

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

Company Announcement

Copenhagen, Denmark; December 6, 2013 — Pursuant to Section 28a of the Danish Securities Trading Act, Genmab A/S (OMX: GEN) shall make public information on transactions by managerial employees and their related parties involving Genmab shares and related instruments, as follows:

Name: Mats Pettersson
Reason: Chairman of the Board of Directors
Issuer: Genmab A/S
ID code/ ISIN: DK0010272202
Description: Warrants
Transaction: Grant
Trading date: December 6, 2013
Market: NASDAQ OMX Copenhagen A/S
Number: 20,000
Value: DKK 1,875,800

Name: Anders Gersel Pedersen
Reason: Member of the Board of Directors
Issuer: Genmab A/S
ID code/ ISIN: DK0010272202
Description: Warrants
Transaction: Grant
Trading date: December 6, 2013
Market: NASDAQ OMX Copenhagen A/S
Number: 10,000
Value: DKK 937,900

Name: Nedjad Losic
Reason: Member of the Board of Directors
Issuer: Genmab A/S
ID code/ ISIN: DK0010272202
Description: Warrants
Transaction: Grant
Trading date: December 6, 2013
Market: NASDAQ OMX Copenhagen A/S
Number: 15,000
Value: DKK 1,406,850

Name: Burton G. Malkiel
Reason: Member of the Board of Directors
Issuer: Genmab A/S
ID code/ ISIN: DK0010272202
Description: Warrants
Transaction: Grant
Trading date: December 6, 2013
Market: NASDAQ OMX Copenhagen A/S
Number: 10,000
Value: DKK 937,900

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

Name: Hans Henrik Munch-Jensen
Reason: Member of the Board of Directors
Issuer: Genmab A/S
ID code/ ISIN: DK0010272202
Description: Warrants
Transaction: Grant
Trading date: December 6, 2013
Market: NASDAQ OMX Copenhagen A/S
Number: 10,000
Value: DKK 937,900

Name: Tom Vink
Reason: Member of the Board of Directors
Issuer: Genmab A/S
ID code/ ISIN: DK0010272202
Description: Warrants
Transaction: Grant
Trading date: December 6, 2013
Market: NASDAQ OMX Copenhagen A/S
Number: 10,000
Value: DKK 937,900

Name: Jan G. J. van de Winkel
Reason: President & Chief Executive Officer
Issuer: Genmab A/S
ID code/ ISIN: DK0010272202
Description: Warrants
Transaction: Grant
Trading date: December 6, 2013
Market: NASDAQ OMX Copenhagen A/S
Number: 120,000
Value: DKK 11,254,800

Name: David A. Eatwell
Reason: Executive Vice President & Chief Financial Officer
Issuer: Genmab A/S
ID code/ ISIN: DK0010272202
Description: Warrants
Transaction: Grant
Trading date: December 6, 2013
Market: NASDAQ OMX Copenhagen A/S
Number: 72,000
Value: DKK 6,752,880

The exercise price for each warrant is DKK 225.90. Each warrant entitles the owner to subscribe one share of nominally DKK 1. On the basis of an exercise price of DKK 225.90 and by application of the Black-Scholes formula, the average value of each warrant can be calculated as DKK 93.79 based on an interest rate of 1.0370% and the historical volatility of Genmab A/S shares calculated at 50.68%.

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,

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

the company's first marketed antibody, ofatumumab (Arzerra[®]), was approved to treat chronic lymphocytic leukemia in patients who are 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.

Contact:

Rachel Curtis Gravesen, Senior Vice President, Investor Relations & Communications
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 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; HuMax[®]; HuMax-CD20[®]; DuoBody[®]; HexaBody[™] and UniBody[®]. Arzerra[®] is a registered trademark of GlaxoSmithKline.