Media Release
Planegg/Munich, December 2, 2018

MorphoSys Presents Updated Data from L-MIND Study of MOR208 in combination with Lenalidomide in r/r DLBCL at ASH 2018

MorphoSys AG (FSE: MOR; Prime Standard Segment; MDAX & TecDAX; Nasdaq: MOR) today presented data from the ongoing single-arm phase 2 clinical trial known as L-MIND in an oral presentation at the 60th American Society of Hematology (ASH) Annual Meeting 2018 in San Diego, USA. L-MIND is designed to investigate the antibody MOR208 in combination with lenalidomide in patients with relapsed or refractory diffuse large B cell lymphoma (r/r DLBCL) who are not eligible for high-dose chemotherapy (HDC) and autologous stem cell transplantation (ASCT). MOR208 is an investigational humanized Fc-enhanced monoclonal antibody directed against CD19 and is currently in clinical development in blood cancer indications.

The L-MIND study enrolled patients with r/r DLBCL, who are ineligible for HDC and ASCT, after up to three prior lines of therapy, with at least one prior therapy including an anti-CD20 targeting therapy, such as rituximab. The updated interim data reported today (cut-off date June 5, 2018) included all 81 patients enrolled in the L-MIND trial, with a median observation time of 12 months. Efficacy results in this update are based on assessment by the investigators for all 81 patients. Patients enrolled had a median age of 72 years and had received a median of two prior treatment lines.

The data showed a response in 47 out of 81 patients (overall response rate, or ORR, 58%), with complete responses (CR) in 27 (33%) and partial responses (PR) in 20 (25%) patients. The median progression-free survival (mPFS) was 16.2 months (95% confidence interval (CI) 6.3 months – not reached). Responses were durable with the median duration of response (DoR) not reached (95% CI: NR – NR) and 70% of responding patients were without progression at 12 months (12-month DoR rate: 70%, Kaplan-Meier estimate). A significant proportion of patients (37/81; 46%) were still on study treatment, with 19 having been treated for over 12 months. Median overall survival (OS) was not reached (95% CI: 18.6 months – NR); the 12-month OS rate was 73% (95% CI: 63% – 85%).

Efficacy parameters, such as response rates and median PFS showed comparable results in most patient subgroups of interest, including low/low-intermediate versus intermediate-high/high IPI score, rituximab refractory versus not refractory and primary refractory versus not refractory, amongst others.

No unexpected toxicities were observed for the treatment combination and no infusion-related reactions (IRRs) were reported for MOR208. The most frequent treatment-emergent adverse events (TEAEs) with a toxicity grading of 3 or higher were neutropenia in 35 (43%), thrombocytopenia in 14 (17%), and anemia in 7 (9%) patients each. Treatment-related serious adverse events (SAEs) occurred in 16 (19.8%) patients, the majority of which were infections or neutropenic fever. 41 (50.6%) patients required dose reduction with lenalidomide, 58 patients (72%) could stay on a daily lenalidomide dose of 20 mg or higher.

The results reported today confirm data from earlier interim analyses reported from this trial in March 2018, when 68 patients had been eligible for investigators' efficacy assessment at the Dec 12, 2017 cut-off date.

"Patients with relapsed or refractory DLBCL who, after having failed initial therapies, are ineligible for high-dose chemotherapy (HDC) and autologous stem cell transplantation (ASCT), need more treatment options," commented Dr. Malte Peters, Chief Development Officer of MorphoSys AG. "We are encouraged by our most recent clinical data from the ongoing L-MIND trial. These support our plan to develop MOR208 in combination with lenalidomide, based on our current FDA breakthrough therapy designation, as a potential chemo-free treatment option for this patient population."

Details about the presentation on L-MIND data at ASH 2018:

Abstract publication number: 227
Session name: 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials"
Session date and time: Saturday, December 1, 2018, 4:00pm-5:30pm PST
Presentation time: 5:00pm PST
Room: Marriot Marquis San Diego Marina, Pacific Ballroom 20, San Diego, California.

MorphoSys will hold an investor & analyst event after the 60th American Society of Hematology (ASH) Annual Meeting 2018 on December 5, 2018, 10:00am EST (3:00pm GMT, 4:00pm CET) in New York. The presentation, a live webcast and a replay of the webcast will be made available at http://www.morphosys.com.

About DLBCL

Diffuse large B-cell lymphoma (DLBCL) is the most frequent type of malignant lymphoma worldwide and accounts for approximately 30% of all non-Hodgkin lymphomas. Between 30% and 40% of all patients with DLBCL either fail to respond to or show a relapse to initial therapy. Patients who failed frontline therapy and are not eligible to high dose chemotherapy (HDC) and autologous stem cell transplantation (ASCT) are reported to have a poor outcome and require more therapeutic options.

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 is an investigational humanized Fc-engineered 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. MOR208 has been observed in preclinical models to induce direct apoptosis by binding to CD19, which is assumed to be involved in B cell receptor (BCR) signaling.
MorphoSys is clinically investigating MOR208 as a therapeutic option in B cell malignancies in a number of ongoing combination trials. An open-label phase 2 combination trial (L-MIND study) is investigating the safety and efficacy of MOR208 in combination with lenalidomide in patients with relapsed/refractory DLBCL who are not eligible for high-dose chemotherapy (HDC) and autologous stem cell transplantation (ASCT). Based on interim data from L-MIND, in October 2017 the U.S. FDA granted Breakthrough Therapy Designation for MOR208 plus lenalidomide in this patient population. The pivotal phase 2/3 B-MIND study is designed to investigate MOR208 in combination with the chemotherapeutic agent bendamustine in patients with relapsed/refractory DLBCL 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. In addition, MOR208 is currently being investigated in patients with relapsed/refractory CLL/SLL after discontinuation of a prior Bruton tyrosine kinase (BTK) inhibitor therapy (e.g. ibrutinib) in combination with idelalisib or venetoclax.

About MorphoSys:

MorphoSys (FSE & NASDAQ: MOR) is a clinical-stage biopharmaceutical company dedicated to the discovery, development and commercialization of exceptional, innovative therapies for patients suffering from serious diseases. The focus is on cancer. Based on its leading expertise in antibody, protein and peptide technologies, MorphoSys, together with its partners, has developed and contributed to the development of more than 100 product candidates, of which 29 are currently in clinical development. In 2017, Tremfya®, marketed by Janssen for the treatment of plaque psoriasis, became the first drug based on MorphoSys's antibody technology to receive regulatory approval. The Company's most advanced proprietary product candidate, MOR208, has been granted U.S. FDA breakthrough therapy designation for the treatment of patients with relapsed/refractory diffuse large B-cell lymphoma (DLBCL). Headquartered near Munich, Germany, the MorphoSys group, including the fully owned New Jersey-based U.S. subsidiary MorphoSys US Inc., has approximately 320 employees. More information at https://www.morphosys.com.

MorphoSys forward looking statements

This communication contains certain forward-looking statements concerning the MorphoSys group of companies, including upcoming data presentations from the phase 2 L-MIND trial of MOR208 and lenalidomide in r/r DLBCL and expectations regarding the further clinical development of MOR208 plus lenalidomide in r/r DLBCL. 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 including upcoming data presentations from the phase 2 L-MIND trial of MOR208 and lenalidomide in r/r DLBCL and expectations regarding the further clinical development of MOR208 plus lenalidomide in r/r DLBCL, 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'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.

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