
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 **October 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): ____

CONTENTS

On October 29, 2020, Evogene Ltd., or Evogene, announced positive results for LAV311 and LAV312 in the bio-fungicide program of its subsidiary, Lavie Bio Ltd., or Lavie Bio. 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 chairman and CEO contained therein, are incorporated by reference in the registration statements on Form F-3 (Securities and Exchange Commission ("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of Evogene, and will be a part thereof from the date on which this Form 6-K is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

EXHIBIT INDEX

<u>Exhibit No.</u>	
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99.1	Press Release: Lavie Bio Announces Positive Results for LAV311 and LAV312 in its Bio-Fungicide Program
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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: October 29, 2020

By: /s/ Dorit Kreiner

Dorit Kreiner
Chief Financial Officer



Lavie Bio Announces Positive Results for LAV311 and LAV312 in its Bio-Fungicide Program

Positive results were achieved in a series of vineyard trials for *bunch rot* diseases conducted in Europe and the United States

Rehovot, Israel – October 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), announced today positive trial results for two of its leading bio-fungicide product candidates. The successful results for LAV311 and LAV312, targeting *bunch rot* diseases, mark the advancement of these candidates to “Development Stage 2”¹. These vineyard trials, conducted in target locations in Europe and the U.S., resulted in significantly better efficacy and consistency than existing comparable commercial biological benchmarks, and competitive to commercial chemical benchmarks, both tested as part of these trials. The positive results will support Lavie Bio’s current plan to launch its first bio-fungicide product for controlling *bunch rots* for use in fruit and vegetables in 2024.



Example of treatment with LAV312 against *Botrytis Cinerea* in vines – untreated control vs treated vines

¹ Please see the heading “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, for more information.

Damage from crop disease is rising, with current efforts largely depending on chemical crop protection, with fungicide chemicals accounting for \$18.7B in annual expenditure in 2019.² As a result of increasing disease resistance to existing chemicals and demand for more sustainability practices, there is a well-recognized and rapidly growing need for new and effective solutions, with ag-biologicals being an important tool in addressing this challenge.

Bunch rots are devastating diseases and the estimated annual expenditure on crop protection with existing chemical solutions is in the \$100s of millions³. New and efficacious biological products can be integrated into the farmer's existing IPM (Integrated Pest Management) practices thus driving both productive and sustainable practices, while reducing the emergence of pest resistance to existing crop protection solutions.

Lavie Bio's bio-fungicide program addresses *bunch rots* currently focused on vines with the aim to expand to other crops. The leading product candidates, LAV311 and LAV312 were developed based on the utilization of Lavie Bio's *BDD (Biology Driven Design)* platform, resulting in an optimized combination of live microbial strain, formulation and fermentation technologies. The positive results were achieved in repeated vineyard trials during the years 2019 and 2020, representing a variety of conditions, such as grape types, agriculture practices and climates. These trials showed that vineyards treated with each of LAV311 and LAV312 demonstrated 60-70% reduction in crop damage due to *bunch rots* in comparison to the control.

Looking forward, Lavie Bio's activities in "Development Stage 2" are expected to focus on further advancement of the formulation and fermentation of LAV311 and LAV312, as well as to broaden the spectrum of target crops and diseases.

Mr. Ido Dor, CEO of Lavie Bio, stated: "The potential to introduce a solution that could generate new value both for the farmer and the consumer by improving productivity, sustainability and the quality of the produce we consume, is exciting and motivates us at Lavie Bio. It is great to see how Lavie Bio's multidisciplinary team, powered by our proprietary *BDD* platform, makes the difference and enables the introduction of novel ag-biological solutions that are '*Better By Nature*'."

Mr. Ofer Haviv, Chairman of Lavie Bio and President & CEO of Evogene, stated: "The progress achieved in Lavie Bio's bio-fungicide program is another testament to the value and impressive progress that can be achieved using computational biology. This achievement represents another product advancing towards commercialization that benefited from our subsidiary's technological platform, *BDD*, powered by Evogene's '*MicroBoost AI*' engine."

² <https://www.marketsandmarkets.com/Market-Reports/fungicides-356.html>

³ According to company estimates.

About Lavie Bio Ltd.

Lavie Bio, a subsidiary of Evogene (NASDAQ: EVGN) (TASE: EVGN), 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, harnessing the power of big data and advanced informatics, for the discovery, optimization and development of bio-stimulants and bio-pesticides products. Corteva Inc. (NYSE: CTVA) 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 a bio-fungicide product, the further development stages of such a product and the potential advantages of such a product, including its contribution to currently implemented IPM practices. 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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