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 **December 2020**

Commission File Number: **001-36187**

EVOGENE LTD.

(Translation of Registrant's Name into English)

13 Gad Feinstein Street
Park Rehovot P.O.B 2100
Rehovot 7612002 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 ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ____

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ____

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On December 29, 2020, Evogene Ltd., or Evogene, provided an update regarding the product pipeline of its subsidiary, Lavie Bio Ltd., or Lavie Bio, for the 2020 calendar year. A copy of the press release is furnished as Exhibit 99.1 to this Report of Foreign Private Issuer on Form 6-K, or this Form 6-K, and is incorporated herein by reference.

The contents of Exhibit 99.1 to this Form 6-K, excluding the statements of Lavie Bio's CEO and Evogene's President and CEO contained therein, are incorporated by reference in the registration statements on Form F-3 (Securities and Exchange Commission, or the SEC) File No. 333-240249, filed with the SEC on July 31, 2020), and Form S-8 (SEC File No.'s 333-193788, 333-201443 and 333-203856, filed with the SEC on February 6, 2014, January 12, 2015 and May 5, 2015, respectively) of Evogene, and will be a part thereof from the date on which this Form 6-K is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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: December 29, 2020

By: /s/ Dorit Kreiner

Dorit Kreiner
Chief Financial Officer

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
99.1	Press Release: Lavie Bio Provides Product Pipeline Update for 2020.

Exhibit 99.1

Lavie Bio Provides Product Pipeline Update for 2020

LAV211 bio-stimulant advancing towards anticipated 2022 commercial launch in spring wheat; Product advancement achieved in multiple programs

Rehovot, Israel – December 29, 2020 - Lavie Bio Ltd. (Lavie Bio), a leading ag-biologicals company focusing on improving food quality, sustainability and agriculture productivity through the introduction of microbiome-based products, and a subsidiary of Evogene Ltd. (NASDAQ: EVGN) (TASE: EVGN), has announced an update on certain advancements achieved in its pipeline in 2020, including phase advancement of bio-stimulant LAV211, towards an anticipated commercial launch in 2022.

"Our commitment and main focus at Lavie Bio is to develop novel microbiome based ag-biological products, bio-pesticides & bio-stimulants that address the dire need for new tools to increase agriculture productivity while improving sustainability and food quality. 2020 was a remarkable year in our journey to achieve these targets," stated **Mr. Ido Dor, CEO of Lavie Bio**.

Bio-stimulants pipeline:

LAV211 Bio-stimulant Targeting Spring Wheat – Initially targeting approximately 25 million acres of spring wheat in North America,[1] LAV211 is Lavie Bio's leading product candidate in this program. According to Lavie Bio's estimates, and assuming current agricultural commodity prices, a viable and effective bio-stimulant could generally be expected to provide farmers with additional value that translates to at least $20, on average, of income per farmed acre.

LAV211 is advancing into the pre-commercial phase,[2] following field trials in target locations, meeting development criteria and outperforming trial controls, which included competitor benchmarks. Additionally, LAV211 received product registration approval this year in North Dakota and Montana, key target markets for growing spring wheat. Additional commercial scale trials are planned for 2021, in preparation for product launch planned for 2022. Lavie Bio intends to evaluate potential expansion of LAV211 to additional crops.

Bio-stimulant for Corn – This program is in the pre-development phase.[2] Following results obtained in recent seasons, a subset of candidates is expected to undergo further optimization and additional trials. In addition, during 2021, potential expansion opportunities of the candidates for additional crops are expected to be evaluated. Part of this program is under Lavie Bio's collaboration with Corteva, Inc. (previously DuPont).[3]

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[1] https://www.ers.usda.gov/webdocs/publications/86210/whs-17l.pdf?v=43083, pg. 18; Phillips McDougall, 2017, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210035901.

[2] For more information, please see "Market Segments – Agriculture – Lavie Bio Ltd. – Product Development Programs – Product Development Cycle" under "Item B. Business Overview" in Evogene's Annual Report on Form 20-F for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on April 27, 2020.

[3] For more information, please see "Market Segments – Agriculture – Lavie Bio Ltd. – Key Collaborations – Corteva" under "Item B. Business Overview" in Evogene's Annual Report on Form 20-F for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on April 27, 2020.

Bio-pesticides pipeline:

LAV311 & LAV312 Targeting Bunch Rot Diseases – Chemical crop protection expenditure for bunch rot diseases is estimated at over $200 million annually.[4] Bio-fungicides LAV311 and LAV312 are designed to integrate into the farmer's existing IPM (Integrated Pest Management) practices. Lavie Bio's initial focus is on grapes and it intends to broaden this solution to other fruit.

As announced last month, LAV311 and LAV312 advanced to "Development Stage 2".[5] This follows successful results in vineyard trials, conducted in target locations in Europe and the U.S. The trials' results showed significantly better efficacy and consistency than existing comparable tested commercial biological benchmarks and were competitive to tested commercial chemical benchmarks. In 2021, Lavie Bio intends to further improve the formulation technology and fermentation protocol of LAV311 and LAV312 and expand these solutions to additional crops. Lavie Bio is targeting a product launch for 2024.

Bio-fungicides Targeting Downy Mildew – Downy mildew is a devastating disease with an urgent need for new solutions. Current chemical crop protection expenditure against downy mildew is estimated at over $350 million annually.[4] Lavie Bio's initial focus is on grapes and it intends to broaden its solution to other fruit and vegetable crops.

