



MAJOR SHAREHOLDER ANNOUNCEMENT

Summary: Major shareholder announcement for Genmab A/S.

Copenhagen, Denmark; February 3, 2010 – Genmab A/S (OMX: GEN) announces under reference to Section 29 of the Danish Securities Trading Act that Hendrikus Hubertus Franciscus Stienstra has informed us that through his personal shareholding and indirect control in Mercurius Beleggingsmaatschappij B.V. and its indirect control in Stimex Participatiemaatschappij B.V.s ownership in Genmab A/S as of December 3, 2009 consists of 4,493,302 shares, which is 10.01% of the total shares in the Company. Mercurius Beleggingsmaatschappij B.V. is fully owned by Hendrikus Hubertus Franciscus Stienstra. Stimex Participatiemaatschappij B.V. is controlled by Mercurius Beleggingsmaatschappij B.V.

About Genmab A/S

Genmab is a leading international biotechnology company focused on developing fully human antibody therapeutics for the potential treatment of cancer. Genmab's world class discovery and development teams are using cutting-edge technology to create and develop products to address unmet medical needs. Our primary goal is to improve 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 Stock Exchange 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. For a further discussion of these risks, please refer to the section "Risk Management" in Genmab's Annual Report, which is available on www.genmab.com. Genmab does not undertake any obligation to update or revise forward looking statements in this Stock Exchange Release 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-HepC[™]; HuMax-CD38[™]; HuMax-CD32b[™]; HuMax-TF[™]; HuMax-Her2[™]; HuMax-VEGF[™] and UniBody[®] are all trademarks of Genmab A/S. Arzerra[™] is a trademark of GlaxoSmithKline.

Contact: Helle Husted, Vice President, Investor Relations
T: +45 33 44 77 30; M: +45 25 27 47 13; E: h.husted@genmab.com

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Genmab A/S
Bredgade 34
1260 Copenhagen K, Denmark
Tel: +45 7020 2728
Fax: +45 7020 2729
CVR no. 2102 3884

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