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 July 2024

Commission File Number: **001-39950**

Evaxion Biotech A/S
(Exact Name of Registrant as Specified in Its Charter)

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of such registration statements and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.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 July 16, 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 Showcases Improved Performance of Key Building Block in AI-Immunology™ at Computational Biology Conference". 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 July 16, 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: July 16, 2024

By: /s/ Christian Kanstrup
Christian Kanstrup
Chief Executive Officer

EXHIBIT 99.1

Evaxion Showcases Improved Performance of Key Building Block in AI-Immunology™ at Computational Biology Conference

- **Central AI-Immunology™ Building Block:** Evaxion's proprietary in-house developed building block, EvaxMHC, is used across the AI-Immunology™ platform

- **Improved Performance:** Utilizing a state-of-the-art novel deep-learning framework as well as training on public and proprietary data, Evaxion has improved the performance of EvaxMHC compared to publicly available tools

- **Precision in Vaccine Target Prediction:** These advancements in EvaxMHC's performance are anticipated to further enhance Evaxion's ability to accurately predict vaccine targets

COPENHAGEN, Denmark, July 16, 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 showcases improved performance of its key building block, EvaxMHC, within its AI-Immunology™ platform, at the 32nd Intelligent Systems for Molecular Biology (ISMB) conference taking place in Montreal, Canada, from July 12-16, 2024.

A key feature in developing effective AI-designed personalized and precision vaccines is the ability to accurately predict which small fragments, known as peptides, of pathogens or cancer cells are displayed on the surface of cells by Major Histocompatibility Complex (MHC) molecules. This display allows the immune system to recognize and eliminate the threat. Evaxion's EvaxMHC building block predicts which peptides are more likely to be presented by MHC molecules, thereby aiding vaccine target discovery and facilitating the development of effective vaccines.

Christian Kanstrup, Evaxion's CEO, comments: "Our results demonstrate significant improvements in the prediction of peptide-MHC interactions, particularly for MHC class II molecules, which have historically been difficult to predict accurately. With this advancement on AI-Immunology™ we now have a more reliable and effective tool for designing personalized and precision vaccines for cancer and infectious diseases. The improved EvaxMHC building block is used in the ongoing Phase 2 trial with Evaxion's lead vaccine candidate, the personal cancer vaccine EVX-01."

Key highlights showcased at the presentation:

- A state-of-the-art deep-learning framework was utilized, enhancing the accuracy of peptide-MHC predictions

- Our approach includes three new strategies: Creating a unified representation for both MHC class I and -II molecules, utilizing a deep transformer encoder-decoder architecture, and adopting a generative adversarial network (GAN) pretraining mechanism

- The updated EvaxMHC building block led to improved vaccine designs demonstrated in preclinical studies

About AI-Immunology™
AI-Immunology™ is a scalable and adaptable artificial intelligence technology platform at the forefront of vaccine discovery for infectious diseases and cancers. By integrating the collective power of proprietary AI models PIONEER™, EDEN™, RAVEN™, and ObsERV™, the platform can model the complexity of the patient's immune system. AI-Immunology™ advanced computational modeling swiftly and uniquely identifies, predicts, and designs vaccine candidates, revolutionizing the landscape of immunotherapy by offering a holistic and personalized approach to combat fast-evolving pathogens and malignant cells.

About EVAXION
Evaxion Biotech A/S is a pioneering TechBio company based upon its AI platform, AI-Immunology™. 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-Immunology™, 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-Immunology™ 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
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Source: Evaxion Biotech