



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 **August 2023**

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

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

99.1 [Lavie Bio 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: August 23, 2023

By: /s/ Yaron Eldad

Yaron Eldad

Chief Financial Officer

Lavie Bio

Introduction

August 2023



lavie bio
better by nature

Forward looking statement

This presentation contains "forward-looking statements" relating to future events, and Lavie Bio (the "Company") and its parent, Evogene Ltd. ("Evogene"), may from time to time make other statements, regarding our outlook or expectations for future financial or operating results and/or other matters regarding or affecting us that are considered "forward-looking statements" as defined in the U.S. Private Securities Litigation Reform Act of 1995 (the "PSLRA") and other securities laws, as amended. Statements that are not statements of historical fact may be deemed to be forward-looking statements. Such forward-looking statements may be identified by the use of such words as "believe", "expect", "anticipate", "should", "planned", "estimated", "intend" and "potential" or words of similar meaning. We are using forward-looking statements in this presentation when we discuss our value drivers, product pipeline, future sales, commercialization efforts and timing, product development and launches, estimated market sizes and milestones, as well as the capabilities of Evogene's and our 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. Readers are cautioned that certain important factors may affect the Company's actual results and could cause such results to differ materially from any forward-looking statements that may be made in this presentation. Therefore, actual future results, performance or achievements, and trends in the future 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 our control, including, without limitation, those described in greater detail in Evogene's Annual Report on Form 20-F and in other information Evogene files and furnishes with the Israel Securities Authority and the U.S. Securities and Exchange Commission, including those factors under the heading "Risk Factors".

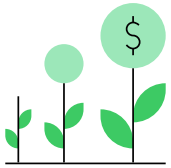
Except as required by applicable securities laws, we disclaim any obligation or commitment to update any information contained in this presentation or to publicly release the results of any revisions to any statements that may be made to reflect future events or developments or changes in expectations, 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.

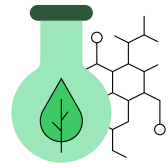


Lavie Bio – In a Nutshell



Ag-Biologicals Rapidly Growing Market

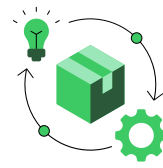
The ag-biologicals market is expected to grow at a double digit CAGR



Unique AI Tech-Platform and Data Assets

Leveraging AI technology to increase:

- Microbe selection predictability by 10X
- Microbe efficiency by 20%

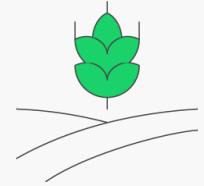


Broad & Diverse Pipeline

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



Strategic Partners & Investors



2 Revenue Generating Graduated Programs



The Challenge

Grow more food with less environmental impact



Efficiency

Climate Change

- Unstable weather patterns
- Drought & higher temperatures
- Increased extreme weather

Pest & Disease Outbreaks

- Deregulation of existing pesticides
- Resistance development to chemicals
- Fewer new product introductions

Sustainability

Regulatory Restrictions

- Limiting the use of chemicals
- Enforcing regenerative practices
- Regulating food imports

