Media Release
Planegg/Munich, Germany, June 5, 2017

MorphoSys Presents First Safety and Efficacy Data of MOR208 in Combination with Lenalidomide from a Phase 2 Study in DLBCL

MorphoSys AG (FSE: MOR; Prime Standard Segment, TecDAX; OTC: MPSYY) today presented safety and efficacy data from an ongoing phase 2 clinical trial ("L-MIND" study) evaluating MOR208 in combination with lenalidomide in patients with relapsed or refractory (R/R) diffuse large B cell lymphoma (DLBCL). DLBCL is the most common form of non-Hodgkin's lymphoma. Data were reported during a poster presentation at the 2017 Annual Meeting of the American Society of Clinical Oncology (ASCO) in Chicago/USA. MOR208 is an Fc-enhanced investigational antibody directed against CD19.

"We are very excited having seen the preliminary data from the first 44 patients of our ongoing phase 2 L-MIND trial. We are particularly optimistic about the level of response rates that we have seen so far, especially complete responses. For DLBCL patients who relapse after their first-line treatment, current treatment options are very limited. We are therefore exploring potential new treatment regimens with MOR208 for this difficult-to-treat patient group", commented Dr. Malte Peters, Chief Development Officer of MorphoSys AG.

44 patients were enrolled in the study at data cut-off, 34 of whom were evaluable for efficacy assessment. Preliminary data show an objective response in 19 out of 34 patients (ORR: 56%). Complete remission was seen in 11 out of 34 patients (CR: 32%). 16 out of 19 patients in whom responses were recorded, were still on study at time of data-cut off.

No infusion-related reactions were reported for MOR208. The most frequent adverse events observed of grade 3 or higher were hematological, comprising neutropenia, thrombocytopenia, and leukopenia, seen in 32%, 9%, and 9% of patients, respectively. To date, 27% of patients required a reduction of the lenalidomide dose due to side effects. No unexpected safety-related effects were observed.

The L-MIND trial (Lenalidomide plus MOR208 in DLBCL) is a single-arm, open-label, multicenter study of MOR208 in combination with lenalidomide. The trial will enroll approximately 80 patients with relapsed or refractory DLBCL after up to three prior lines of therapy, with at least one prior therapy including an anti-CD20 targeting therapy (e.g. rituximab). Patients in the trial could not be candidates for high-dose chemotherapy or autologous stem cell transplantation. Patients enrolled in the trial had a median age of 73 years.

In addition to the preliminary data from the phase 2 L-MIND study with MOR208 and lenalidomide in R/R DLBCL, two "trial-in-progress" posters about MOR208 were presented at ASCO 2017 illustrating the study designs of two other ongoing clinical combination trials of MOR208: the phase 2/3 randomized, "B-MIND" study comparing MOR208 plus bendamustine vs. rituximab plus bendamustine in patients with R/R DLBCL; and the phase 2 "COSMOS"

study in R/R chronic lymphocytic leukemia (CLL) patients, who had previously discontinued treatment with a Bruton tyrosine kinase (BTK) inhibitor. The COSMOS trial is currently investigating MOR208 in combination with idelalisib.

Details of the MOR208 presentations at ASCO 2017

Abstract #7514, poster board #276

L-MIND: MOR208 combined with lenalidomide (LEN) in patients with relapsed or refractory diffuse large B-cell lymphoma (R-R DLBCL) – A single-arm phase 2 study

The poster will be presented during the session, "Hematologic Malignancies – Lymphoma and Chronic Lymphocytic Leukemia," held on June 5, 2017 (8:00 AM-11:30 AM CDT, poster hall). The results will also be highlighted during a poster discussion session about CD19 targeting therapies on June 5, 2017 (1:15 PM-2:30 PM CDT, room E354b).

Abstract #TPS7571, poster board #330b

B-MIND: MOR208 plus bendamustine (BEN) versus rituximab (RTX) plus BEN in patients with relapsed or refractory (R-R) diffuse large B-cell lymphoma (DLBCL): An open-label, randomized phase 2/3 trial

The poster will be presented in the "Hematologic Malignancies – Lymphoma and Chronic Lymphocytic Leukemia" session on June 5, 2017 (8:00 AM-11:30 AM CDT, poster hall).

