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of such registration statements and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.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 October 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 "Recent clinical data confirms significantly improved predictive power of Evaxion's AI-Immunology™ platform". 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 October 3, 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: October 4, 2024   By: /s/ Christian Kanstrup

                                                  Christian Kanstrup
                                                  Chief Executive Officer

EXHIBIT 99.1

Recent clinical data confirms significantly improved predictive power of Evaxion's AI-Immunology™ platform

- **Improved precision of the AI-Immunology™ platform in predicting clinically relevant vaccine targets boosts the potential of its AI-derived vaccine candidates**
- **The improvement has been achieved through iterative learning and the integration of advanced bioinformatics and machine learning techniques**
- **In the ongoing phase 2 trial with personalized cancer vaccine EVX-01, 79% of the AI-Immunology™ predicted vaccine targets triggered a tumor-specific immune response, a significant increase from 58% observed in the EVX-01 phase 1 trial**
- **The precision level seen with AI-Immunology™ in predicting targets triggering the desired immune response is very encouraging compared to other approaches**
- **The ability to select vaccine targets eliciting a tumor-specific immune response is pivotal for a vaccine's clinical efficacy and resulting commercial potential**

COPENHAGEN, Denmark, October 3, 2024 – Evaxion Biotech A/S (NASDAQ: EVAX) ("Evaxion"), a clinical-stage TechBio company specializing in developing AI-Immunology™ powered vaccines, continues to gather clinical evidence for the steady improvement of its AI-Immunology™ platform.

The platform's precision has significantly improved between the two clinical trials with Evaxion's personalized cancer vaccine EVX-01. In the ongoing phase 2 trial, 81 out of 103 (79%) vaccine targets assessed to date triggered a tumor-specific immune response, a notable increase from the 58% observed in the phase 1 trial completed last year.

The high number of immune-active vaccine targets is observed across all patients. The ability to trigger a broad and consistent tumor-specific immune response is pivotal for a vaccine's clinical efficacy and, thereby, critical for the vaccine's commercial potential and ability to address unmet medical needs.

"As a truly AI-first TechBio company, Evaxion rests on our leading AI-Immunology™ platform and its continued improvement remains a top priority for us. It is, of course, very pleasing to see that we are successful in that work, reaching 79% of identified vaccine targets triggering an immune response in the ongoing EVX-01 phase 2 trial. This compares very favorably to data reported from other personalized cancer neoantigen trials. We are further pleased that the clinical outcome data are also very strong, providing us with a compelling AI-Immunology™ derived investigational vaccine candidate." says Christian Kanstrup, CEO of Evaxion.

The improvement of the AI-Immunology™ platform's predictive capabilities results from iterative learning loops, optimization based on clinical data and the integration of novel bioinformatic and machine learning methodologies.

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.

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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.