Consumer Demands

- Healthier food
- Higher quality
- Sustainable production

Ag-biologicals is relatively a newcomer to the huge **\$200B** ag-inputs market

\$10B
Ag-Biologicals

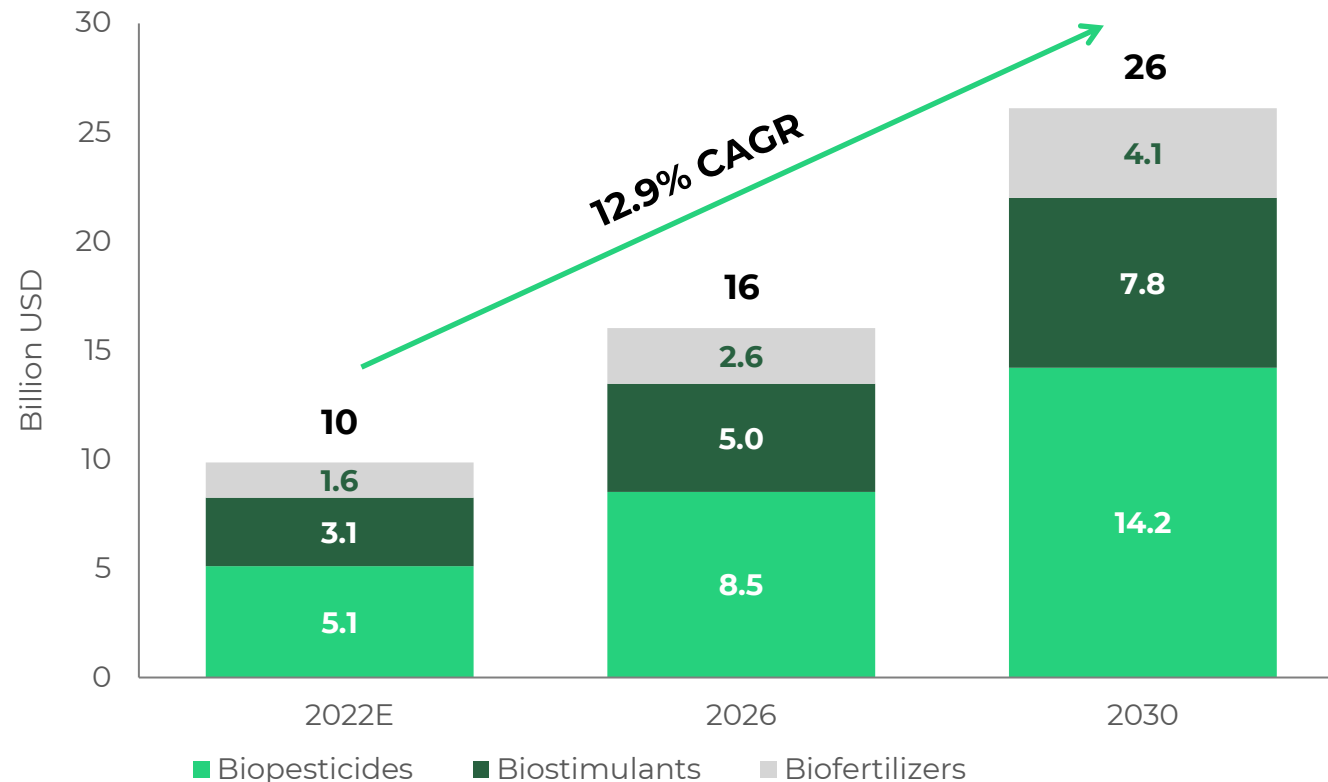
\$60B
Crop Protection Chemicals

\$130B
Chemical Fertilizers

* The amounts described herein are based on Markets and Markets, Research and Markets, Vantage Market Research and company's analysis

Ag-Biologicals Could be the Solution

Driving healthier crops, while preserving the soil



Consumer Health

- Less residues
- Less applicator exposure

Regenerative Agriculture

- Improving soil fertility
- Integrated pest management

Sustainability

- Renewable resources
- Increased uptake of fertilizers



However, Ag-Biologicals are Struggling still not efficient as 'traditional' solutions




	Chemical Crop Protection & Fertilizers	Ag-Biologicals Today
Sustainability	+	+++
Efficiency <ul style="list-style-type: none">• Efficacy	+++	++
<ul style="list-style-type: none">• Consistency	+++	+
<ul style="list-style-type: none">• Commercial viability	+++	+


Next
Generation
?



Lavie Bio – Next Generation Ag-Biologicals

Efficient & Sustainable Products



	Chemical Crop Protection & Fertilizers	Ag-Biologicals Today	 lavie bio Ag-Biologicals
Sustainability	+	+++	+++
Efficiency <ul style="list-style-type: none">Efficacy	+++	++	+++
<ul style="list-style-type: none">Consistency	+++	+	+++
<ul style="list-style-type: none">Commercial viability	+++	+	+++



Our Mission



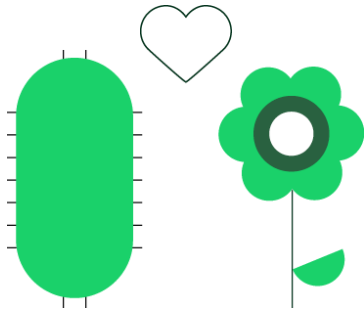
lavie bio

Improve food quality, sustainability
and agriculture productivity
through **microbiome** based,
AI-driven, ag-biological products

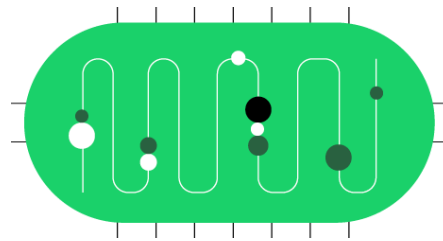


The Power of the Microbiome

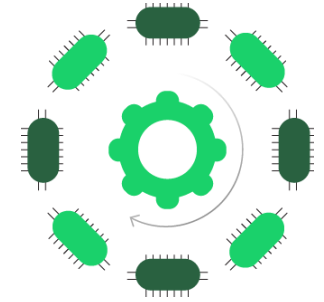
Billions of microbes make a difference!



