

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 January 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 □			
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

Attached hereto and incorporated by reference herein is the following exhibit:

99.1 Evogene Investor Presentation.

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: January 9, 2024

By: <u>/s/ Yaron Eldad</u> Yaron Eldad Chief Financial Officer



COMPANY PRESENTATION

Ofer Haviv, President & CEO January 9, 2024



Forward Looking Statement

This presentation 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 presentation when it discusses its value drivers, commercialization efforts and timing, product development and launches, estimated market sizes and milestones, pipeline, its capabilities and technology.

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 boarder of Israel, and those risk factors contained in Evogene's reports filed with the applicable securities authority (including in its Annual Report on Form 20-F).

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 preclinical 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.

The information contained herein does not constitute a prospectus or other offering document, nor does it constitute or form part of any invitation or offer to sell, or any solicitation of any invitation or offer to purchase or subscribe for, any securities of Evogene or the Company, nor shall the information or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any action, contract, commitment or relating thereto or to the securities of Evogene or the Company.

The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of our products or services.



Agenda



* Business Model

* Success Stories

* Summary

Annex I - Financial overview

Annex II - Evogene subsidiaries



OUR VISION

Revolutionize the development of life-science based products, utilizing cutting edge computational biology technologies

DECODING BIOLOGY

Life Science Product Development - Current State

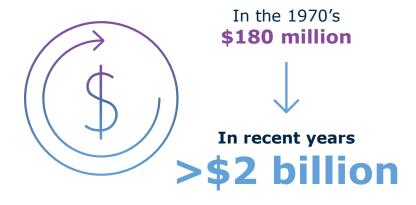
Pharma Industry



Ag-chemicals Industry



Cost of developing a single pharmaceutical drug



Years to develop a new crop protection product



Low probability of success with high cost and long time-to-market

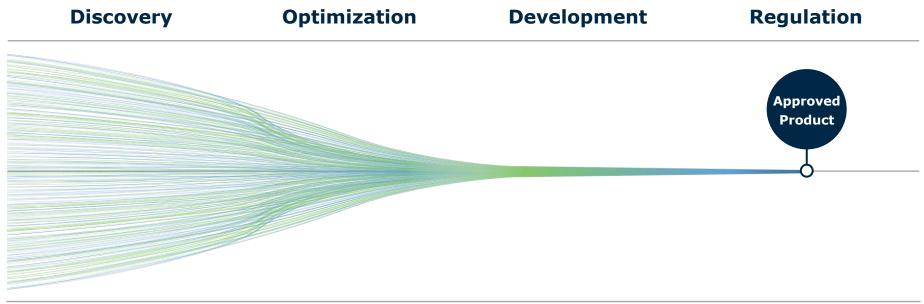
^{*}https://www.forbes.com/sites/matthewherper/2017/10/16/the-cost-of-developing-drugs-is-insane-a-paper-that-argued-otherwise-was-insanely-bad/?sh=7533aa82d459; Phillips McDougall, 2016.



The Ultimate Case of Finding the "Needle in the Haystack"

The challenge: finding the winning candidates out of a vast number of possible prospects that address a complex myriad of criteria, to reach successful products





The Opportunity

Utilizing advanced computational biology technologies

to **discover** and **optimize** the most promising candidates addressing multiple development challenges towards successful life-science based products

Increase probability of success

Reduce time

Reduce cost



Our Solution

When Biology Meets Disruptive Technologies



Incorporating deep scientific understanding with big data and advanced AI technologies, to successfully discover & guide the optimization of novel life-science based products

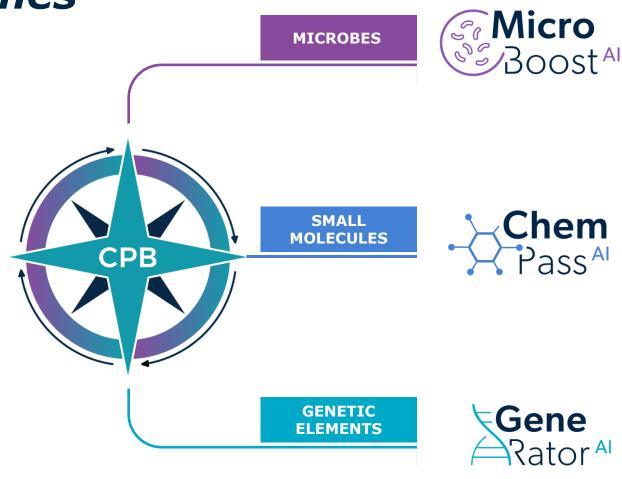




Tailored AI Tech-Engines

The CPB platform directs and accelerates product discovery and optimization through dedicated **AI Tech-Engines** for products based on three core components:

- Microbes
- Small molecules
- Genetic elements



AI Tech-Engines
to direct & accelerate
product discovery &
optimization

Discovery

Computational selection of the most promising candidates to initiate the product development process.