During 2020, Lavie Bio tested leading candidates that demonstrated positive preliminary results in field trials. Additional candidates were introduced into the pipeline and underwent lab and greenhouse testing. In 2021, select candidates are expected to be tested in target locations in Europe.

Bio-fungicides Targeting Seedling Diseases – The average annual expenditure for crop protection against seedling diseases is over $500 million,[4] with leading commercial chemicals under regulatory pressure and resistance emergence posing a risk. Lavie Bio believes that biological solutions have the potential to play an important role in addressing these challenges. Lavie Bio's initial focus is on corn and it intends to expand its solution to soybean and other crops.

In 2020, Lavie Bio's new candidates were validated in lab and greenhouse trials with positive results. Leading candidates are undergoing further development with field testing planned for target locations during 2021.

Bio-insecticides Targeting Western Corn Root Worm (WCRW) – The annual overall expenditure on protection against WCRW, including genetically modified corn seed traits (biotech traits) and chemical insecticides, exceeds $1.5 billion.[6] Biological insecticides could be integrated into the farmer's existing IPM either with biotech traits or combined with chemical solutions. During 2019-2020, Lavie Bio introduced additional candidates to its pipeline, which were validated in lab, greenhouse and field trials. In 2021, Lavie Bio expects to test leading candidates in multi-location fields in target territories and in parallel further optimize their formulations.

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[4] According to company estimates.
[5] For more information, please see "Market Segments – Agriculture – Lavie Bio Ltd. – Product Development Programs – Product Development Cycle" under "Item B. Business Overview" in Evogene's Annual Report on Form 20-F for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on April 27, 2020.
[6] According to industry publications.

Mr. Ido Dor added: "The sustainable approach of ag-biologicals holds a significant promise for the future of agriculture, and we are excited to be at the forefront of this area. We are confident Lavie Bio has an excellent opportunity, powered by our *Biology Driven Design (BDD)* platform, to make a real impact for both growers and consumers and look forward to sharing our progress over the coming year, as our vision advances towards commercialization of our initial products."

Mr. Ofer Haviv, Chairman of Lavie Bio and CEO & President of Evogene, stated: "We are pleased with the progress that Lavie Bio achieved in its product pipelines in 2020. The use of Lavie Bio's computational *BDD platform*, powered by Evogene's *'MicroBoost AI'* engine, has led Lavie Bio to reach impressive achievements in multiple product pipelines. I am confident that Lavie Bio is on the right track to becoming a global leading ag-biologicals company, introducing multiple novel products in the coming years."

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About the Biology Driven Design (BDD) Platform

The BDD platform facilitates and accelerates the design and development of microbiome-based products through the decoding of complex microbiome/host interactions and the identification of the key genetic elements (functions) governing these interactions. This decoding, which enables amplification of positive or elimination of negative, and/or the retrieval of lost interactions, is powered by big data and artificial intelligence, provides the basis for products design. The enabling technology for the establishment of the BDD platform was the MicroBoost AI engine, a component of Evogene's Computational Predictive Biology (CPB) platform and the Taxonia platform acquired as part of the Taxon Biosciences acquisition.

About Lavie Bio Ltd.:

Lavie Bio, a subsidiary of Evogene Ltd., aims to improve food quality, sustainability and agriculture productivity through the introduction of microbiome based ag-biological products. Lavie Bio utilizes a proprietary computational predictive platform, the *BDD platform*, harnessing the power of big data and advanced informatics, for the discovery, optimization and development of bio-stimulants and bio-pesticides products. Corteva, Inc. holds approximately 28% in Lavie Bio. For more information, please visit www.lavie-bio.com.

About Evogene Ltd.:

Evogene (NASDAQ: EVGN) (TASE: EVGN) is a leading computational biology company focused on revolutionizing product discovery and development in multiple life-science based industries, including human health and agriculture, through the use of our broadly applicable Computational Predictive Biology (CPB) platform. The CPB platform, incorporating a deep understanding of biology leveraged through the power of Big Data and Artificial Intelligence, has been designed to computationally discover and uniquely guide the development of life-science products based on microbes, small molecules and genetic elements. Utilizing the CPB platform, Evogene and its subsidiaries are now advancing product pipelines for human microbiome-based therapeutics through Biomica Ltd., medical cannabis through Canonic Ltd., ag-biologicals through Lavie Bio Ltd., ag-chemicals through AgPlenus Ltd., and ag-solutions for castor oil production through Casterra Ag Ltd. For more information, please visit www.evogene.com.

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", "intends", "anticipates", "plans", "believes", "scheduled", "estimates" or words of similar meaning. For example, Lavie Bio and Evogene are using forward-looking statements in this press release when they discuss the commercialization date of bio-stimulant, bio-fungicide and bio-insecticide products, the further development stages of Lavie Bio's ag-biological products and the potential value and advantages of such products, the intention to evaluate potential expansion of product candidates in additional crops, fields and territories, the intention to further improve the formulation technology and fermentation protocol of LAV311 and LAV312 and the belief that Lavie Bio's sustainable approach of ag-biologicals holds a significant promise for the future of agriculture. 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 global spread of COVID-19, or the Coronavirus, the various restrictions deriving therefrom and those risk factors contained in Evogene's reports filed with the applicable securities authorities. 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 (including as a result of the effect of the Coronavirus), 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.

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