Billions of microbes
integral to plant-related ecosystems
impact the entire plant lifecycle



Surrounding microbes generate
nature's largest '**function bank**' for
plant growth and development

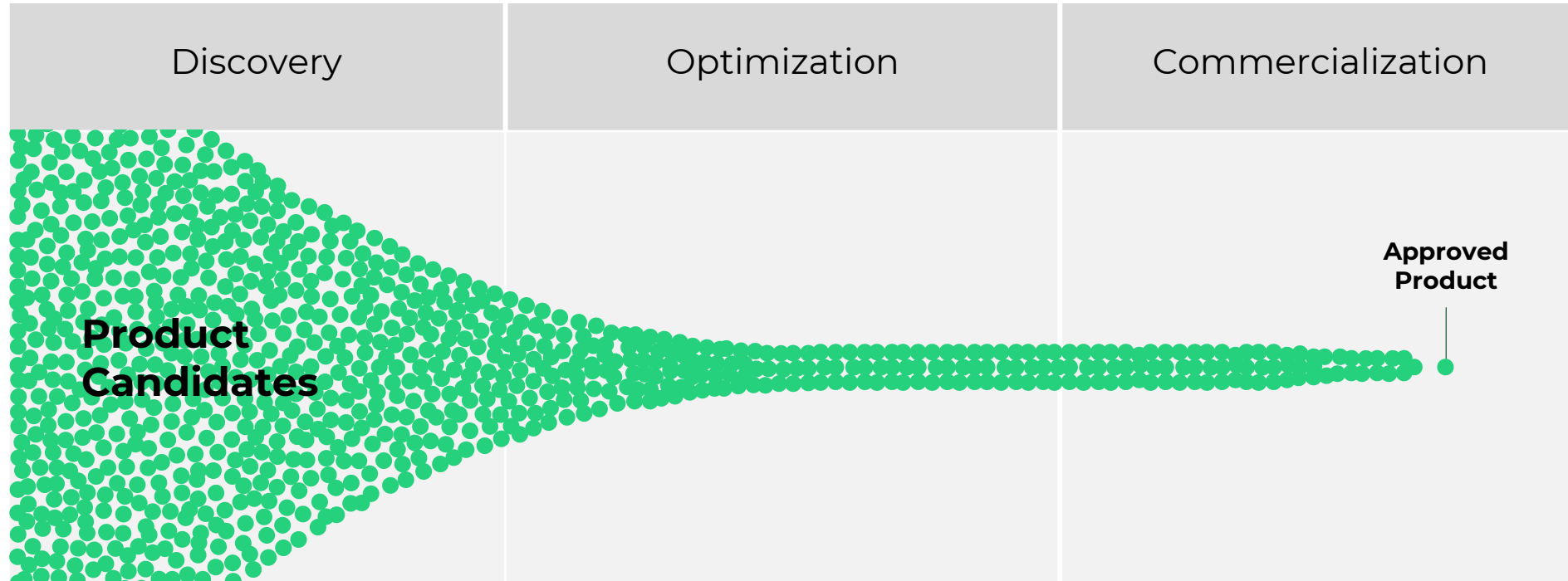


These microbes act as a
'live engine' supporting yield
production in the field



Ag-Biological Product Development

The ultimate case of finding “the needle in the haystack”



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



Lavie Bio's Tech Edge: The Biology Driven Design (BDD) Platform



Powered by  Micro
Boost^{AI}

Lavie Bio's proprietary BDD platform leverages advanced computational technologies that incorporate **deep scientific understanding together with big data and advanced AI**, to successfully discover & guide the development of novel ag-biological products



BIG DATA

BIOLOGY

AI

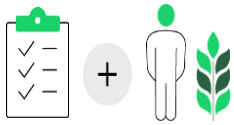


BDD Platform - Function-Based Product Discovery

Decoding the natural diversity of genetic functionality



Clear product requirements



crop, region,
disease, weather
conditions, yield...



Translate requirements into functions



Efficacy, shelf life,
drought tolerance,
nutrient uptake...