Optimization

Computational driven solution addressing optimization challenges for the selected candidates, without impairing their ability to address other product attributes.



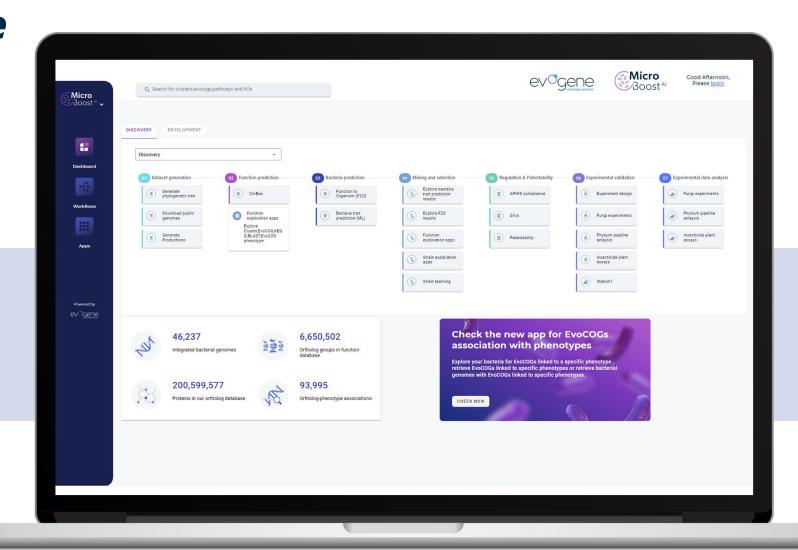
Value proposition

Increase probability of success

Reduce time Reduce

AI Tech-Engine Dashboard (Example)





Potential Market Diversity

Structuring an 'ecosystem' of diverse product types to be developed utilizing our AI Tech-Engines

Potential Markets for *MicroBoost AI* (Example)



Agenda

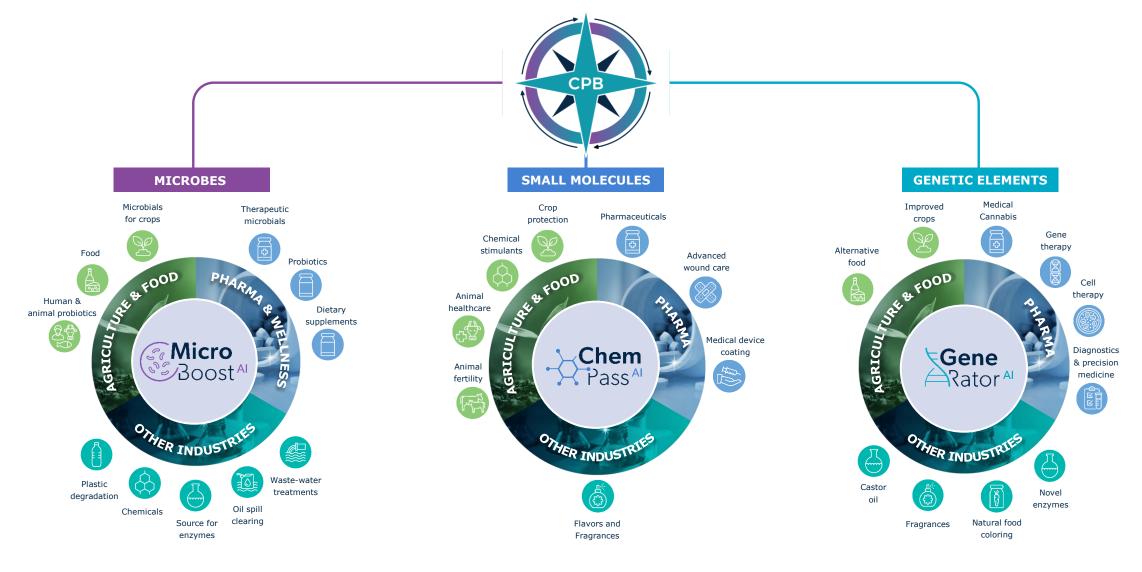
- * About Evogene
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Annex II – Evogene subsidiaries



Evogene's AI Tech-Engines - Potential Markets



Business Strategy

Capture the value of our AI tech-engines as product-development enablers, through two types of business models:

