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PRESS RELEASE

GEMoaB Announces Clinical Data Presentations on Their Lead Asset UniCAR-T-CD123 in relapsed/refractory AML at the Upcoming EHA-EBMT 3rd European CAR T-Cell Meeting

Dresden, Germany, January 7, 2021. GEMoaB, a biopharmaceutical company focused on the development of next-generation immunotherapies for hard-to-treat cancers, today announced the acceptance of two presentations on clinical data from the ongoing Phase I study of their lead asset UniCAR-T-CD123 in relapsed/refractory acute myeloid leukemia (rrAML) at the 2021 EHA-EBMT 3rd European CAR T-Cell Meeting, being held from February 4-6.

So far, CAR-T cell therapy in AML has been impacted by the lack of antigens differentially expressed on malignant blasts. Targeting CD123, which is also expressed on hematopoietic progenitor cells, with conventional CAR-T products has led to promising response rates but also to long-lasting aplasias, with the frequent need for subsequent allogeneic hematopoietic cell transplantation.

The Phase I data of UniCAR-T-CD123 in rrAML presented at the congress highlight the unique product profile of UniCAR-T-CD123 in heavily pretreated rrAML patients as well as the key features of GEMoaB's rapidly switchable universal CAR-T platform, UniCAR. The UniCAR platform promises an improved therapeutic window and increased efficacy and safety over conventional CAR-T therapies in hematological malignancies and solid tumors.

"We are pleased to present important clinical data for UniCAR-T-CD123, the lead asset of our rapidly switchable UniCAR platform, at the 2021 EBMT/EHA European CAR-T meeting", said Professor Gerhard Ehninger, Chief Medical Officer of GEMoaB. "Our data nicely support our UniCAR key platform claims and provide the clinical proof of UniCAR's rapid switch on/off and re-activation capability, potentially leading to a highly differentiated product for rrAML patients in need for better treatment options."

The clinical data further support the ongoing development of UniCAR in hematological malignancies and solid tumors. A Phase IA dose-finding study of the first UniCAR asset, UniCAR-T-CD123, for the treatment of relapsed/refractory AML, is ongoing. A

Phase IA study with UniCAR-T-PSMA directed against CRPC and other PSMA-expressing late-stage solid tumors, has been initiated.

GEMoaB's presentations at the 3rd EHA/EBMT European CAR-T Meeting:

(1) Oral Presentation: ID33: Martin Wermke et al., "Proof-of-Concept for Rapidly Switchable Universal CAR-T Platform with UniCAR-T-CD123 in Relapsed/Refractory AML".

(2) Poster Presentation: AS-Cart-2021-00068: Sabrina Kraus et al., "Re-activation of UniCAR-T-Cells with 2nd Cycle of Targeting Module TM123 in a Patient with Relapsed/Refractory AML".

About the UniCAR-T-CD123 Phase IA Study

This first-in-human phase I study is an open-label, non-randomized, dose-finding study designed to evaluate the safety and activity of UniCAR-T-CD123 in up to 16 CD123 positive patients with relapsed/refractory AML. Its purpose is to determine the maximum tolerated dose (MTD) as well as Dose limiting toxicities (DLT) of the combined application of a single dose of UniCAR-T and the continuous infusion of TM123 over 25 days. Application follows post salvage therapy and lymphodepletion. The study also investigates response rates, response duration, persistence of UniCAR-T cells over time as well as the ability to rapidly switch UniCAR-T cells on and off in case of side effects through stopping TM infusion. The study takes place at selected Phase I, Acute Leukemia and CAR-T experienced University centers in Germany. The study is supported by a grant from the German Federal Ministry for Education and Research (project "TurbiCAR"). To learn more about the trial, please visit clinicaltrials.gov.

About UniCAR

GEMoaB is developing a rapidly switchable universal CAR-T platform, UniCAR, to improve the therapeutic window and increase efficacy and safety of CAR-T cell therapies in challenging cancers, including acute leukemias and solid tumors. Conventional CAR-T cells depend on the presence and direct binding of cancer antigens for activation and proliferation. An inherent key feature of the UniCAR platform is a rapidly switchable on/off mechanism (less than 4 hours after interruption of TM supply) enabled by the short pharmacokinetic half-life and fast internalization of soluble adaptors termed TMs. These TMs provide the antigen-specificity to activate UniCAR gene-modified T-cells (UniCAR-T) and consist of a highly flexible antigen binding moiety, linked to a small peptide motif recognized by UniCAR-T.

About GEMoaB

GEMoaB is a privately-owned, clinical-stage biopharmaceutical company that is aiming to become a fully integrated biopharmaceutical company. By advancing its proprietary UniCAR, RevCAR and ATAC platforms, the company will discover,

develop, manufacture and commercialize next-generation immunotherapies for the treatment of cancer patients with a high unmet medical need.

GEMoaB has a broad pipeline of product candidates in pre-clinical and clinical development for the treatment of hematological malignancies as well as solid tumors. Its clinical stage assets GEM333, an Affinity-Tailored Adaptor for T-Cells (ATAC) with binding specificity to CD33 in relapsed/refractory AML, and GEM3PSCA, an ATAC with binding specificity to PSCA for the treatment of castrate-resistant metastatic prostate cancer and other PSCA expressing late stage solid tumors, are currently investigated in Phase I studies and globally partnered with Bristol-Myers Squibb. A Phase IA dose-finding study of the first UniCAR asset in hematological malignancies, UniCAR-T-CD123 for treatment of relapsed/refractory AML, is currently recruiting patients.

Manufacturing expertise, capability and capacity are key for developing cellular immunotherapies for cancer patients. GEMoaB has established a preferred partnership with its sister company Cellex in Cologne, a world leader in manufacturing hematopoietic blood stem cell products and a leading European CMO for CAR-T cells, co-operating in that area with several large biotech companies. More information can be found at www.gemoab.com.

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