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 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of May 2024

Commission File Number: 001-39950

Evaxion Biotech A/S

(Translation of registrant's name into English)

Dr. Neergaards Vej 5f DK-2970 Hoersholm Denmark

(Address of principal executive office)

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 [X] Form 40-F []

INCORPORATION BY REFERENCE

This report on Form 6-K shall be deemed to be incorporated by reference in Evaxion Biotech A/S's registration statements on Form S-8 (File No. 333-255064), on Form F-3 (File No. 333-265132), on Form F-1, as amended (File No. 333-266050) and Form F-1 (File No. 333-276505), including any prospectuses forming a part of such registration statements and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.

Press Release

On May 23, 2024, Evaxion Biotech A/S (the "Company"), a clinical-stage TechBio company specializing in developing AI-ImmunologyTM powered vaccines, issued a press release titled "Evaxion to Present New Positive Data from Ongoing Phase 2 Study on Lead Vaccine Candidate EVX-01 at the American Society of Clinical Oncology Annual Meeting 2024". A copy of the press release is furnished as Exhibit 99.1 to this report on Form 6-K.

Exhibits

Exhibit No. Description

99.1 Press Release dated May 23, 2024

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 by the undersigned, thereunto duly authorized.

Evaxion Biotech A/S (Registrant)

Date: May 23, 2024 By: /s/ Christian Kanstrup

Christian Kanstrup Chief Executive Officer

Evaxion to Present New Positive Data from Ongoing Phase 2 Study on Lead Vaccine Candidate EVX-01 at the American Society of Clinical Oncology Annual Meeting 2024

- EVX-01 induced positive clinically relevant immune responses in all assessed patients
- Booster immunizations tended to increase the immune response
- The observed immune responses were mediated by both CD4+ and CD8+ T-cells

COPENHAGEN, Denmark, May 23, 2024 (GLOBE NEWSWIRE) -- Evaxion Biotech A/S (NASDAQ: EVAX) ("Evaxion" or the "Company"), a clinical-stage TechBio company specializing in developing AI-Immunology™ powered vaccines, today announces its participation in the American Society of Clinical Oncology (ASCO) Annual Meeting, where it will present positive immune data form its ongoing EVX-01 Phase 2 study. The study assesses the personalized cancer vaccine EVX-01 in combination with anti-PD1 therapy in patients with advanced melanoma. The conference will take place in Chicago, IL, from May 31 − June 4, 2024.

"We continue to see encouraging results from our ongoing Phase 2 study with EVX-01. The immune signatures induced by EVX-01 are both specific and strong, with booster immunizations pointing to further increased immune responses. The data makes us optimistic about the potential clinical benefit of EVX-01, and we eagerly await further data readouts on this novel personalized cancer vaccine. With our AI-ImmunologyTM platform, we can precisely select vaccine targets and design personalized vaccines that match each patient's unique tumor signature and immune characteristics. This represents a novel approach to addressing an unmet medical need that remains dire, and we are excited about the interest we are seeing in the EVX-01 program," said Christian Kanstrup, CEO at Evaxion.

This ongoing Phase 2 study currently confirms findings from the previous Phase 1 study, reaffirming the ability of Evaxion's AI-ImmunologyTM platform to precisely select therapeutically relevant vaccine targets and generate new valuable insights. Key highlights from the Phase 2 study are:

- Analyses of patient samples demonstrated EVX-01 vaccine-induced specific and robust immune responses, mediated by both CD4+ and CD8+ T-cells
- Booster immunizations tended to increase the immune response and did not impose any safety concerns
- The EVX-01 vaccine candidate was found to be well-tolerated with only grade 1 and 2 adverse events

Poster Details:

Abstract Title: "Immunogenicity of an AI-designed personalized neoantigen vaccine, EVX-01, in combination with anti-PD-

1 therapy in patients with metastatic melanoma"

Abstract #: 9561 **Poster Bd** #: 345

Track: Melanoma/Skin Cancers **Location:** Hall A – McCormick Place

Date/Time: Saturday, June 1, 1:30 – 4:30 p.m. CDT **Presenter:** Mads Lausen Nielsen, Senior Scientist

About EVX-01 Phase 2 Clinical Trial

EVX-01 is Evaxion's lead clinical asset and constitutes a peptide-based personalized cancer vaccine. The ongoing Phase 2 clinical study is a self-sponsored, open-label, single-arm, multi-center trial carried out in collaboration with Merck Sharp & Dohme LLC that, together with leading principal investigators and research centers from Italy and Australia. It aims to evaluate the efficacy and safety of EVX-01 vaccination in combination with the anti-PD1 treatment pembrolizumab (more commonly known as KEYTRUDA®) in treatment-naive patients with metastatic or unresectable malignant stage III or IV melanoma. More information can be accessed under clinical trial ID NCT05309421.

About EVAXION

Evaxion Biotech A/S is a pioneering TechBio company based upon its AI platform, AI-ImmunologyTM. Evaxion's proprietary and scalable AI prediction models harness the power of artificial intelligence to decode the human immune system and develop novel immunotherapies for cancer, bacterial diseases, and viral infections. Based upon AI-ImmunologyTM, Evaxion has developed a clinical-stage oncology pipeline of novel personalized vaccines and a preclinical infectious disease pipeline in bacterial and viral diseases with high unmet medical needs. Evaxion is committed to transforming patients' lives by providing innovative and targeted treatment options. For more information about Evaxion and its groundbreaking AI-ImmunologyTM platform and vaccine pipeline, please visit our website.

Forward-Looking Statement

This announcement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The words "target," "believe," "expect," "hope,"

"aim," "intend," "may," "might," "anticipate," "contemplate," "continue," "estimate," "plan," "potential," "predict," "project," "will," "can have," "likely," "should," "would," "could," and other words and terms of similar meaning identify forward-looking statements. Actual results may differ materially from those indicated by such forward-looking statements as a result of various factors, including, but not limited to, risks related to: our financial condition and need for additional capital; our development work; cost and success of our product development activities and preclinical and clinical trials; commercializing any approved pharmaceutical product developed using our AI platform technology, including the rate and degree of market acceptance of our product candidates; our dependence on third parties including for conduct of clinical testing and product manufacture; our inability to enter into partnerships; government regulation; protection of our intellectual property rights; employee matters and managing growth; our ADSs and ordinary shares, the impact of international economic, political, legal, compliance, social and business factors, including inflation, and the effects on our business from the worldwide ongoing COVID-19 pandemic and the ongoing conflict in the region surrounding Ukraine and Russia and the Middle East; and other uncertainties affecting our business operations and financial condition. For a further discussion of these risks, please refer to the risk factors included in our most recent Annual Report on Form 20-F and other filings with the U.S. Securities and Exchange Commission (SEC), which are available at www.sec.gov. We do not assume any obligation to update any forward-looking statements except as required by law.

Contact Information Evaxion Biotech A/S Christian Kanstrup Chief Executive Officer cka@evaxion-biotech.com