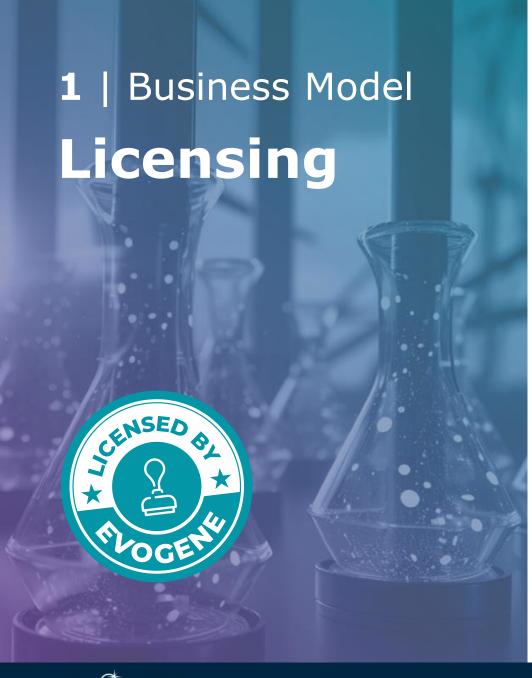


Licensing

A time-limited license grant to utilize one of Evogene's tech-engines, to a third party for product development in a defined commercial field. In most cased the third party will be a subsidiary, or a related party, of Evogene.

Collaboration

Joint product development with leading companies utilizing Evogene's unique tech-engines. Typically, the partner leads later-stage development and product commercialization.



Licensing Evogene's AI Tech-Engines to a third party (currently, all Evogene subsidiaries)

Potential revenue stream

- License fees & R&D reimbursement
- Dividends to Evogene as a shareholder
- Significant one-time-payment upon an exit event*

Powered by:







^{*}As long as Evogene remains a major shareholder

2 | Business Model Collaboration ONERED

Collaborations Driven by Evogene's *AI Tech-Engines* with Leading Life-Science Companies

Potential revenue stream

- Upfront payments
- R&D fees
- Milestone payments
- Royalties from sale of end-products

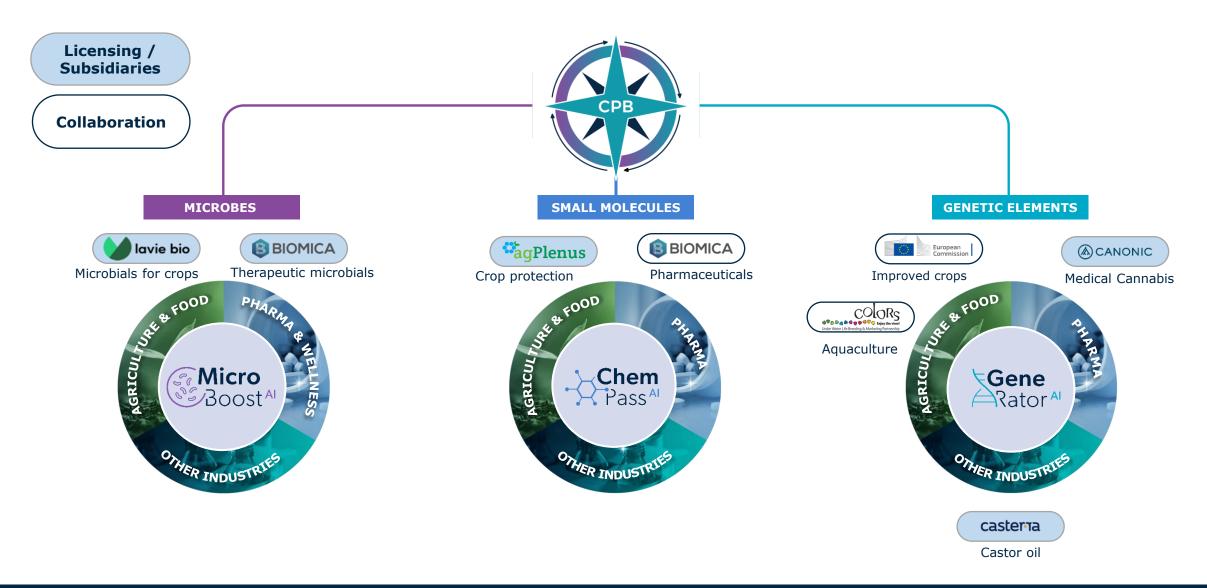
Powered by:







