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 June 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), Form F-1 (File No. 333-276505), and Form F-1 (File No. 333-279153), 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of such registration statements and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.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 June 3, 2024, Evaxion Biotech A/S (the "Company"), a clinical-stage TechBio company specializing in developing AI-Immunology[™] powered vaccines, issued a press release titled "Evaxion Presents Positive and Validating Immune Data from Ongoing Phase 2 Trial with AI-Designed EVX-01 Vaccine at the ASCO 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

<u>99.1</u> <u>Press Release dated June 3, 2024</u>

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: June 3, 2024

By: <u>/s/ Christian Kanstrup</u> Christian Kanstrup Chief Executive Officer

Evaxion Presents Positive and Validating Immune Data from Ongoing Phase 2 Trial with AI-Designed EVX-01 Vaccine at the ASCO Annual Meeting 2024

- Evaxion's AI-designed cancer vaccine, EVX-01, triggered a specific and tumor-targeting immune response in all assayed melanoma patients
- Findings further confirm and validate the precision and predictive power of Evaxion's AI vaccine target discovery and design platform, AI-Immunology[™]

COPENHAGEN, Denmark, June 03, 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, reported data from its ongoing Phase 2 study at the American Society of Clinical Oncology (ASCO) Annual Meeting 2024. The data demonstrated vaccine-induced immune response in metastatic melanoma patients treated with the Company's AI-Immunology[™] designed personalized cancer vaccine, EVX-01, in combination with an anti-PD1 inhibitor. The EVX-01 vaccine targets neoantigens - antigenic sequences derived from cancer mutations - that are displayed on the surface of the cancer cells, allowing the immune system to recognize, attack and eliminate the malignant cells.

"We believe these positive data further confirms the precision and predictive power of our AI-ImmunologyTM platform. This analysis shows the potential of EVX-01 and our AI platform's ability to develop life-saving and life-improving treatments. We look forward to the one-year clinical readout in the third quarter of 2024 and are excited about the interest we are seeing in EVX-01," said Christian Kanstrup, CEO of Evaxion.

Key EVX-01 Phase 2 study findings presented at the meeting:

- The EVX-01 vaccine induced specific and targeted immune responses, with 71% of the administered neoantigens eliciting a T-cell response
- The neoantigen-reactive immune responses were mediated by both CD4+ and CD8+ T-cells
- EVX-01 booster immunizations tended to increase the immune responses and did not impose any safety concerns
- A statistically significant positive correlation between neoantigen quality, as predicted by AI-Immunology[™], and vaccineinduced immune response was demonstrated
- The EVX-01 vaccine candidate was found to be well-tolerated, with only grade 1 and 2 adverse events

The data presented from the Phase 2 study currently confirm findings from the previous EVX-01 Phase 1 study, reaffirming the ability of Evaxion's AI-ImmunologyTM platform to precisely select therapeutically relevant vaccine targets. The Phase 2 study is ongoing and continues to generate new valuable insights.

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, 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 Source: Evaxion Biotech