

GENMAB ANNOUNCES PRELIMINARY SAFETY AND EFFICACY DATA FOR DARATUMUMAB

- Preliminary Phase I/II data show daratumumab is active in multiple myeloma & has an acceptable safety profile
- Data presented in poster session today at the ASH Annual Meeting

Copenhagen, Denmark; December 11, 2011 – Genmab A/S (OMX: GEN) announced today encouraging preliminary safety and efficacy data from the first Phase I/II clinical study of daratumumab (HuMax®-CD38) in multiple myeloma. A 49%, 55%, and 61% reduction in the serum M-component was observed in the three patients treated at the highest dose level examined so far (4 mg/kg of daratumumab). The serum M-component is an abnormal protein produced by the cancerous plasma cells and is a direct marker for tumor activity. Reduction in the serum M-component is a key factor for response evaluations in multiple myeloma. The observed level of reduction therefore indicates that daratumumab was clinically active in these multiple myeloma patients.

The data presented today was from 23 patients who received daratumumab in doses up to 4mg/kg. The data also showed daratumumab has an acceptable safety profile. The most common adverse events seen in the study so far were pyrexia, cough, free hemoglobin, anemia, dizziness, hemolysis, flu-like illness, nausea, lymphopenia and monocytopenia.

"We are delighted to share these preliminary data which offer the first insight we have into the activity of daratumumab in multiple myeloma. We have not yet reached the maximum tolerated dose and therefore the study will continue to examine patients at higher doses and we look forward to announcing detailed safety and response data at a later date," said Jan van de Winkel, Ph.D., Chief Executive Officer of Genmab.

The poster presented at ASH today can be accessed at Genmab's website www.genmab.com.

About the study

This ongoing Phase I/II dose escalation study will include a maximum of 122 patients with multiple myeloma that is relapsed or refractory to at least two different prior treatments. The primary objective of the study is to establish the safety profile of daratumumab and secondary objectives are to establish maximum tolerated dose and efficacy. An independent data monitoring committee evaluates the safety data for each cohort before dose-escalation. For more detailed information on the study including the dosing cohorts, please see the poster presented at ASH, posted on Genmab's website.

About daratumumab

Daratumumab is a human CD38 monoclonal antibody with broad-spectrum killing activity. Daratumumab is in clinical development for multiple myeloma. The CD38 molecule is highly expressed on the surface of multiple myeloma cells. CD38 is also expressed on a number of other hematological tumors, including diffuse large B-cell lymphoma, chronic lymphocytic leukemia, acute lymphoblastic leukemia, acute myeloid leukemia, follicular lymphoma and mantle cell lymphoma.

About Genmab A/S

Genmab is a publicly traded, international biotechnology company specializing in the creation and development of differentiated human antibody therapeutics for the treatment of cancer. Founded in 1999, the company's first marketed antibody, Arzerra® (ofatumumab), was approved to treat chronic lymphocytic leukemia that is refractory to fludarabine and alemtuzumab after less than eight years in development. Genmab's validated and next generation antibody technologies are expected to provide a steady stream of future product candidates. Partnering of innovative product candidates and technologies is a key focus of Genmab's strategy and the company has alliances with top tier pharmaceutical and biotechnology companies. For more information visit www.genmab.com.

Tel: +45 7020 2728

Fax: +45 7020 2729

www.genmab.com

Contact:



GENMAB ANNOUNCES PRELIMINARY SAFETY AND EFFICACY DATA FOR DARATUMUMAB

Rachel Curtis Gravesen, Senior Vice President, Investor Relations & Communication T: +45 33 44 77 20; M: +45 25 12 62 60; E: r.gravesen@genmab.com

This Company Announcement 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 pre-clinical and clinical development of products, 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. For a further discussion of these risks, please refer to the risk management sections in Genmab's most recent financial reports, which are available on www.genmab.com. Genmab does not undertake any obligation to update or revise forward looking statements in this Company Announcement nor to confirm such statements in relation to actual results, unless required by law.

Genmab®; the Y-shaped Genmab logo®; HuMax®; HuMax-CD20®; HuMax®-EGFr; HuMax®-IL8; HuMax®-TAC; HuMax®-CD38; HuMax®-TF; HuMax®-Her2; HuMax®-cMet, HuMax®-CD74, DuoBody™ and UniBody® are all trademarks of Genmab A/S. Arzerra® is a trademark of GlaxoSmithKline.

Tel: +45 7020 2728

Fax: +45 7020 2729

www.genmab.com