Licensing & Collaboration - Current Status

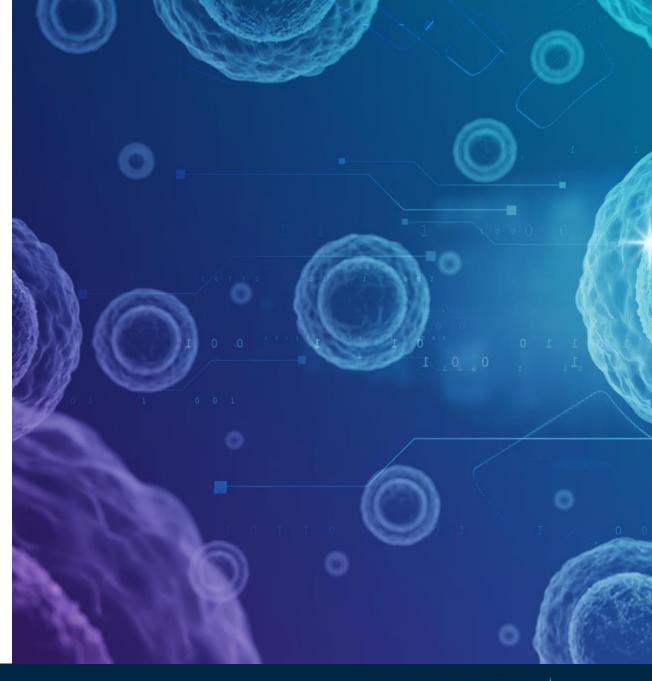


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Evogene's Subsidiary

Mission

Improve food quality, sustainability and agricultural productivity through microbiome-based, **ag-biological products**

Ag-biologicals a rapidly growing market

The ag-biologicals market is expected to grow at a double digit CAGR over the next decade

Unique AI tech-platform and data assets

Proprietary tech platform increases probability of success and reduces cost and time-to-market

Powered by



Broad & diverse pipeline

8 programs – new product launch expected every 1-2 years

Strategic partners & investors







2 revenuegenerating graduated programs





Evogene's Subsidiary

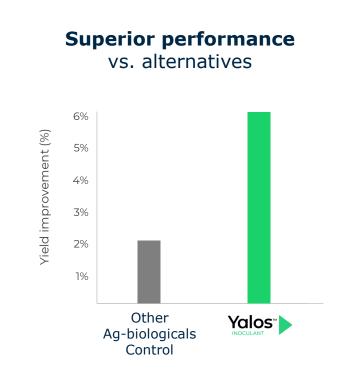
Yalos™ - Bio-inoculant for cereal grains*



Sold in USA**

& expanding globally









^{**} In 2023 Yalos™ was sold for wheat. 2023 trials for barley and durum look promising for potential 2024 expansion



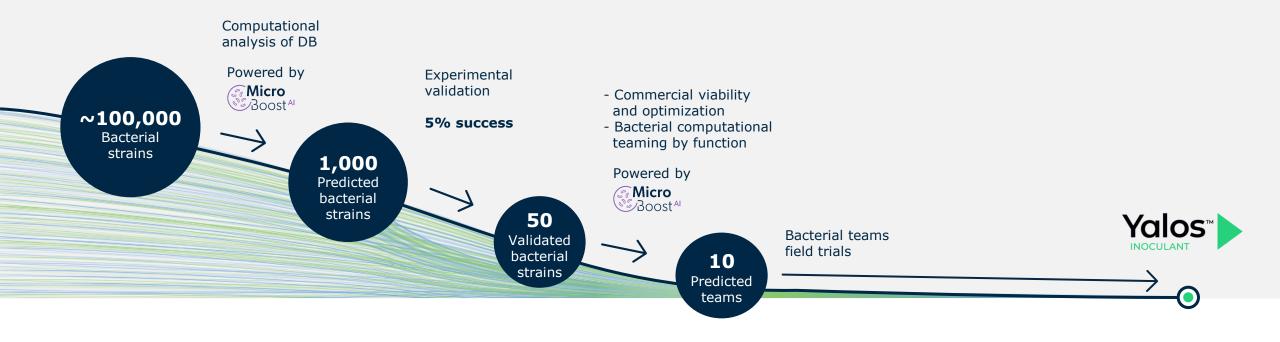
^{*} Yalos™ has regulatory approval in the US & Canada for all small grains including wheat, barley, durum, oats, soybeans, canola, and others. Data was gathered in large side-by-side field trials in the US



Evogene's Subsidiary

MicroBoost AI tech-engine directing & accelerating product discovery & optimization





Increase probability of success

Reduce time and cost



Evogene's Subsidiary

LAV311 - Bio-pesticide for Fruit rots & Powdery mildew



Licensing agreement with

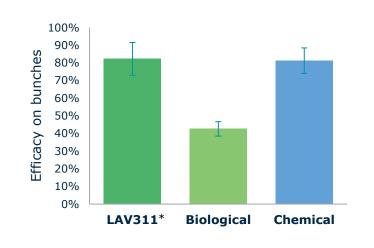


- \$5M upfront payment
- Future milestone payments
- Royalties from future sales



Superior performance

compared to competing biological control products, similar results to chemicals



Consistent performance

in preventative application over 3 years (validated by Corteva)