World leading
microbial bank



Identify min microbes with max functions



Microbiome
gene pool



Microbiome
function catalog



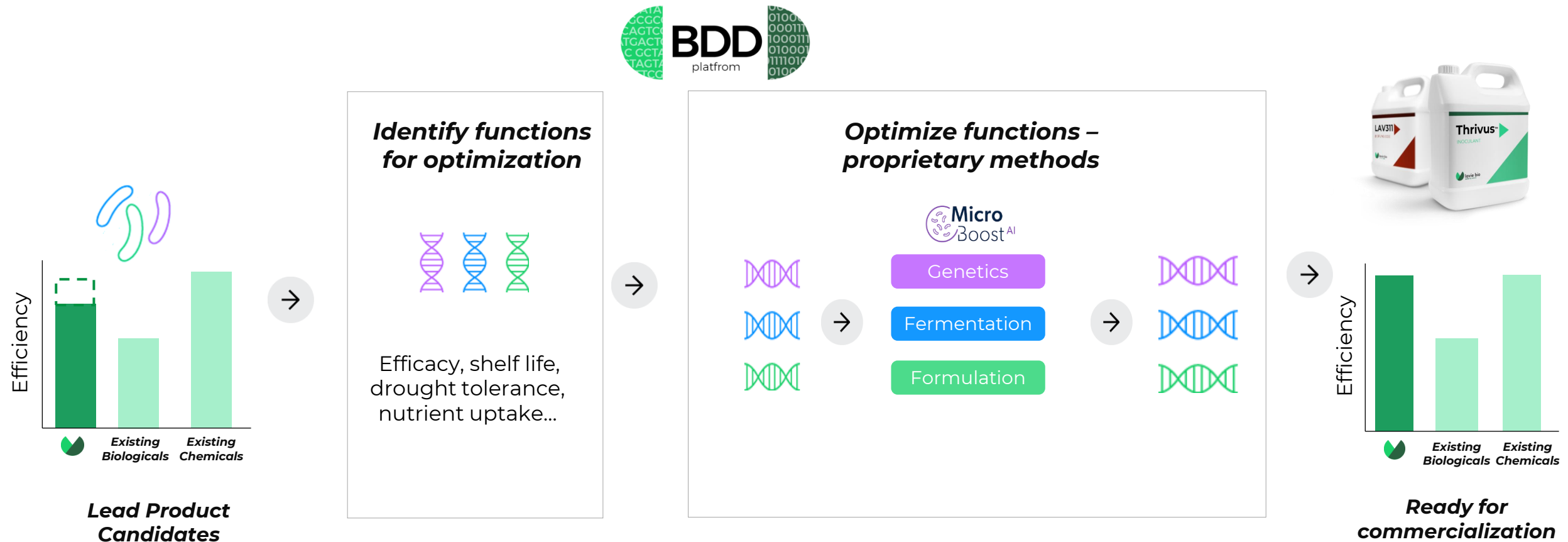
**Lead
Product
Candidates**

The  platform increases microbe selection predictability by 10X



BDD Platform - Function-Based Product Optimization

Maximizing performance of leading microbes



End-to-End Capabilities

From product concept to commercialization



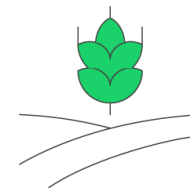
Discovery

billions > promising few



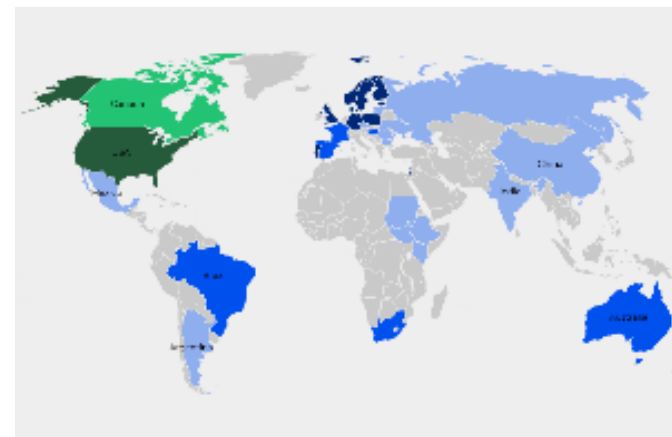
Optimization

promising few > product



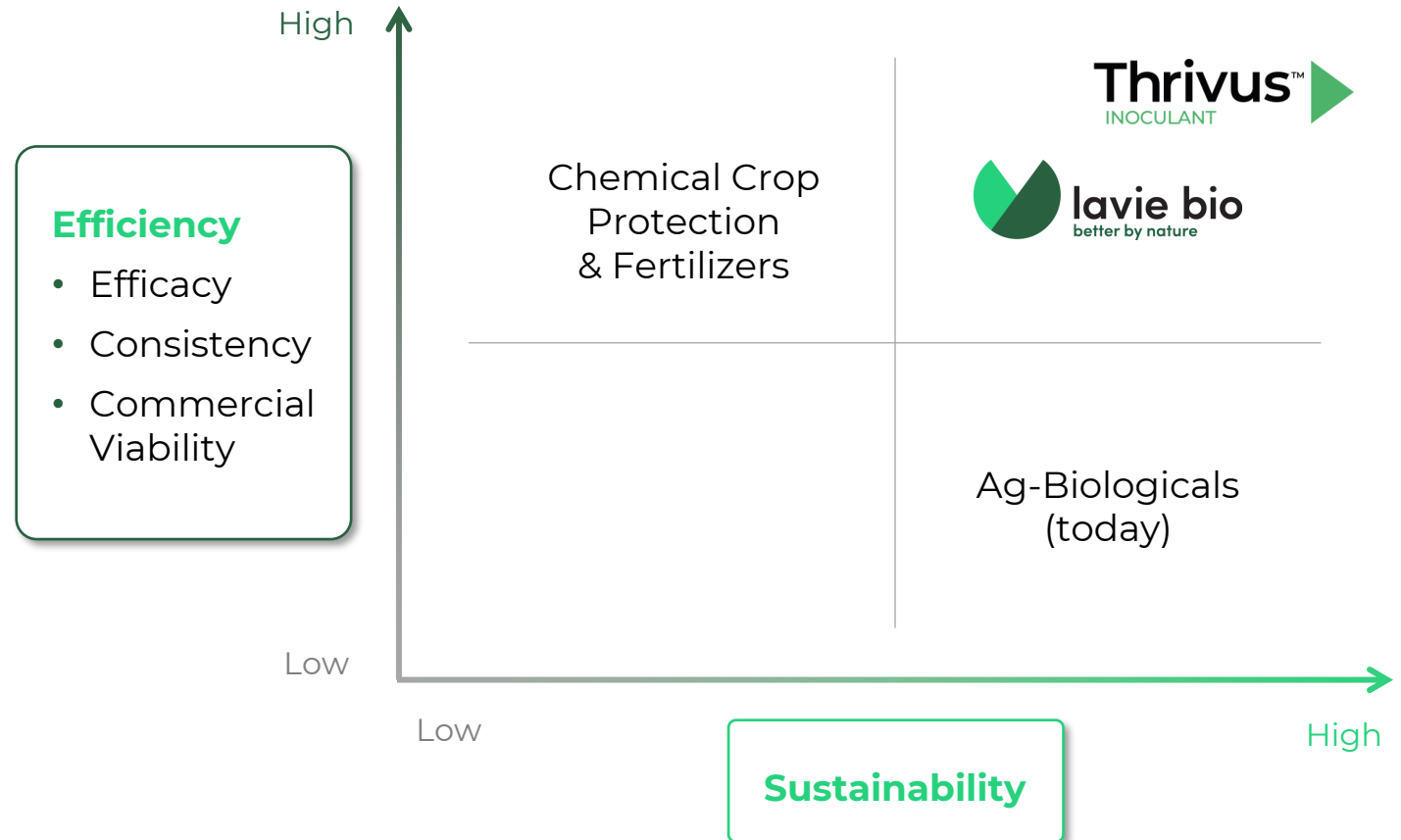
