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 2023

Commission File Number: 001-39950

Evaxion Biotech (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) and on Form F-1 (File No. 333-266050), 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of such registration statements and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.

On July 31, 2023, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

(c) Exhibit 99.1. Press release dated July 31, 2023

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 (Registrant)

Date: July 31, 2023

/s/ Sabine Mølleskov Sabine Mølleskov VP Investor Relations

Evaxion presents promising results on EVX-B1, an AI-designed vaccine against Staphylococcus aureus

- EVX-B1, a vaccine against *Staphylococcus aureus (S. aureus)* containing AI-identified antigens, is highly protective against *S. aureus* disease in preclinical animal models
- EVX-B1 immunization resulted in complete bacterial clearance of S. aureus in multiple organs

COPENHAGEN, Denmark, July 31, 2023 (GLOBE NEWSWIRE) -- Evaxion Biotech A/S (NASDAQ: EVAX) ("Evaxion" or the "Company"), a clinical-stage biotechnology company specializing in the discovery and development of AI-powered immunotherapies, presents promising results of EVX-B1 at the Staphylococcal Diseases Gordon Research Conference in New Hampshire, USA.

"I am excited to present the impressive results of EVX-B1 at the Gordon Research Conference. The demonstration of full disease protection and complete bacterial clearance marks a significant advancement in the fight against this widespread and often antibiotic-resistant pathogen. With the many previous unsuccessful attempts to develop an effective *S. aureus* vaccine, EVX-B1 instills renewed hope in the battle against the bacteria," said Steven Projan, PhD, Scientific Advisor to Evaxion and poster presenter.

EVX-B1 has been designed using Evaxion's proprietary AI technology for vaccine target discovery. The AI technology has enabled the identification of novel *S. aureus* antigens, paving the way for the development of a vaccine with potential for broad protection against clinically relevant strains.

EVX-B1 induces strong immune responses, both cellular and humoral, that translate to a high level of protection in preclinical models for skin infection and sepsis. Importantly, EVX-B1 prevents both the development of disease and effectively eliminates the infection itself. In a 12-month immunogenicity study, EVX-B1 induced high and long-lasting antibody titers. A booster immunization substantially increased the immune response, protecting against *S. aureus* infection. The EVX-B1 vaccine candidate is ready for non-clinical development, CMC, and subsequent clinical testing.

"The remarkable performance of EVX-B1 in state-of-the-art animal models is a testament to our innovative approach and the power of computational target discovery. We are excited about the potential impact this vaccine could have in preventing *S*. *aureus* infections, which have long posed significant challenges to global health and where antibiotic resistance is developing fast," said Birgitte Rønø, Chief Scientific Officer at Evaxion.

The poster entitled "EVX-B1: An AI-designed vaccine against *Staphylococcus aureus*, demonstrating full disease protection and complete bacterial clearance" is presented at the Staphylococcal Diseases Gordon Research Conference in New Hampshire, USA, taking place from 30th of July to 4th of August this year (<u>https://www.grc.org/staphylococcal-diseases-conference/2023/</u>).

About S. aureus infections

The *S. aureus* bacteria are usually harmless but can cause serious infections, leading to sepsis or death. *S. aureus* is causing severe hospital-acquired infections. Antibiotic-resistant *S. aureus*, particularly Methicillin-resistant *S. aureus* (MSRA) infections, are of critical concern and remain a prevention priority. According to the CDC, nearly 120,000 bloodstream infections with 20,000 associated deaths were reported in 2019 (<u>https://www.cdc.gov/mmwr/volumes/68/wr/mm6809e1.htm</u>). The estimated annual economic impact of MRSA on US hospitals alone is \$3.2-4.2 billion.

About EDEN

Our proprietary EDEN platform rapidly identifies novel, highly protective antigens for the use in pathogen-specific prophylactic vaccines against bacteria. Within EDEN, our proprietary algorithms allow us to predict and identify those antigens we believe will trigger a robust, protective immune response against almost any bacterial infectious disease. The input to the AI models is a feature transformation of the protein data set, in which several global and sequence-resolved properties are extracted. These structural and functional features have been selected for their relevance in protein chemistry, immunology, protein structure and ability to guide the network in discriminating protective versus non-protective antigens.

About Evaxion

Evaxion Biotech A/S is a pioneering company developing AI-powered immunotherapies. Evaxion's proprietary and scalable AI technologies decode the human immune system to discover and develop novel immunotherapies for cancer, bacterial diseases, and viral infections. Evaxion has a broad pipeline of candidates, including three personalized cancer immunotherapies. It is located in Hørsholm, Denmark, listed on the Nasdaq New York stock exchange. For more information, please visit <u>www.evaxion-biotech.com</u>.

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 COVID-19 pandemic and the ongoing conflict in the region surrounding Ukraine and Russia; 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.

For more information: Evaxion Biotech A/S Per Norlén Chief Executive Officer pno@evaxion-biotech.com