Chemical



Untreated

Integrated spray programs showed a potential reduction of 3-5 chemical applications* per season

^{*} Program consisted of alternating applications between a chemical and LAV311 across the season

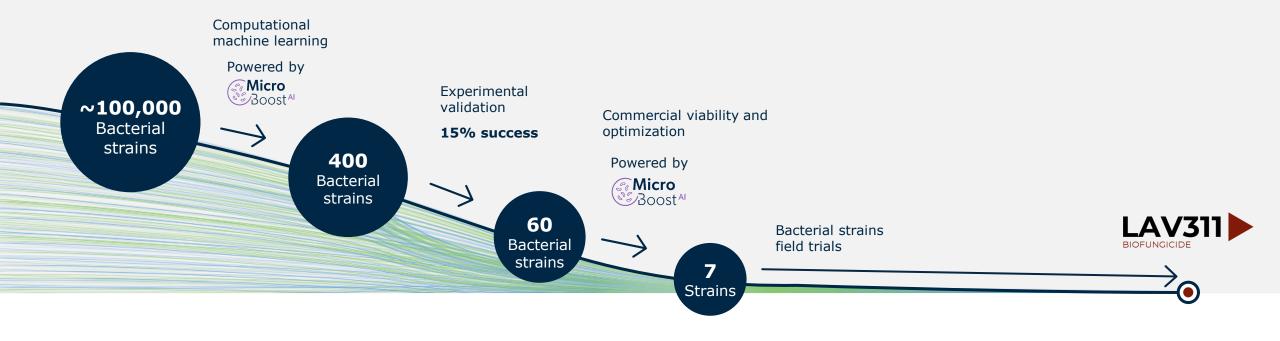




Evogene's Subsidiary

MicroBoost AI tech-engine directing & accelerating product discovery & optimization





Increase probability of success

Reduce time and cost



casterna

Evogene's Subsidiary

Mission

Provide elite castor seeds to the bio-based industries

Castor oil - emerging market

The global castor oil & oil derivatives market is expected to reach \$2.06 billion by 2028* CAGR of 4.9%

Unique tech platform for elite varieties

Combining deep scientific know-how, genomic and phenotypic big-data, and computational technology for elite castor variety development

Powered by



Holistic ag-solution

Proprietary holistic agsolution: elite varieties, growth protocols, and novel mechanical harvesting and dehulling machines



Strategic alliance

A strategic alliance in the biofuel space with a leading global oil and gas company



3 Commercial revenue generating castor varieties

Proprietary varieties with improved traits suitable for commercial scale cultivation

EVF716, EVF712, EVF701



^{*}https://www.marketreportsworld.com/global-castor-oil-and-derivatives-market-19862171

casterna

Evogene's Subsidiary

EVF716, EVF712, EVF701 **Elite Castor Varieties**









Evogene's Subsidiary

Castor Seed Sales



Casterra Announces Additional \$2.2 Million of Purchase Orders to Supply Castor Seeds for New African Territories

Casterra will supply the castor seeds in 2023 for the cultivation of castor plants to produce oil for sustainable biofuel

Rehovot, Israel – July 3, 2023 – Casterra Ag Ltd. ("Casterra"), an integrated castor cultivation solution company and a subsidiary of Evogene Ltd. ("Evogene") (Nasdaq: EVGN; TASE: EVGN), today announced additional \$2.2 million of purchase orders to supply castor seeds during 2023, for new African territories. Casterra's castor seeds, developed with Evogene's *GeneRator Al* Tech Engine, will be used to grow Castor to produce oil for sustainable biofuel. Casterra's high-yield, high-oil castor seed varieties are optimized for biofuel production to support the growing sustainable energy market.

Casterra Signs a Framework Agreement with a World Leading Oil and Gas Company to Sell Its Castor Seeds for Sustainable Biofuel Production. with Initial Purchase Orders of

\$9.1 Million

Casterra is expected to deliver the initial orders of its proprietary castor seeds, developed using Evogene's GeneRator AI tech engine, during 2023

Rehovot, Israel – June 21, 2023 – Casterra Ag Ltd. ("Casterra"), an integrated castor cultivation solution company and a subsidiary of Evogene Ltd. ("Evogene") (Nasdaq: EVGN; TASE: EVGN), announced today that it signed a framework agreement to sell seeds of its proprietary castor varieties to one of the world's leading oil and gas companies for cultivation in specific African territories. Initial purchase orders, valued at an aggregate of \$9.1 million, were received and the seeds are expected to be delivered during 2023. Casterra's high-yield, high-oil castor seed varieties are optimized for biofuel production to support the growing market of sustainable energy.

