.2**	**(81%)**
Monjuvi	**12.9**	**-**	**-**
Royalties	**11.6**	**9.3**	**25%**
Licenses, Milestones and Other	**22.7**	**241.9**	**>(100%)**
Cost of Sales	(5.0)	(3.3)	52%
Gross Profit	**42.1**	**248.0**	**(83%)**
Total Operating Expenses	**(71.7)**	**(44.4)**	**61%**
R&D Expenses	(33.3)	(21.5)	55%
Selling Expenses	(28.2)	(12.8)	>100%
G&A Expenses	(10.3)	(10.1)	2%
Operating Profit / (Loss)	**(29.6)**	**203.5**	**>(100%)**
Consolidated Net Profit / (Net Loss)	**(41.6)**	**195.5**	**>(100%)**
Earnings per Share, basic and diluted (in €)	**(1.27)**	**-**	**-**
Earnings per Share, basic (in €)	**-**	**6.12**	**-**
Earnings per Share, diluted (in €)	**-**	**6.11**	**-**

On March 31, 2021 MorphoSys' position in cash and investments amounted to Euros 1,215.0 million (December 31,2020: Euros 1,244.0 million)

* Differences due to rounding

Financial Guidance FY2021

In € million

	Reported FY2020	Guidance FY2021	2021 Guidance Insights
Group Revenues	327.7*	150 to 200	Includes confirmed EUR 16m otilimab milestones The range captures the potential for variability from the first full year of the Monjuvi product launch and the impact from the COVID-19 pandemic which is anticipated to be greater in the 1H21 Expect moderate y-y growth of Tremfya royalty revenue Excludes other potential significant milestones from development partners
Operating Expense**	300.6**	355 to 385**	Full year impact of Monjuvi selling expenses
R&D Expense	141.4	45 to 50% of OpEx	Investment in the development of tafasitamab, felzartamab, early-stage development programs, and technologies

*2020 Group Revenues include €236.1m upfront from Incyte, €18.5m Monjuvi sales, €42.5m Tremfya royalties, and €30.6m Milestones/other categories
**Operating Expense does not include cost of sales; FY2020 number was adapted to include SG&A and R&D only

Q & A

Thank You

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Overview of Accounting for Co-Commercialization of Monjuvi in the U.S.