Commercialization

product > global expansion



Lavie Bio – Breaking the Efficiency/ Sustainability Trade-off

Case Study - Thrivus





Efficiency - Proven Capabilities

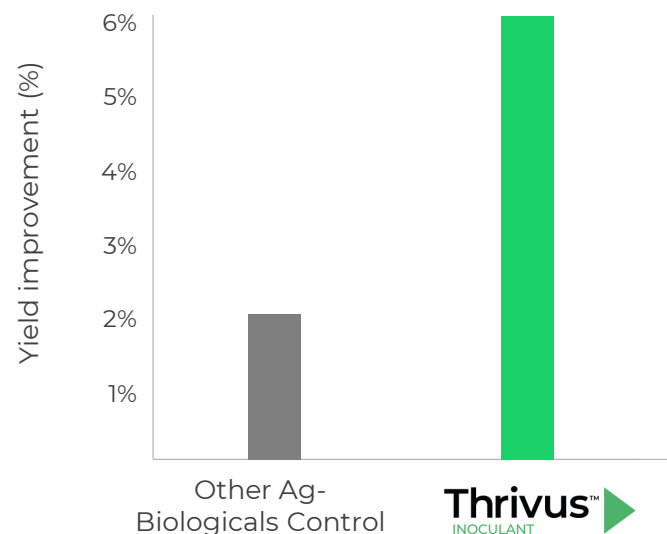
Bio-inoculant for cereal grains*



Sold in USA**
& expanding globally



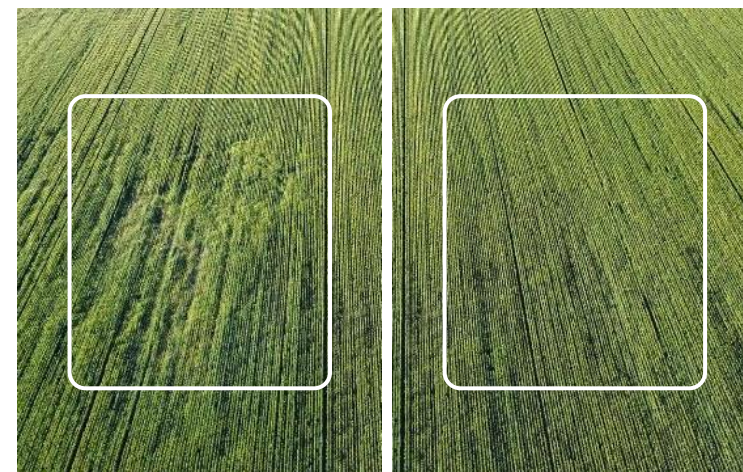
Superior performance
than alternatives



Consistent performance
providing a **4:1** ROI to farmers

Check

Thrivus INOCULANT



*Thrivus 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

** In 2023 Thrivus was sold for wheat and Durum. 2023 trials for barley and oats look promising for potential 2024 expansion