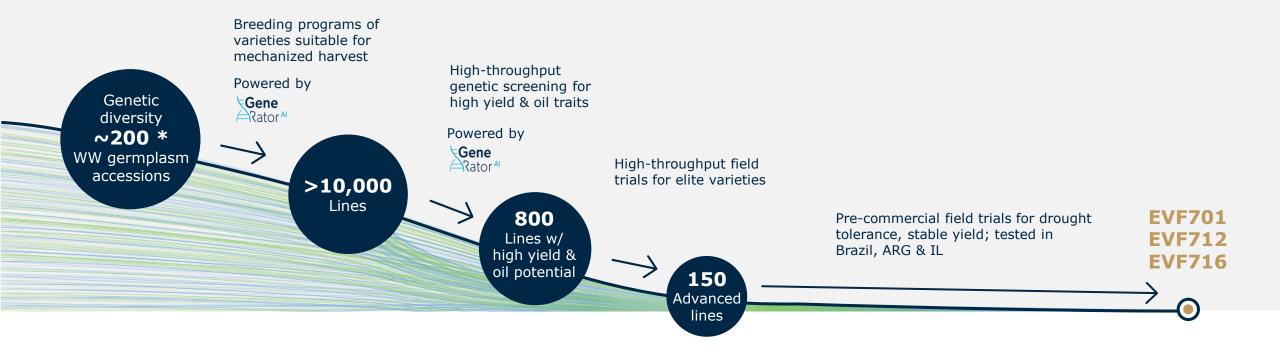


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Evogene's Subsidiary

GeneRator AI tech engine directing & accelerating product discovery & optimization





Increase probability of success

Reduce time and cost

^{*} Representing 40,000 (200*200) line potential for breeding



Agenda

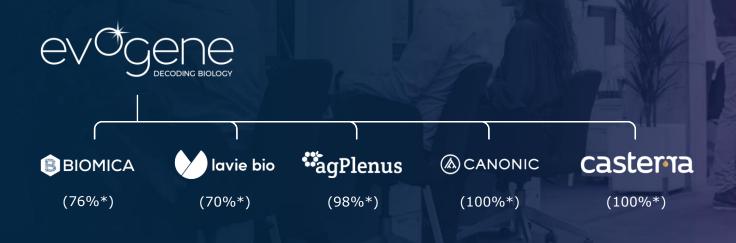
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The Evogene Group



142 50% Women

As of Nov 13, 2023



*Evogene holdings

Our vision

Revolutionize the development of life-science based products, utilizing cutting edge computational biology technologies

Our unique offering - 3 *AI Tech-Engines to* direct & accelerate product discovery and optimization:

- MicroBoost AI
- · ChemPass AI
- · GeneRator AI

Tech engine value proposition

- Increase probability of success
- Reduce time
- Reduce cost

Business strategy - Capture the value of our *AI tech-engines* through:

- Licensing to 3rd parities (mainly subsidiaries)
- **Collaboration** with world-leading partners

Current subsidiaries

- Biomica Human-microbiome based therapeutics
- Lavie Bio Ag-biologicals
- **AgPlenus** Ag-chemicals
- Canonic Medical cannabis
- Casterra Castor end-to-end solution

Commercial products developed utilizing Evogene's AI tech-engines (examples)

- 3 commercial castor elite varieties by Casterra
- 2 ag-biologicals by Lavie Bio
- Medical cannabis products by Canonic

Vote of confidence

Equity investment in the following subsidiary:

- Lavie Bio Corteva & ICL
- Biomica Shanghai Healthcare Capital







Annex I: Financial Overview

Key Financials: Balance Sheet

Key Points:

- Consolidated cash position: ~\$37 million as of 30.09.2023
- This Consolidated cash position does not include the \$2.5 million, which represents the second half of the upfront payment from the licensing agreement of Lavie Bio with Corteva and amount due to the purchase orders received by Casterra in the last few months.
- No bank debt
- Listed on TASE (2007) and NASDAQ (2016)

Thousands of US \$	30.09.2023	31.12.2022
Current Assets	40,555	37,751
Long-Term Assets	17,191	18,375
Total Assets	57,746	56,126
Current Liabilities	6,484	5,625
Long-Term Liabilities (inc. \$10m convertible SAFE at Lavie Bio)	15,399	15,711
Equity attributable to equity holders of the Company	18,510	27,930
Non-controlling interest	17,353	6,860
Total Liabilities & Shareholders Equity	57,746	56,126



Annex II: Evogene Subsidiaries

Evogene Subsidiaries









76%*

Microbiome-based **Therapeutics**

- Immuno-oncology
- GI- related disorders



\$20M investment led by SHC (Apr. 2023)



70%*

Ag Biologicals

- Bio-stimulants
- Bio-pesticides





\$10M SAFE investment (Aug 2022)





