

Report Pursuant to Section 28a of the Danish Securities Trading Act

Company Announcement

Copenhagen, Denmark; August 20, 2015 — Pursuant to Section 28a of the Danish Securities Trading Act, Genmab A/S (OMX: GEN) hereby, on behalf of managerial employees, makes public information on transactions by managerial employees and their related parties involving Genmab shares and related instruments, as follows:

Name: David A. Eatwell
Reason: Executive Vice President & Chief Financial Officer
Issuer: Genmab A/S
ID code/ISIN: DK0010272202
Description: Shares
Transaction: Sale
Trading date: August 20, 2015
Market: NASDAQ OMX Copenhagen A/S
Number: 15,000
Value: DKK 8,971,920

Name: Burton G. Malkiel
Reason: Member of the Board of Directors
Issuer: Genmab A/S
ID code/ISIN: DK0010272202
Description: Shares
Transaction: Sale
Trading date: August 20, 2015
Market: NASDAQ OMX Copenhagen A/S
Number: 25,000
Value: DKK 14,953,200

Name: Nedjad Losic
Reason: Member of the Board of Directors
Issuer: Genmab A/S
ID code/ISIN: DK0010272202
Description: Shares
Transaction: Sale
Trading date: August 20, 2015
Market: NASDAQ OMX Copenhagen A/S
Number: 5,000
Value: DKK 2,990,640

About Genmab

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 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

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tier pharmaceutical and biotechnology companies. For more information visit www.genmab.com.

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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 A/S and its subsidiaries own the following trademarks: Genmab[®]; the Y-shaped Genmab logo[®]; Genmab in combination with the Y-shaped Genmab logo[™]; the DuoBody logo[®]; the HexaBody logo[™]; HuMax[®]; HuMax-CD20[®]; DuoBody[®]; HexaBody[®] and UniBody[®]. Arzerra[®] is a trademark of Novartis Pharma AG.