

Media Release

Planegg/Munich, Germany, December 6, 2016

MorphoSys Presents Updated Clinical Results for Anti-CD38 Antibody MOR202 at ASH 2016

Updated Results Include Clinical Response Rates from Ongoing Phase 1/2a Study with MOR202 in Patients with Relapsed / Refractory Multiple Myeloma

MorphoSys AG (FSE: MOR; Prime Standard Segment, TecDAX; OTC: MPSYY) presented updated safety and efficacy data from an ongoing phase 1/2a clinical study evaluating MOR202 alone and in combination with immunomodulatory drugs (IMiDs) lenalidomide (Len) and pomalidomide (Pom), plus dexamethasone (Dex), in heavily pre-treated patients with relapsed/refractory multiple myeloma (MM). MOR202 is an investigational human antibody targeting CD38. Data were presented during an oral presentation at the 58th American Society of Hematology (ASH) Annual Meeting in San Diego, California/USA.

"The results presented include updated data from higher dosing cohorts of MOR202 in combination with IMiDs, in patients being evaluable for efficacy and safety assessment. In addition to the infusion time of 2 hours and the occurrence of infusion-related reactions in only 7% of the patients, we are particularly pleased with the responses seen in patients treated with MOR202 plus Len/Dex and Pom/Dex", Dr. Arndt Schottelius, Chief Development Officer of MorphoSys AG, commented. "We look forward to enrolling more patients in the highest dosing cohorts of 16 mg/kg MOR202 in these combinations."

Patients treated with MOR202 in combination with Len/Dex had a median of 2 prior regimens; 64% were refractory to their last therapy. In this arm of the trial, 91% of evaluable patients (10 out of 11) showed an objective response (defined as either a complete response (CR) or a partial response (PR)) to MOR202 and Len/Dex. Considering only patients in the highest dosing cohort of 16mg/kg MOR202 plus Len, ORR (objective response rate) was 100%, with 7 out of 7 patients showing response to treatment.

In the group receiving MOR202 with Pom/Dex, patients had a median of 3 prior therapies, all being refractory to their last therapy. In these heavily pretreated patients, 57% (4 out of 7) showed a response, with two patients achieving a complete remission (CR). In relapsed/refractory patients treated with MOR202 alone, 29% (5 out of 17) showed an objective response.

Responses are ongoing in 16 of 19 patients, with the longest response ongoing for more than 14 months. The median progression-free survival (PFS) of the patients treated with MOR202 alone was 4.7 months; the median PFS for the combination regimen has not yet been reached.

MOR202 was given as a 2-hour infusion up to the highest dose of 16 mg/kg. Infusion-related reactions (IRRs) occurred in 7% of patients and were limited to grade 1 or 2. The most frequent adverse events of grade 3 or higher were lymphopenia, neutropenia and leukopenia. No unexpected safety signals were observed. No treatment-related deaths were reported.

According to a biomarker analysis, CD38 molecules were preserved on bone marrow plasma cells during MOR202 treatment, comparing values at baseline and at cycle 2 day 1.

Number und tittle of the presentation:

Abstract #1152

Raab et al: A Phase I/IIa Study of the CD38 Antibody MOR202 Alone and in Combination with Pomalidomide or Lenalidomide in Patients with Relapsed or Refractory Multiple Myeloma

MorphoSys held an Investor & Analyst Event at the 2016 ASH Annual Meeting on December 5, 2016, at 8:00pm PST (December 6, 2016: 4:00am GMT, 5:00am CET). Two clinical investigators presented clinical data for MorphoSys's investigational agents MOR208 and MOR202.

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

Webcast: https://www.webcaster4.com/Webcast/Page/359/18722

About MOR202 and the ongoing phase 1/2a study in multiple myeloma

The investigational drug MOR202 is a fully human HuCAL antibody targeting CD38, a highly expressed and validated target in multiple myeloma. Data are from an ongoing clinical phase 1/2a, open-label, multi-center, dose-escalation study conducted in several sites in Germany and Austria. The study is evaluating the safety and preliminary efficacy of MOR202 alone and in combination with the immunomodulatory drugs pomalidomide (Pom) and lenalidomide (Len) plus dexamethasone (Dex) in patients with relapsed/refractory multiple myeloma. The primary endpoints of the trial are the safety, tolerability and recommended dose of MOR202 alone and in combination with the IMiDs. Secondary outcome measures are pharmacokinetics and preliminary efficacy based on overall response rate, duration of response, time-to-progression, and progression-free survival.

About MorphoSys:

MorphoSys developed HuCAL, the most successful antibody library technology in the pharmaceutical industry. By successfully applying this and other patented technologies, MorphoSys has become a leader in the field of therapeutic antibodies, one of the fastest-growing drug classes in human healthcare.

Together with its pharmaceutical partners, MorphoSys has built a therapeutic <u>pipeline</u> of more than 100 human antibody drug candidates for the treatment of cancer, rheumatoid arthritis, and Alzheimer's disease, to name just a few. With its ongoing commitment to new antibody technology and drug development, MorphoSys is focused on making the healthcare products of tomorrow. MorphoSys is listed on the Frankfurt Stock Exchange under the symbol MOR. For regular updates about MorphoSys, visit http://www.morphosys.com.

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