98%*

Ag Chemicals

- Herbicides
- Fungicides
- Insecticides





100%*

Medical Cannabis

- · High yield & consumer traits
- Therapeutic traits currently inflammation & pain

casterna

100%*

Castor Cultivation End-to-End Solution

- Elite castor varieties
- Cultivation protocols
- · Harvesting and dehulling machinery customized to Casterra's varieties

^{**}Includes \$10M cash investment along with transfer of assets



^{*}Evogene holdings



Mission:

Discovery and development of novel therapies for microbiome-related human disorders using computational biology

Products & Pipeline



Immuno-oncology program

- Combination therapy for cancer with checkpoint inhibitors
- Phase 1 clinical stage
- Addressable market of \$309.7B (by 2030*)



GI related disorders

- Inflammatory Bowel Disorder (IBD) pre-clinical stage
- Irritable Bowel Syndrome (IBS) pre-clinical stage
- Addressable market: IBD \$27B; IBS \$3.3B (by 2026**)



Antimicrobial resistance (AMR)

- Clostridium Difficile Infection (CDI) discovery stage
- Methicillin-resistant Staphylococcus aureus (MRSA) discovery stage
- Addressable market: CDI \$1.7B (***); MRSA \$1.3B (by 2026****)

Expected upcoming value drivers

Immuno-oncology

Readout & completion of POC from first in-human study; Pre-IND meeting with FDA

IBD

 Clinical batch production of drug candidate for IBD as preparation for Phase 1 clinical trials in USA.

IBS

 Advancement of pre-clinical studies and nomination of bacterial consortium for clinical trial

^{*}https://www.alliedmarketresearch.com/cancer-immunotherapy-market

^{**}https://www.grandviewresearch.com/press-release/global-inflammatory-bowel-disease-ibd-treatment-market?utm_source=blog.goo.ne.jp&utm_medium=referral&utm_campaign=Vrushali_7Aug_hc_InflammatoryBowelDiseaseTreatmentMarket_pr&utm_content=Content;
https://www.grandviewresearch.com/industry-analysis/inflammatory-bowel-disease-ibd-treatment-market#:~:text=Report%20Overview,4.4%25%20from%202018%20to%202026, https://www.bloomberg.com/press-releases/2019-07-23/ibs-treatment-market-size-worth-3-3-billion-by-2026-caar-10-1-arand-view-research-inc

^{*** &}lt;a href="https://www.globaldata.com/media/press-release/global-clostridium-difficile-infections-market-approach-1-7-billion-2026/">https://www.globaldata.com/media/press-release/global-clostridium-difficile-infections-market-approach-1-7-billion-2026/

^{****} https://www.biospace.com/article/releases/global-methicillin-resistant-staphylococcus-aureus-mrsa-drugs-market-to-surpass-us-1-3-billion-by-2026



Example Results:

Immuno-Oncology program – **BMC128** potentiate the effect of anti-PD-1 therapy (immunotherapy) in-vivo



Improved antitumor activity in mice following the administration of BMC128, compared to treatment with immunotherapy alone

Biomica Opens Second Site to Advance Its Immuno-Oncology Drug Trials at Davidoff Center

AUGUST 15, 2023

Read full press release

Biomica Announces Closing of \$20 Million Financing Round led by Shanghai Healthcare Capital

APRIL 27, 2023

Biomica Announces Interim Positive Results from Pre-Clinical Studies in its Irritable Bowel Syndrome (IBS) Program

JULY 19, 2023

Read full press release





Mission:

Improve food quality, sustainability & agriculture productivity through microbiome based ag-biologicals technology & products

Products & Pipeline (examples)

Bio-stimulants



- Yalos[™] primarily spring wheat: commercial stage; addressable USA & Canada markets ~25M acres*
- Bio-stimulants #2 primarily soy: pre-development stage;
 addressable market ~90M acres*

Bio-pesticides



- Fruit rots primarily grapes: pre-commercial; addressable market >\$1B**
- Downy Mildew fruits and vegetables; development stage 1; addressable market >\$500M**
- Seedling disease corn and soy: pre-development; addressable market >\$500M**

Expected upcoming value drivers

Bio-stimulants

 Yalos[™] – distribution licensing agreements and sales expansion in USA & Canada. Expansion to additional crops and an additional territory in 2025

Bio-pesticides:

- US regulatory approval for bio-fungicide candidate for fruit rots (LAV311) expected by 2024
- Submission for Lavie Bio's bio-fungicide candidate for downy mildew (LAV321) to the US EPA for regulatory approval – expected by 2025
- Co-development and licensing agreement for an additional bio-pesticide program with a large multinational company – expected by 2025

