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

FOR THE MONTH OF SEPTEMBER 2019

COMMISSION FILE NUMBER 001-38976

Genmab A/S

(Exact name of Registrant as specified in its charter)

Kalvebod Brygge 43
1560 Copenhagen V
Denmark
+45 70 20 27 28
(Address of principal executive offices)

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

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1)

Yes ☐ No ☒

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7)

Yes ☐ No ☒

This report on Form 6-K shall be deemed to be incorporated by reference in Genmab A/S's registration statements on Form S-8 (File No. 333-232693) and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.

SIGNATURE

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

GENMAB A/S

BY: /s/ David A. Eatwell
Name: David A.Eatwell
Title: Executive Vice President & Chief Financial Officer

DATE: September 13, 2019

EXHIBIT INDEX

Exhibit	Description of Exhibit
99.1	Company Announcement Dated September 13, 2019

Genmab Announces Positive Topline Results in Phase III Study of Daratumumab in Combination with Carfilzomib and Dexamethasone in Relapsed or Refractory Multiple Myeloma

Company Announcement

- **Phase III CANDOR study of daratumumab in combination with carfilzomib and dexamethasone in relapsed or refractory multiple myeloma met the primary endpoint of improvement in progression free survival**
- **Data to be discussed with health authorities in preparation for regulatory submissions**

Copenhagen, Denmark; September 13, 2019 – Genmab A/S (Nasdaq: GMAB) announced today topline results from the Phase III CANDOR study, sponsored by Amgen, of daratumumab in combination with carfilzomib and dexamethasone (Kd) versus Kd alone in patients with multiple myeloma who have relapsed after one to three prior therapies. The study met the primary endpoint of improving progression free survival (PFS). The regimen resulted in a 37% reduction in the risk of progression or death in patients with relapsed or refractory multiple myeloma treated with daratumumab in combination with Kd (HR=0.630; 95% CI: 0.464, 0.854; p=0.0014). The median PFS for patients treated with daratumumab in combination with Kd had not been reached by the cut-off date compared to a median PFS of 15.8 months for patients who received Kd alone.

There was a higher frequency of adverse events reported with daratumumab plus Kd, a three-agent regimen, than with Kd, a two-agent regimen. The types of observed adverse events were consistent with the known safety profiles of the individual agents. The most frequently reported treatment-emergent adverse events (greater than or equal to 20%) in the daratumumab plus Kd arm were thrombocytopenia, anemia, diarrhea, hypertension, upper respiratory tract infection, fatigue and dyspnea.

The CANDOR data will be submitted to a future medical meeting and Amgen will discuss the data with health authorities in preparation for regulatory submissions.

“We are very pleased that daratumumab has shown efficacy in yet another combination regimen – in this case with carfilzomib, a newer member of the proteasome inhibitor class. We look forward to the potential for this combination to provide an additional regimen for patients diagnosed with relapsed multiple myeloma,” said Jan van de Winkel, Ph.D., Chief Executive Officer of Genmab.

In August 2012, Genmab granted Janssen Biotech, Inc. an exclusive worldwide license to develop, manufacture and commercialize daratumumab.

About the CANDOR study
The Phase III trial (NCT03158688) is a randomized, open-label study that includes approximately 460 patients with multiple myeloma who have relapsed after 1 to 3 prior therapies. Patients were randomized to receive either daratumumab in combination with carfilzomib (a proteasome inhibitor) and dexamethasone (a corticosteroid) or carfilzomib and dexamethasone alone. In the daratumumab treatment arm, patients received 8 milligrams per kilogram (mg/kg) on days 1 and 2 of cycle 1, then 16 mg/kg once weekly for the remaining doses of the first 2 cycles, then every 2 weeks for 4 cycles (cycles 3 to 6), and then every 4 weeks for the remaining cycles or until disease progression. In both treatment arms carfilzomib was dosed twice weekly (20 mg/m^2 on cycle 1 days 1 and 2 and 56 mg/m^2 beginning on cycle 1 day 8 and thereafter) and dexamethasone was given weekly (40 mg orally or via IV infusion). The primary endpoint of the study is PFS.

Genmab Announces Positive Topline Results in Phase III Study of Daratumumab in Combination with Carfilzomib and Dexamethasone in Relapsed or Refractory Multiple Myeloma

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 26,000 new patients were expected to be diagnosed with multiple myeloma and approximately 13,650 people were expected to die from the disease in the U.S. in 2018.[3] Globally, it was estimated that 160,000 people were diagnosed and 106,000 died from the disease in 2018.[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]

