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 OF
THE SECURITIES EXCHANGE ACT OF 1934

For the month of **February 2024**

Commission File Number: **001-36187**

EVOGENE LTD.
(Translation of Registrant's Name into English)

13 Gad Feinstein Street, Park Rehovot, Rehovot
P.O.B 4173, Ness Ziona, 7414002, Israel
(Address of principal executive offices)

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 ☒ Form 40-F ☐

CONTENTS

Evogene Ltd., or Evogene, today announces that its subsidiary, Ag Plenus Ltd., or AgPlenus entered into a Licensing and Collaboration Agreement with Bayer AG, or Bayer, for the development of a new sustainable weed control solution. A copy of the press release is attached as Exhibit 99.1to this Report of Foreign Private Issuer on Form 6-K, or this Form 6-K.

This agreement grants Bayer an exclusive license for the development and commercialization of products developed within the collaboration. AgPlenus will be entitled to receive an upfront payment, ongoing research funding, milestone payments, and royalties based on future product sales, subject to certain conditions set forth therein.

This Form 6-K contains "forward-looking statements" relating to future events. These statements may be identified by words such as "will", "may", "could", "expects", "intends", "anticipates", "plans", "believes", "scheduled", "estimates", "demonstrates", or words of similar meaning. For example, Evogene is using forward-looking statements in this Form 6-K when it discusses the eligibility to ongoing research funding, future milestone and royalty payments. Such statements are based on current expectations, estimates, projections and assumptions, describe opinions about future events, and involve certain risks and uncertainties which are difficult to predict and are not guarantees of future performance. Therefore, actual future results, performance or achievements of Evogene and its subsidiaries may differ materially from what is expressed or implied by such forward-looking statements due to a variety of factors, many of which are beyond the control of Evogene and its subsidiaries, including, without limitation, those risk factors contained in Evogene's reports filed with applicable securities authorities. Evogene and its subsidiaries disclaim any obligation or commitment to update these forward-looking statements to reflect future events or developments or changes in expectations, estimates, projections and assumptions.

The content of this Form 6-K, excluding Exhibit 99.1, is incorporated by reference into the registration statements on Form F-3 (File No. 333-253300) and on Form S-8 (File Nos. 333-193788, 333-201443, 333-203856 and 333-259215) of Evogene, filed with the Securities and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

SIGNATURE

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.

EVOGENE LTD.
(Registrant)

Date: February 21, 2024

By: /s/ Yaron Eldad
Yaron Eldad
Chief Financial Officer

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
99.1	Press Release: AgPlenus Announces Licensing & Collaboration Agreement with Bayer to Develop a New Sustainable Weed Control Solution

Exhibit 99.1

AgPlenus Announces Licensing & Collaboration Agreement with Bayer to Develop a New Sustainable Weed Control Solution

The collaboration will tap into the potential of artificial intelligence (AI) to design and optimize crop protection chemistry, developing a novel sustainable Mode-of-Action (MoA) broad-spectrum herbicide for farmers.

Rehovot, Israel, Feb 21, 2024 - **AgPlenus Ltd**., a global leader in designing and developing novel sustainable crop protection products and a subsidiary of Evogene Ltd. (Nasdaq: EVGN, TASE: EVGN), announced today the signing of a licensing & collaboration agreement with **Bayer AG**, a global enterprise with core competencies in the life science fields of health care and agriculture.

In collaboration with Bayer's Crop Science division, having an industry-leading R&D pipeline and portfolio of seeds & traits, crop protection, and digital farming solutions, AgPlenus will use its AI-driven computational modeling technology to design and optimize molecules identified for their broad-spectrum herbicidal activity targeting the APTH1 protein, a new mode of action identified by AgPlenus.

Herbicide market is valued at $42.81 billion in 2024[1] and is crucial for ensuring global food security. It is also an essential part of regenerative agricultural practices such as cover crops and no-till. Most commercially available herbicides are based on molecules that inhibit target proteins that are essential for weed vitality. In recent years, the global agricultural industry has been facing a growing challenge of weed resistance to the limited number of existing products available to farmers, whose challenges are further exacerbated by climate change that is causing weeds to evolve and spread.

The two companies will collaborate to optimize new molecules, identified by AgPlenus and tested by Bayer, into commercially viable candidates. The collaboration will leverage AgPlenus' proprietary computational technology, powered by Evogene's *ChemPass AI* tech engine, together with Bayer's extensive expertise in research, development and commercialization of crop protection products.

