GENMAB'S HUMAX-CD38 ENTERS PHASE I/II CLINICAL TRIAL FOR MULTIPLE MYELOMA

Summary: Genmab has initiated a Phase I/II safety and dose finding study of HuMax-CD38 for the treatment of multiple myeloma.

Copenhagen, Denmark; December 7, 2007 – Genmab A/S (OMX: GEN) announced today it has initiated a Phase I/II safety and dose finding study of HuMax-CD38™ for the treatment of multiple myeloma (MM). The study will include a maximum of 122 patients with MM who are relapsed or refractory to at least two different prior treatments and are without further established treatment options.

"HuMax-CD38 is the ninth Genmab antibody to enter clinical development," said Lisa N. Drakeman, Ph.D., Chief Executive Officer of Genmab. "We are looking forward to the results of this safety study and hope that HuMax-CD38 may one day offer a new potential treatment for multiple myeloma patients who have run out of treatment options."

About the trial

This open label dose escalation safety study will consist of two parts. In Part 1, 26 to 62 patients will be enrolled depending on the number of dose levels reached during escalation. Patients in Part 1 will be divided into cohorts at various doses of HuMax-CD38, with each patient receiving 7 infusions. The first infusion will be followed by a 3 week period of safety monitoring with the following 6 doses to be given at weekly intervals.

In Part 2, 60 patients will be enrolled with 20 patients in each of three dose levels. The highest dose in Part 2 will be the highest safe dose in Part 1 and two dose levels below. Patients in Part 2 will receive 6 infusions of HuMax-CD38 at weekly intervals.

In each part of the study, patients will attend 12 follow up visits at 2 to 4 week intervals to assess safety and efficacy and will be followed every 12 weeks thereafter until disease progression, initiation of alternative treatment for MM or death for a maximum total of 2 years from study start.

About HuMax-CD38

HuMax-CD38 is a fully human antibody that targets the CD38 molecule which is highly expressed on the surface of multiple myeloma tumor cells. In preclinical studies, HuMax-CD38 was more effective in triggering the immune system killing mechanisms Antibody-Dependent Cellular Cytotoxicity (ADCC) and Complement Dependent Cytotoxicity (CDC), than other human CD38 antibodies when tested on multiple myeloma tumors. HuMax-CD38 also potently killed tumor cells from a patient with a CD38/138 positive plasma cell leukemia which was refractory to chemotherapy at the time of analysis. Furthermore, treatment with HuMax-CD38

slowed tumor growth in both preventive and therapeutic settings in SCID mice in animal models. HuMax-CD38 is the first antibody known to block the ecto-enzymatic activity of CD38.

About Multiple Myeloma
Multiple Myeloma is a plasma cell disorder, characterized by uncontrolled and progressive proliferation of a plasma cell clone. The proliferation of myeloma cells causes displacement of the normal bone marrow. MM accounts for approximately 1% of all malignancies and 10% of all hematologic malignancies with a higher frequency in African Americans where MM accounts for 20% of all hematologic malignancies. In the US, approximately 11,000 deaths each year are related to MM and the estimated number of new cases is rising. At present, no cure is available, and the mean survival is approximately 3-5 years.

About Genmab A/S
Genmab is a leading international biotechnology company focused on developing fully human antibody therapeutics for unmet medical needs. Using unique, cutting-edge antibody technology, Genmab's world class discovery and development teams have created and developed an extensive pipeline of products for potential treatment of a variety of diseases including cancer and autoimmune disorders. As Genmab advances towards a commercial future, we remain committed to our primary goal of improving the lives of patients who are in urgent need of new treatment options. For more information on Genmab's products and technology, visit www.genmab.com.

This press release contains forward looking statements. The words "believe", "expect", "anticipate", "intend" and "plan" and similar expressions identify forward looking statements. Actual results or performance may differ materially from any future results or performance expressed or implied by such statements. The important factors that could cause our actual results or performance to differ materially include, among others, risks associated with product discovery and development, uncertainties related to the outcome and conduct of clinical trials including unforeseen safety issues, uncertainties related to product manufacturing, the lack of market acceptance of our products, our inability to manage growth, the competitive environment in relation to our business area and markets, our inability to attract and retain suitably qualified personnel, the unenforceability or lack of protection of our patents and proprietary rights, our relationships with affiliated entities, changes and developments in technology which may render our products obsolete, and other factors. Genmab is not under an obligation to up-date statements regarding the future following the publication of this release; nor to confirm such statements in relation to actual results, unless this is required by law.

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