^{*}https://www.fao.org/faostat/en/#home; https://www.nass.usda.gov/Charts_and_Maps/Crops_County/; https://data.oecd.org/agroutput/crop-production.htm

**Company estimation





Example Results:

- **Yalos**™ inoculant for spring wheat
- LAV 311 bio-fungicide candidates for fruit rot



Lavie Bio's wheat field in the USA during harvest –

Sales initiated in 2022



Example of treatment against *Botrytis*Cinerea vs untreated control in vines

Lavie Bio Announces Commercial Launch of its First Microbiome-Based Product for Yield Improvement –

Yalos

NOVEMBER 3, 2021



Lavie Bio Announces Licensing Agreement for Bio-Fungicides with Corteva Agriscience

JULY 17, 2023





- License for LAV 311 & LAV 312 bio-fungicide candidates
- \$5M initial payment
- Additional future milestone payments & royalties







Mission:

Design next-generation, effective, and sustainable crop protection products by leveraging predictive chemistry and biology

Products & Pipeline



Herbicides

- Novel Mode-of-Action selective herbicide
- Herbicides addressable market \$48.9B (2027)*



Fungicides

- Novel Mode-of-Action wheat blotch fungicide
- Fungicides addressable market \$25.81B**



Insecticides

- Novel Site-of-Action resistance breaking piercing/sucking insecticide
- Insecticides addressable market \$22B (2030)***

Expected upcoming value drivers

Herbicides

- Milestone achievement of the ongoing collaboration with Corteva
- Engage in a new additional strategic collaboration

Fungicides

- Nominate new Mode-of-Action protein targets
- Initial greenhouse readouts of designed compounds on the defined fungi targets

Platform

- Verification of computational tool for selection of novel Mode-of-Action protein targets
- POC for the computational tool for novel molecule design

^{***} https://straitsresearch.com/report/insecticides-market



^{*} https://www.statista.com/statistics/1350387/herbicides-market-size-globally/

^{**} https://www.fortunebusinessinsights.com/fungicides-market-103267



**agPlenus | Ag-Chemicals

Example Results:

New MoA Herbicide - APH1



Field test of APH1
against a panel of
grass and
broadleaf weeds –
untreated control vs
APH1



Greenhouse testing of APH1 – Conferring resistance by modifying tobacco

AgPlenus Announces Reaching a 'Lead' Stage in its Novel Mode-of-Action Herbicide Program

DECEMBER 15, 2020

AgPlenus Announces Positive Results for a Herbicide Resistance Trait to its Leading Herbicide Product Candidate
JULY 6, 2021



Mission:

Leading the castor oil market with an integrated solution for industrialized cultivation of castor in support of the biobased materials industry

Product & Pipeline

Elite castor seed varieties

 'EVF' series - castor seed suitable for various environmental and climatic conditions



- Estimated addressable castor oil market \$1.21B (2021) and is expected to expand at CAGR of 5.8% from 2022 to 2030*
- Main target markets:
 - **Bio-polymers** driven by the need for quality and consistent inputs
 - Bio-fuel driven by environmental & regulatory trends in EU



Agro-technical support

Cultivation protocols to maximize the results of the elite seeds



Dedicated machinery

- Best-in-class harvesting header, developed with Fantini Srl., Italy
- Casterra proprietary patented dehulling machine

Expected upcoming value drivers

Seeds development

- Production extending production outreach in the target markets: Africa (Zambia & Kenya), Latin America (Brazil) with few hundred tons a year as of 2024
- R&D development of new seed traits matching industry needs (e.g., Ricin free, low viscosity) using advanced technologies: CRISPR, genetic markers

Territorial expansion

- Africa engaging with bio-fuel strategic industry leaders to increase our sales and sector footprint
- Latin America addressing the bio-polymer industry's interest in broad, consistent and high-quality castor oil supply in Latin America

Strategic alliance

 A strategic alliance with a leading global biofuel company, leveraging Casterra's holistic industrial solution



^{*} https://www.grandviewresearch.com/industry-analysis/castor-oil-derivatives-industry





High Yield & Oil Castor Seeds

Elite castor seed varieties - The 'EVF' series

Biobased Materials







EVF701

EVF712

EVF716

Dedicated machinery







Mechanical Harvest



Proprietary dehulling machine

Casterra Signs Royalty Agreement with Titan for Castor Oil Sales in South-Fastern Africa

NOVEMBER 15. 2022

Casterra Signs a Framework Agreement with a World Leading Oil and Gas Company to Sell Its Castor Seeds for Sustainable Biofuel Production, with Initial Purchase Orders of \$9.1 Million

JUNE 21, 2023

Casterra Announces Additional \$2.2 Million of Purchase Orders to Supply Castor Seeds for New African Territories

JULY 3, 2023