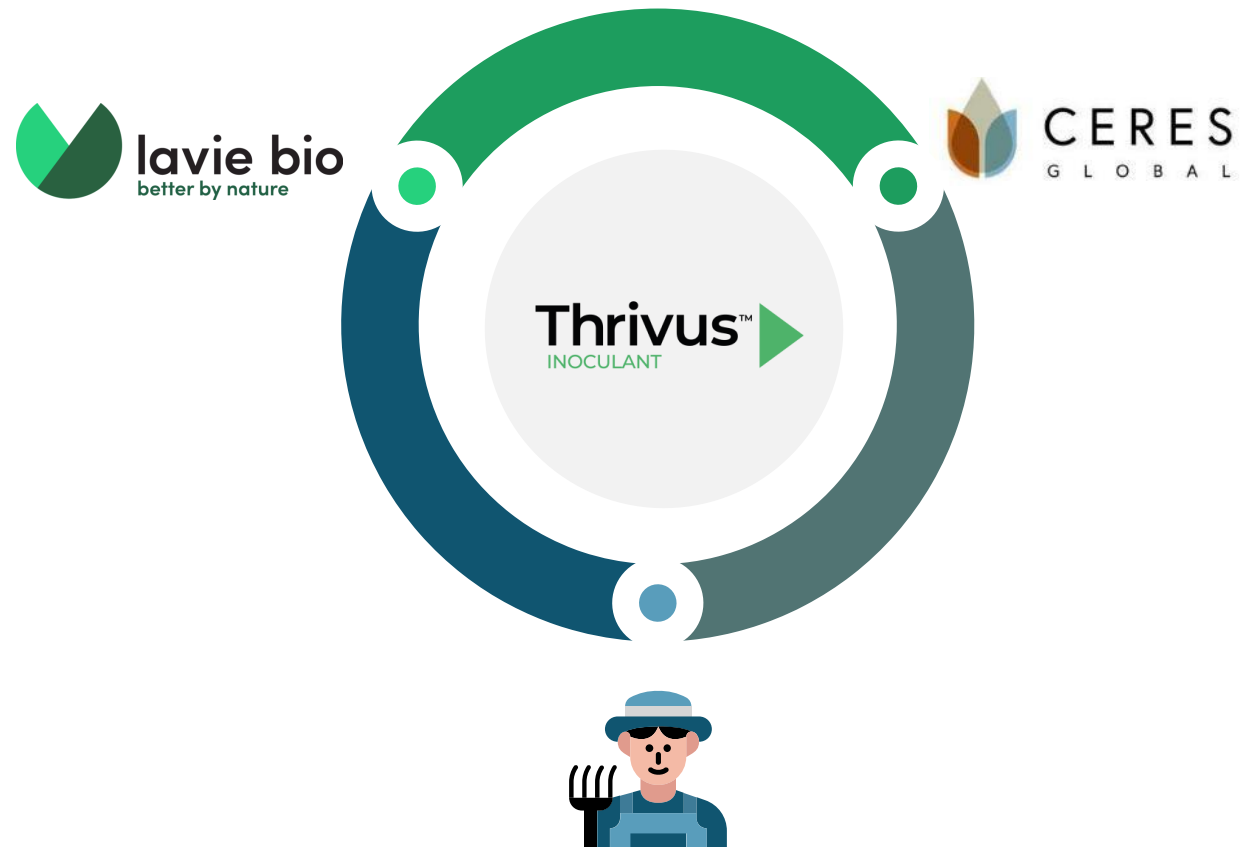
Sustainability - Proven Capabilities

Bio-inoculant for cereal grains



Growers are financially rewarded for advancing sustainability

- ✓ Use Thrivus bioinoculant for \$8/acre
- ✓ Realize yield improvement of ± 4 bushels per acre on average from Thrivus
- ✓ Enroll in the Ceres Global sustainability program
- ✓ As part of the Ceres program, paid upon delivery a \$2.50/acre premium for advancing sustainability (subsidized by food companies)



* Thrivus is a combination of 2 synergistic bacteria strains which improve nutrient availability & uptake, improving plant health

Our Product Pipeline

An engine for new product launch every 1-2 years

Product program	Product focus	Target market*	Potential expansion**	2022	2023	2024	2025	2026	2027	2028
 Bio-Stimulants										
Thrivus™ <small>INOCULANT</small> 	Seed treatment, Spring wheat North America		25M ACRES wheat North America	500M ACRES						
LAV228 Bio-stimulants 2	Seed treatment Soy N.A, Europe		85M ACRES soy US	180M ACRES						
Bio-stimulants 3	Foliar treatment Soy Brazil, US & LATAM		100M ACRES soy Brazil	140M ACRES						
Bio-stimulants 4	Foliar treatment Cotton Brazil, US, India		40M ACRES cotton Brazil, US, & India	90M ACRES						
 Bio-Pesticides										
LAV311 <small>BIOFUNGICIDE</small> 	Foliar treatment Fruits & Veg Europe. N.A	 	>\$200M grapes chemicals usage	+\$800M Additional Fruits & Veg						
LAV321 Downey mildew	Foliar treatment Fruits & Veg Europe. N.A	 	>\$350M grapes chemicals usage	+\$150M Additional Fruits & Veg						
LAV332 Seedling disease (Pythium)	Seed treatment, Corn, soy, F&V Europe, N.A	 	>\$500M	<\$200M						
LAV441, LAV442 Bio-Insecticides	Seed treatment, Corn, soy Europe, N.A	 	>\$1.5B existing traits and chemicals market	<\$500M						



