

NOVO NORDISK A S
Form 6-K
September 14, 2010

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER

Pursuant to Rule 13a-16 or 15d-16
of the Securities Exchange Act of 1934

September 14, 2010

NOVO NORDISK A/S

(Exact name of Registrant as specified in its charter)

Novo Allé

DK- 2880, Bagsvaerd

Denmark

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F

Form 20-F Form 40-F

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes No

If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g-32(b):82-_____

Company Announcement

13 September 2010

Novo Nordisk A/S – Share repurchase programme

On 12 August 2010 Novo Nordisk initiated a share repurchase programme in accordance with the provisions of the European Commission's regulation no 2273/2003 of 22 December 2003, also referred to as the Safe Harbour rules.

Under the programme Novo Nordisk will repurchase B shares for an amount up to DKK 1.0 billion in the period from 12 August 2010 to 25 October 2010.

Since the announcement as of 6 September 2010, the following transactions have been made under the programme:

| | Number of shares | Average purchase price | Transaction value, DKK |
|--|---------------------|---------------------------|---------------------------|
| Accumulated, last announcement | 595,000 | | 296,658,933 |
| 06 September 2010 | 35,000 | 506.4000 | 17,724,000 |
| 07 September 2010 | 35,000 | 513.7100 | 17,979,850 |
| 08 September 2010 | 35,000 | 514.7600 | 18,016,600 |
| 09 September 2010 | 35,000 | 527.3700 | 18,457,950 |
| 10 September 2010 | 35,000 | 541.8300 | 18,964,050 |
| Accumulated under the programme | 770,000 | | 387,801,383 |

With the transactions stated above, Novo Nordisk owns a total of 25,648,087 treasury shares, corresponding to 4.3% of the share capital. The total amount of shares in the company is 600,000,000 including treasury shares.

| | | | | |
|-------------------------|---------------|---------------|-----------------|----------|
| Novo Nordisk A/S | Novo Allé | Telephone: | Internet: | CVR no: |
| Investor Relations | 2880 Bagsværd | +45 4444 8888 | novonordisk.com | 24256790 |
| | Denmark | Telefax: | | |
| | | +45 4444 6626 | | |

Novo Nordisk is a global healthcare company with 88 years of innovation and leadership in diabetes care. The company also has leading positions within haemophilia care, growth hormone therapy and hormone replacement therapy. Headquartered in Denmark, Novo Nordisk employs approximately 29,890 employees in 76 countries, and markets its products in 179 countries. Novo Nordisk's B shares are listed on the NASDAQ OMX Copenhagen (Novo-B). Its ADRs are listed on the New York Stock Exchange (NVO). For more information, visit novonordisk.com.

Further information:

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf of the undersigned, thereunto duly authorized.

Date: September 14, 2010

NOVO NORDISK A/S

Lars Rebien Sørensen,

President and Chief Executive Officer
