
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 **November 2021**

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 ☐

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 November 30, 2021, Evogene Ltd., or Evogene, announced positive results from pre-clinical studies in the inflammatory bowel disease program of its subsidiary Biomica Ltd., or Biomica. 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 Biomica's CEO and of a member of its Scientific Board contained therein, are 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and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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)

By: /s/ Dorit Kreiner

Dorit Kreiner
Chief Financial Officer

Date: November 30, 2021

EXHIBIT INDEX

| <u>EXHIBIT NO.</u> | <u>DESCRIPTION</u> |
|----------------------|--|
| 99.1 | Press Release: Biomica Reports Positive Results from Pre-Clinical Studies in its Inflammatory Bowel Disease Program. |



Biomica Reports Positive Results from Pre-Clinical Studies in its Inflammatory Bowel Disease (IBD) Program

The results demonstrate the efficacy of Biomica's live bacterial consortia, BMC333, for the treatment of IBD

Rehovot, Israel – November 30, 2021 – Biomica, an emerging biopharmaceutical company developing innovative microbiome-based therapeutics and a subsidiary of Evogene Ltd. (NASDAQ: EVGN, TASE: EVGN), reported today positive results from pre-clinical studies in its IBD program. In these studies, Biomica tested its optimized drug candidate BMC333, which consists of four live bacterial strains derived from Biomica's drug candidates BMC321 and BMC322, which had been previously tested as well. Treatment with these drug candidates demonstrated efficacy in several studies in reducing inflammation for the treatment of IBD.

IBD includes conditions such as ulcerative colitis and Crohn's disease, which are chronic, debilitating, non-infectious, inflammatory diseases of the digestive tract. However, despite the introduction of new modalities and therapeutics, many patients do not completely respond, and others' response may diminish over time¹. The global IBD treatment market size was valued at USD 19.2 billion in 2020².

Earlier this year, initial positive pre-clinical results pointing to reduction of inflammation following treatment with BMC321 and BMC322, were achieved using a DSS-induced colitis mouse model. These results were presented at the 2021 Crohn's & Colitis Congress, jointly organized by the American Crohn's & Colitis Foundation (CCFA) and the American Gastroenterological Association (AGA)³. Additional positive results were obtained in an IL-10 knock-out model performed in collaboration with the laboratory of Prof. R. Balfour Sartor at the University of North Carolina, Chapel Hill, USA, which demonstrated reduced inflammatory scores in histological assessment.

Following the insights provided by these pre-clinical studies, Biomica developed BMC333, an optimized combination of four of the strains originally present in BMC321 and BMC322. The optimization was supported by the use of PRISM, a proprietary high-resolution computational microbiome analysis platform for the identification of microbial functions and strains, powered by Evogene's Microboost AI platform, with specific emphasis on the functional capabilities of the selected bacterial strains.

¹ <https://www.mayoclinic.org/medical-professionals/digestive-diseases/news/managing-refractory-ibd/mac-20430383>

² <https://www.grandviewresearch.com/industry-analysis/inflammatory-bowel-disease-ibd-treatment-market#:~:text=Report%20Overview,4.4%25%20from%202018%20to%202026>

³ <https://www.prnewswire.com/news-releases/biomica-announces-participation-at-the-crohns--colitis-congress-january-21-24-2021-virtual-conference-301212460.html>

The results Biomica is currently reporting follow the evaluation of BMC333 in a DSS-induced colitis model, which demonstrated BMC333’s ability to significantly reduce intestinal tissue damage resulting from inflammation. BMC333 attenuated intestinal inflammation as observed in several key parameters such as reduced fecal lipocalin and reduced inflammation observed in histopathological analysis. Moreover, animals treated with BMC333 demonstrated increased survival rates compared to the untreated group.

Looking forward, Biomica expects to begin the scale-up development processes of BMC333 in 2022, in preparation for the production of an initial clinical batch. In parallel, BMC333 is expected to undergo additional pre-clinical studies, including in collaboration with the laboratory of Prof. R. Balfour Sartor.

Prof. R. Balfour Sartor, Biomica Scientific Board member, stated: “Manipulating the dysregulated microbiota of patients with ulcerative colitis and Crohn’s disease using protective bacterial consortia that normally live in the intestine, and that were chosen for restoring protective functions that are either absent or decreased in IBD patients, is one of the more exciting approaches to treating IBD patients. This approach potentially introduces fewer side effects and long-lasting benefit compared to currently available therapies. The initial positive results of Biomica’s consortia obtained using two separate animal models are encouraging and merit further studies.”

Dr. Elran Haber, Biomica Chief Executive Officer, stated: “We are encouraged by the results we have achieved in our IBD program. These results provide the evidential groundwork for expansion to additional pre-clinical studies with BMC333 and the beginning of scale up development of BMC333 in 2022. We believe that Biomica’s unique computational approach could provide a new form of therapy for this chronic and devastating condition. We look forward to updating you on the advancements in this program.”

About BMC321, BMC322 & BMC333

BMC321, BMC322 and BMC333 Live Bacterial Products (LBPs), are rationally-designed consortia designed to restore diversity and specific functionality to a microbial community with individually selected, cultured bacteria.

BMC321, BMC322 and BMC333 are comprised of bacterial strains selected for their multiple desired functions to achieve maximal functional activity with only 4 bacterial strains. These LBP’s are aimed to result in robust immune modulation through several underlying and complementary modes of action.

About Biomica Ltd.:

Biomica is an emerging biopharmaceutical company developing innovative microbiome-based therapeutics utilizing a dedicated Computational Predictive Biology platform (CPB), licensed from Evogene. Biomica aims to identify and characterize disease-related microbiome entities and to develop novel therapeutics based on these understandings. The company is focused on the development of therapies for antibiotic resistant bacteria, immuno-oncology, and microbiome-related gastrointestinal (GI) disorders. Biomica is a subsidiary of Evogene Ltd. (NASDAQ: EVGN, TASE: EVGN). For more information, please visit www.biomicamed.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, Biomica and Evogene are using forward-looking statements in this press release when they discuss the potential efficacy and benefits of BMC321, 322, 333 in the treatment of IBD, the potential for additional -pre-clinical studies with BMC333 and the expectation for Biomica to begin the scale-up and manufacturing processes of BMC333 in 2022, in preparation for the production of an initial clinical batch. 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, those risk factors contained in Evogene’s reports filed with the 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.

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