* Company estimations for the target market of initial crops and disease based on FAO, OECD & USDA data
 ** Company estimations for total addressable market including potential geographies & crop expansions



product launch year

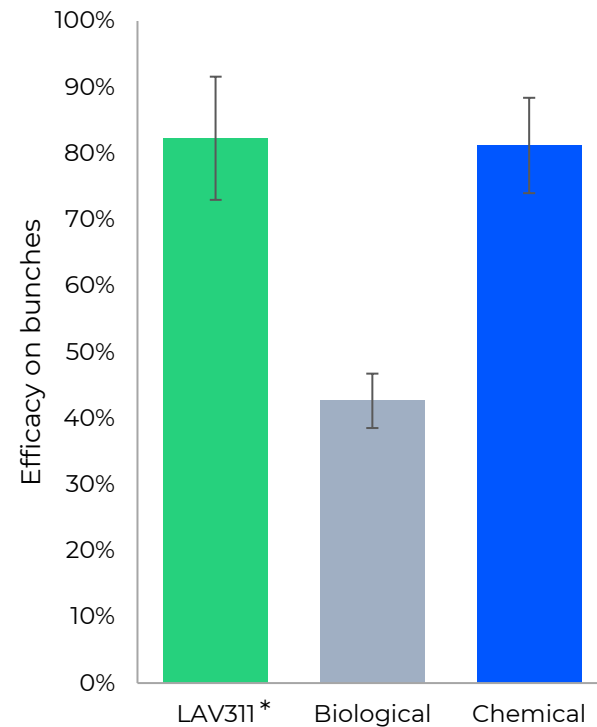


Expected product launch year

Product Example

A bio-control product for vineyards (fruit rot)

- Consistent performance in preventative application over 3 years (validated by Corteva)
- Superior performance compared to competing biological control products, similar results to chemicals
- Integrated spray programs showed potential reduction of 3-5 chemical applications* per season
- Potential annual product sales **>\$100m****



Chemical



LAV311
BIOFUNGICIDE



Untreated



Product Example

A bio-control for vineyards & vegetables (Downey Mildew & Late Blight)

- Field proven against Downy Mildew (grapes) & Late Blight (potato & tomato)
- 2 years testing by 4 multinationals with consistent performance & strong results
- Limited solutions in the market due to pest resistance and regulatory constraints
- Potential annual product sales **>\$100m***