Under the agreement, Bayer will have the exclusive license for the development and commercialization of products developed within the collaboration. AgPlenus will be entitled to receive an upfront payment, ongoing research funding, milestone payments, and royalties based on future product sales.

"We are looking forward to the collaboration with AgPlenus, which shares our belief that the breakthrough technologies available today represent a vast potential to design and develop entirely new solutions to help farmers overcome challenges such as pest resistance, climate change, and societal expectations towards crop protection," said **Rachel Rama, Head of Small Molecules at Bayer's Crop Science division**. "Bringing together AgPlenus' expertise with Bayer's *CropKey* approach to crop protection innovation will help accelerate the delivery of essential, sustainable, and affordable solutions to farmers and set a new benchmark in the industry."

Dr. Brian Ember, CEO of AgPlenus, said: "The collaboration with Bayer is a significant step forward for AgPlenus and validates the value of our computational technology platform. Leveraging Bayer's expertise and AgPlenus's technology, our mutual goal is to provide farmers worldwide with effective tools for more sustainable crop protection by introducing a novel herbicide with a new MoA."

About AgPlenus Ltd.:

AgPlenus is a platform company designing effective and sustainable crop protection products. At AgPlenus, we are solving pesticide resistance by infusing the discovery process with predictive biology and artificial intelligence. AgPlenus leverages the *ChemPass AI* tech-engine, licensed from Evogene, to discover and bring to market effective and sustainable crop protection products. Our target-based approach allows us to reduce risk and increase efficiency, so that we can deliver on our promise to defeat global pesticide resistance. AgPlenus is a subsidiary of Evogene Ltd.

For more information, please visit www.agplenus.com

About Evogene Ltd.:

Evogene (Nasdaq: EVGN, TASE: EVGN) is a computational biology company aiming to revolutionize the development of life-science based products by utilizing cutting edge technologies to increase the probability of success while reducing development time and cost. Evogene established three unique tech-engines - *MicroBoost AI*, *ChemPass AI* and *GeneRator AI* – leveraging Big Data and Artificial Intelligence and incorporating deep multidisciplinary understanding in life sciences. Each tech-engine is focused on the discovery and development of products based on one of the following core components: microbes (*MicroBoost AI*), small molecules (*ChemPass AI*), and genetic elements (*GeneRator AI*).

Evogene uses its tech-engines to develop products through subsidiaries and strategic partnerships. Evogene's subsidiaries currently utilize the tech-engines to develop human microbiome-based therapeutics by Biomica, ag-biologicals by Lavie Bio, ag-chemicals by AgPlenus, medical cannabis products by Canonic and castor varieties, for the biofuel and other industries, by Casterra.

For more information, please visit: www.evogene.com.

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[1] https://www.mordorintelligence.com/industry-reports/global-herbicides-market-industry?gclid=EAIaIQobChMIqL--hsHMgAMVoJODBx2ZLQeZEAAYAiAAEgLXqvD_BwE

Forward-Looking Statements

This press release contains "forward-looking statements" relating to future events. These statements may be identified by words such as "may", "could", "expects", "hopes" "intends", "anticipates", "plans", "believes", "scheduled", "estimates", "demonstrates" or words of similar meaning. For example, Evogene and its subsidiaries are using forward-looking statement in this press release when they discuss AgPlenus' ability to design and optimize molecules identified for their broad-spectrum herbicidal activity targeting the APTH1 protein, to create commercially viable candidates, to create effective tools for more sustainable crop protection, by introducing a novel herbicide with a new MoA and Ag Plenus' eligibility to ongoing research funding, future milestone and royalty payments. Such statements are based on current expectations, estimates, projections, and assumptions, describe opinions about future events, involve certain risks and uncertainties which are difficult to predict and are not guarantees of future performance. Therefore, actual future results, performance or achievements of Evogene and its subsidiaries may differ materially from what is expressed or implied by such forward-looking statements due to a variety of factors, many of which are beyond the control of Evogene and its subsidiaries, including, without limitation, the current war between Israel and Hamas and any worsening of the situation in Israel such as further mobilizations or escalation in the northern border of Israel, and those risk factors contained in Evogene's reports filed with the applicable securities authority. In addition, Evogene and its subsidiaries rely, and expect to continue to rely, on third parties to conduct certain activities, such as their field-trials and pre-clinical studies, and if these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, Evogene and its subsidiaries may experience significant delays in the conduct of their activities. Evogene and its subsidiaries disclaim any obligation or commitment to update these forward-looking statements to reflect future events or developments or changes in expectations, estimates, projections, and assumptions.