Data Published in The New England Journal of Medicine Shows Daratumumab Monotherapy Induced Durable Responses in Heavily Pre-treated Relapsed or Refractory Multiple Myeloma Patients

Media Release

- **New England Journal of Medicine (NEJM) publishes full data set of the first clinical study initiated using daratumumab monotherapy to treat patients with relapsed/refractory multiple myeloma**
- **Data shows encouraging efficacy with a 36% response rate in the group treated with 16 mg/kg dose in part 2 of study**
- **65% of patients who responded to treatment in the 16mg/kg dose group in part 2 of study had not experienced disease progression 12 months after the start of treatment**
- **Tolerable safety profile and no maximum tolerated dose was identified**

Copenhagen, Denmark; August 27, 2015 – Genmab A/S (OMX: GEN) announced today the New England Journal of Medicine (NEJM) has published the full data set from the initial Phase I/II study with daratumumab monotherapy treating patients with relapsed or refractory multiple myeloma. Patients that received 16 mg/kg in part 2 of the study had a median of 4 prior lines of therapy and 64% of these patients were refractory to both proteasome inhibitors (PIs) and immunomodulatory (IMiD) drugs, which are current standard of care treatments for multiple myeloma. The data showed a 36% response rate in the 16 mg/kg group in part 2 of the study, with responses that deepened over time. Sixty five percent of patients in this group that responded to treatment were progression-free twelve months following the start of treatment. For all patients in part 2, pneumonia and thrombocytopenia were the most common grade 3/4 adverse events (AEs; ≥5%). Infusion-related reactions were mild with no dose-dependent adverse events. In part 1 of the study, no maximum tolerated dose was identified up to 24 mg/kg.

Following this study, 16 mg/kg was chosen as the dose to be used in future daratumumab clinical studies. Daratumumab is being developed by Janssen Biotech, Inc. under an exclusive worldwide license to develop, manufacture and commercialize daratumumab from Genmab.

“Patients who have relapsed or refractory multiple myeloma currently have very limited treatment options. The results from this first-in-human study of daratumumab, presented in full in *The NEJM*, show an impressive response rate and duration of response, particularly when you consider that patients in the study had received a large number of prior treatments,” said Jan van de Winkel, Ph.D., Chief Executive Officer of Genmab.

Data from this study has been included in the Biologics License Application (BLA) submitted by Janssen to the U.S. Food and Drug Administration for daratumumab as a treatment for patients with multiple myeloma who have received at least three prior lines of therapy including both a proteasome inhibitor (PI) and an immunomodulatory agent (IMiD) or who are double refractory to a PI and an IMiD. The BLA submission was completed on July 9th 2015.

About the study
This two-part, Phase I/II, open-label study enrolled 32 patients in part 1, and 72 patients in part 2, 42 of which were in the 16 mg/kg dose group. Part 1 was a dose-escalation study with patients receiving weekly doses of daratumumab between 0.005 and 24 mg/kg of daratumumab.

In part 2, 8 mg/kg and 16 mg/kg daratumumab were administered with different schedules. The primary endpoint of the study was safety. Secondary endpoints were pharmacokinetics, objective response according to International Myeloma Working Group (IMWG) uniform response criteria for myeloma, relative reductions in M-protein and free light chains, time to progression, response duration, progression-free and overall survival.

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About multiple myeloma
Multiple myeloma is an incurable blood cancer that starts in the bone marrow and is characterized by an excess proliferation of plasma cells.[1] Multiple myeloma is the third most common blood cancer in the U.S., after leukemia and lymphoma.[2] Approximately 26,850 new patients will be diagnosed with multiple myeloma and approximately 11,240 people will die from the disease in the U.S. in 2015.[3] Globally, it is estimated that 124,225 people will be diagnosed and 87,084 will die from the disease in 2015.[4] While some patients with multiple myeloma have no symptoms at all, most patients are diagnosed due to symptoms which can include bone problems, low blood counts, calcium elevation, kidney problems or infections.[5] Patients who relapse after treatment with standard therapies, including PIs or IMiDs, have poor prognoses and few treatment options.[6]

About daratumumab
Daratumumab is an investigational human IgG1k monoclonal antibody (mAb) that binds with high affinity to the CD38 molecule, which is highly expressed on the surface of multiple myeloma cells. It induces rapid tumor cell death through multiple immune-mediated mechanisms[7], including complement-dependent cytotoxicity[7], antibody-dependent cellular phagocytosis[8] and antibody-dependent cellular cytotoxicity[7], as well as via induction of apoptosis[9]. Five Phase III clinical studies with daratumumab in relapsed and frontline settings are currently ongoing. Additional studies are ongoing or planned to assess its potential in other malignant and pre-malignant diseases on which CD38 is expressed, such as smoldering myeloma and non-Hodgkin lymphoma. Daratumumab has been granted Breakthrough Therapy Designation from the US FDA.

About Genmab
Genmab is a publicly traded, international biotechnology company specializing in the creation and development of differentiated antibody therapeutics for the treatment of cancer. Founded in 1999, the company currently has one marketed antibody, Arzerra® (ofatumumab) for the treatment of certain chronic lymphocytic leukemia indications and daratumumab in clinical development for multiple myeloma and non-Hodgkin's lymphoma, in addition to other clinical programs, and an innovative pre-clinical pipeline. Genmab's technology base consists of validated and proprietary next generation antibody technologies - the DuoBody® platform for generation of bispecific antibodies, and the HexaBody® platform which creates effector function enhanced antibodies. Genmab's deep antibody expertise is expected to provide a stream of future product candidates. Partnering of selected 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.

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