About DARZALEX® (daratumumab)
DARZALEX® (daratumumab) intravenous infusion is indicated for the treatment of adult patients in the United States: in combination with lenalidomide and dexamethasone for the treatment of patients with newly diagnosed multiple myeloma who are ineligible for autologous stem cell transplant; in combination with bortezomib, melphalan and prednisone for the treatment of patients with newly diagnosed multiple myeloma who are ineligible for autologous stem cell transplant; in combination with lenalidomide and dexamethasone, or bortezomib and dexamethasone, for the treatment of patients with multiple myeloma who have received at least one prior therapy; in combination with pomalidomide and dexamethasone for the treatment of patients with multiple myeloma who have received at least two prior therapies, including lenalidomide and a proteasome inhibitor (PI); and as a monotherapy for the treatment of patients with multiple myeloma who have received at least three prior lines of therapy, including a PI and an immunomodulatory agent, or who are double-refractory to a PI and an immunomodulatory agent.[6] DARZALEX is the first monoclonal antibody (mAb) to receive U.S. Food and Drug Administration (U.S. FDA) approval to treat multiple myeloma. DARZALEX is indicated in Europe in combination with bortezomib, melphalan and prednisone for the treatment of adult patients with newly diagnosed multiple myeloma who are ineligible for autologous stem cell transplant; for use in combination with lenalidomide and dexamethasone, or bortezomib and dexamethasone, for the treatment of adult patients with multiple myeloma who have received at least one prior therapy; and as monotherapy for the treatment of adult patients with relapsed and refractory multiple myeloma, whose prior therapy included a PI and an immunomodulatory agent and who have demonstrated disease progression on the last therapy. The option to split the first infusion of DARZALEX over two consecutive days has been approved in both Europe and the U.S. In Japan, DARZALEX is approved in combination with lenalidomide and dexamethasone, or bortezomib and dexamethasone, for the treatment of adults with relapsed or refractory multiple myeloma and in combination with bortezomib, melphalan and prednisone for the treatment of patients with newly diagnosed multiple myeloma who are ineligible for autologous stem cell transplant. DARZALEX is the first human CD38 monoclonal antibody to reach the market in the United States, Europe and Japan. For more information, visit www.DARZALEX.com.

Daratumumab is a 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. Daratumumab triggers a person's own immune system to attack the cancer cells, resulting in rapid tumor cell death through multiple immune-mediated mechanisms of action and through immunomodulatory effects, in addition to direct tumor cell death, via apoptosis (programmed cell death).[6,7,8,9,10]

Daratumumab is being developed by Janssen Biotech, Inc. under an exclusive worldwide license to develop, manufacture and commercialize daratumumab from Genmab. A comprehensive clinical development program for daratumumab is ongoing, including multiple Phase III studies in smoldering, relapsed and refractory and frontline multiple myeloma settings. Additional studies are ongoing or planned to assess the potential of daratumumab in other malignant and pre-malignant diseases in which CD38 is expressed, such as amyloidosis, NKT-cell lymphoma and B-cell and T-cell ALL. Daratumumab has received two Breakthrough Therapy Designations from the U.S. FDA for certain indications of multiple myeloma, including as a monotherapy for heavily pretreated multiple myeloma and in combination with certain other therapies for second-line treatment of multiple myeloma.

Genmab Announces Positive Topline Results in Phase III Study of Daratumumab in Combination with Carfilzomib and Dexamethasone in Relapsed or Refractory Multiple Myeloma

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 has two approved antibodies, DARZALEX® (daratumumab) for the treatment of certain multiple myeloma indications, and Arzerra® (ofatumumab) for the treatment of certain chronic lymphocytic leukemia indications. Daratumumab is in clinical development for additional multiple myeloma indications, other blood cancers and amyloidosis. A subcutaneous formulation of ofatumumab is in development for relapsing multiple sclerosis. Genmab also has a broad clinical and pre-clinical product pipeline. Genmab's technology base consists of validated and proprietary next generation antibody technologies - the DuoBody® platform for generation of bispecific antibodies, the HexaBody® platform, which creates effector function enhanced antibodies, the HexElect® platform, which combines two co-dependently acting HexaBody molecules to introduce selectivity while maximizing therapeutic potency and the DuoHexaBody® platform, which enhances the potential potency of bispecific antibodies through hexamerization. The company intends to leverage these technologies to create opportunities for full or co-ownership of future products. Genmab has alliances with top tier pharmaceutical and biotechnology companies. Genmab is headquartered in Copenhagen, Denmark with core sites in Utrecht, the Netherlands and Princeton, New Jersey, U.S.

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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 or technologies 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 and the risk factors included in Genmab's final prospectus for our U.S. public offering and listing and other filings with the U.S. Securities and Exchange Commission (SEC), which are available at www.sec.gov. Genmab does not undertake any obligation to update or revise forward looking statements in this Company Announcement nor to confirm such statements to reflect subsequent events or circumstances after the date made or in relation to actual results, unless required by law.

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[2] National Cancer Institute. "A Snapshot of Myeloma." Available at www.cancer.gov/research/progress/snapshots/myeloma. Accessed June 2016.
[3] Globocan 2018. United States of America Fact Sheet. Available at http://gco.iarc.fr/today/data/factsheets/840-united-states-of-america-fact-sheets.pdf.
[4] Globocan 2018. World Fact Sheet. Available at http://gco.iarc.fr/today/data/factsheets/populations/900-world-fact-sheets.pdf. Accessed December 2018.
[5] American Cancer Society. "How is Multiple Myeloma Diagnosed?" http://www.cancer.org/cancer/multiplemyeloma/detailedguide/multiple-myeloma-diagnosis. Accessed June 2016.

[6] DARZALEX Prescribing information, July 2019. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2019/761036s019lbl.pdf Last accessed July 2019
[7] De Weers, M et al. Daratumumab, a Novel Therapeutic Human CD38 Monoclonal Antibody, Induces Killing of Multiple Myeloma and Other Hematological Tumors. The Journal of Immunology. 2011; 186: 1840-1848.
[8] Overdijk, MB, et al. Antibody-mediated phagocytosis contributes to the anti-tumor activity of the therapeutic antibody daratumumab in lymphoma and multiple myeloma. MAbs. 2015; 7: 311-21.
[9] Krejcik, MD et al. Daratumumab Depletes CD38+ Immune-regulatory Cells, Promotes T-cell Expansion, and Skews T-cell Repertoire in Multiple Myeloma. Blood. 2016; 128: 384-94.
[10] Jansen, JH et al. Daratumumab, a human CD38 antibody induces apoptosis of myeloma tumor cells via Fc receptor-mediated crosslinking. Blood. 2012; 120(21): abstract 2974.

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