Abstract #TPS7567, poster board#328b

COSMOS: MOR208 plus idelalisib or venetoclax in patients with relapsed or refractory (R/R) chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL) previously treated with a Bruton's tyrosine kinase inhibitor (BTKi) – A two-cohort phase 2 study

The poster will be presented in the "Hematologic Malignancies – Lymphoma and Chronic Lymphocytic Leukemia" session on June 5, 2017 (8:00 AM-11:30 AM CDT, poster hall).

MorphoSys will hold an Investor & Analyst Event at the 2017 ASCO Annual Meeting on June 5, 2017, at 6:30pm CDT (June 6, 2017: 1:30am CEST). Clinical data for MorphoSys's investigational agents MOR208 and MOR202 will be presented by clinical investigators and company representatives.

A replay and the presentation will be made available at http://www.morphosys.com.

Live-Webcast:
https://services.choruscall.com/dataconf/productusers/morph/mediaframe/19794/indexl.html

About CD19 and MOR208

CD19 is broadly and homogeneously expressed across different B cell malignancies including DLBCL and CLL. CD19 has been reported to enhance B cell receptor (BCR) signaling, which is assumed important for B cell survival, making CD19 a potential target in B cell malignancies.

MOR208 (previously Xmab®5574) is an Fc-enhanced monoclonal antibody directed against CD19. Fc-modification of MOR208 is intended to lead to a significant potentiation of antibody-dependent cell-mediated cytotoxicity (ADCC) and antibody-dependent cellular phagocytosis (ADCP), thus aiming to improve a key mechanism of tumor cell killing. Furthermore, MOR208 has been observed in preclinical models to induce direct apoptosis by binding to CD19, which is assumed to be a crucial component for B cell receptor (BCR) signaling.

MorphoSys AG is clinically investigating MOR208 as a therapeutic option in B cell malignancies in a number of ongoing combination trials. A phase 2 combination trial (L-MIND study) was started in March 2016 and is designed to investigate the safety and efficacy of MOR208 in combination with lenalidomide in approximately 80 patients with relapsed/refractory DLBCL. The phase 2/3 B-MIND study was started in August 2016 and transitioned into its phase

3 pivotal part in June 2017 following a recommendation of the IDMC based on the available data from the phase 2 initial safety evaluation. The B-MIND study is designed to investigate MOR208 in combination with the chemotherapeutic agent bendamustine in relapsed/refractory DLBCL patients who are not eligible for high-dose chemotherapy (HDC) and autologous stem cell transplantation (ASCT) in comparison to the combination of the anti-CD20 antibody rituximab plus bendamustine. Furthermore, in December 2016, a third phase 2 combination trial was started with MOR208 evaluating the antibody in patients with relapsed/refractory CLL after discontinuation of a prior Bruton tyrosine kinase (BTK) inhibitor therapy (e.g. ibrutinib). Currently MOR208 is being studied in combination with idelalisib; a second study arm of MOR208 plus venetoclax is currently in preparation.

About MorphoSys

MorphoSys is committed to developing exceptional new treatments for patients suffering from serious diseases. A leader in the field of therapeutic antibodies today, MorphoSys is driven by the ambition of creating the most valuable pipeline of biopharmaceuticals in the biotechnology industry. Based on its proprietary technology platforms, MorphoSys, together with its partners, has built a therapeutic pipeline of more than 110 programs in R&D, around a quarter of which is currently in clinical development.
In its proprietary development segment, MorphoSys, alone or with partners, is developing new therapeutic candidates, mainly focusing on cancer and inflammation. In its partnered discovery segment, MorphoSys uses its technologies to discover new drug candidates for pharmaceutical partners and participates from the programs' further development success, through success-based payments and royalties. MorphoSys is listed on the Frankfurt Stock Exchange under the symbol MOR. For regular updates about MorphoSys, visit http://www.morphosys.com.

This communication contains certain forward-looking statements concerning the MorphoSys group of companies. The forward-looking statements contained herein represent the judgment of MorphoSys as of the date of this release and involve risks and uncertainties. Should actual conditions differ from the Company's assumptions, actual results and actions may differ from those anticipated, MorphoSys does not intend to update any of these forward-looking statements as far as the wording of the relevant press release is concerned.

For more information, please contact:

MorphoSys AG
Anke Linnartz
Head of Corporate Communications & IR

Jochen Orlowski
Associate Director Corporate Communications & IR

Alexandra Goller
Senior Manager Corporate Communications & IR

Tel: +49 (0) 89 / 899 27-404
investors@morphosys.com