Control



LAV321 
BIOFUNGICIDE



Control

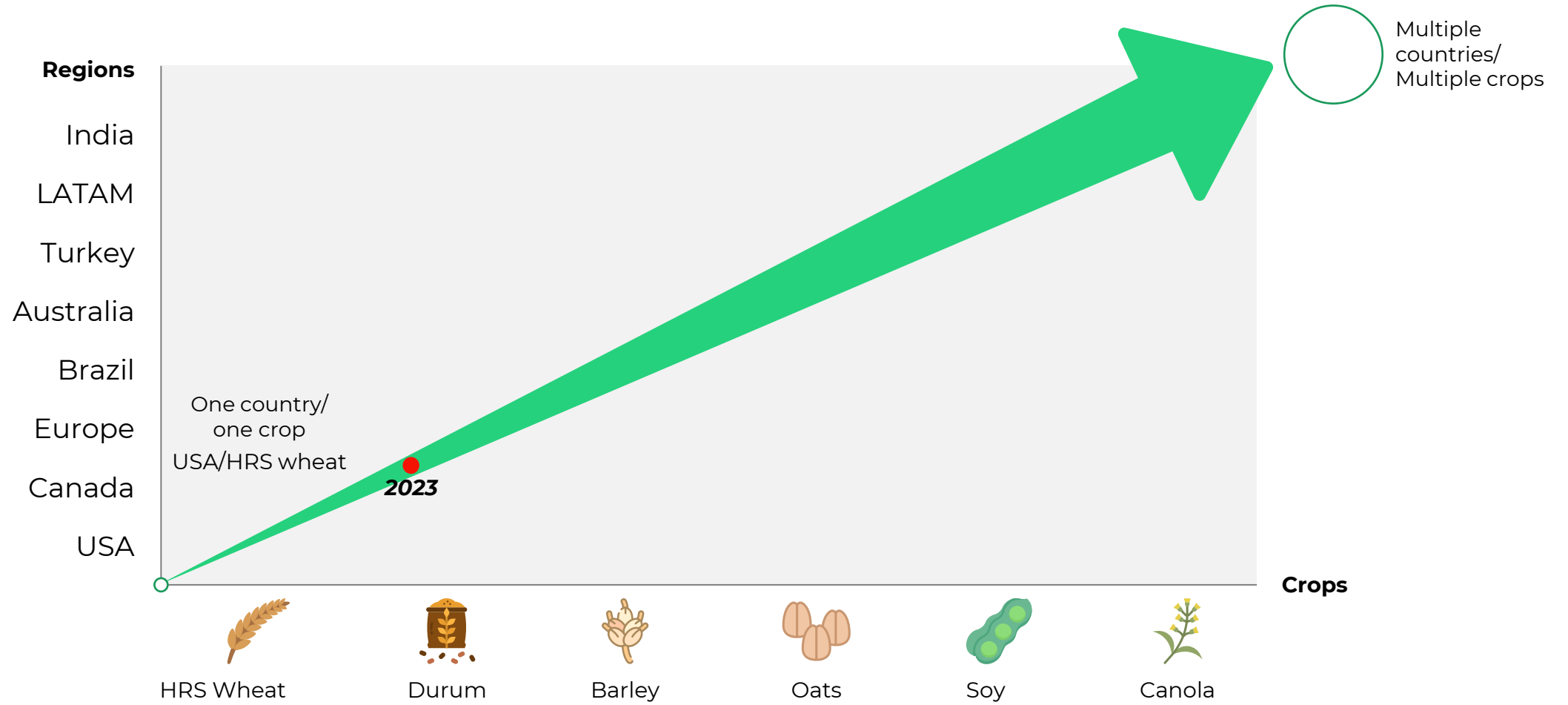


LAV321 
BIOFUNGICIDE



Single Product Market Potential

From focused development to large market potential



Business Model



Direct model

Lavie Bio product

- End-to-end product development
- Production by contractor
- Commercialization via direct channels
- Revenues from sales



Licensing model

Lavie Bio 'tech-inside' product

- End-to-end product development
- Licensing by industry leader
- Commercialization & production by partner
- Revenues from upfront payment, milestones & royalties



Direct Model



G2M Step 1

Bottom-up demand generation and sales through regional distribution partners

G2M Step 2

Scale-up through national partners

Current Thrivus US distribution partners



Potential US national partners



Licensing Model



Corteva to license Lavie Bio's bio-fungicide LAV311 & LAV312 for fruit rot

- Global exclusive license upon reaching diligence milestones

- Deal terms:

\$5M upfront payment

Future milestone payments

Royalties from future sales

- Deal includes LAV311 as main strain and LAV312 as a back-up

Strategic Investors & Partners



*Global leader in
computational biology*

- **Strategic Investor:**
Evogene holdings – 70%
- **Strategic partner:**
Exclusive long-term license for
MicroBoost AI technology for agriculture



*Global leader in seeds and
ag-chemical products*

- **Strategic Investor:**
Corteva holdings – 28%
\$27M investment (Aug 2019)*
- **Strategic partner:**
2 joint bio-pesticide development
programs

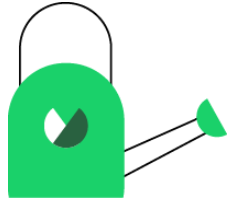


*Global leader in fertilizers
and specialty minerals*

- **Strategic Investor:**
\$10M SAFE investment (Aug 2022)
- **Strategic partner:**
2 joint bio-stimulant development
programs



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



We've got
the right
team to
nurture it

Management Team



Amit Noam
| CEO

An extensive experience in the agriculture and healthcare sectors, leading teams in the development and execution of commercialization strategies, driving long-term growth and value-creation for businesses



Dor Kestecher
| VP Business Development

10+ years of broad experience leading in agriculture product management, strategy, and development



Russel Putland
| EVP Commercial and US General Manager

30+ years of ag commercial leadership roles with 'ground up' experience in large multi-national organizations



Michael Ionesco
| VP Research

Innovative research leader with deep biotechnology, big data and informatics expertise



Amir Bercovitz
| VP Development

Extensive development and product expertise in the ag-biologicals field for 30+ years – led introductions of 5 commercial products



Yaron Eldad
CFO

Over 25 years of experience in various CFO positions in public and private technology and biotechnology companies,

Board of Directors



Ofer Haviv

Chairman of the board
Evogene's President and CEO



Frederic C. Beudot

Global Portfolio Leader for
Biologicals at Corteva Agriscience



Elad Aharonson

President, Growing
Solutions at ICL



Sassi Masliah

Vice President Corporate
Development at Evogene



Trevor Thiessen

Senior agriculture executive,
experienced in marketing,
sales, and go-to-market



Summary

A

Ag-biologicals - a \$10B market, forecasted to grow at a 13% CAGR over the next decade

B

Unique tech edge – enables to systematically bring sustainable ag-biological products to the market, with comparable efficiency to synthetic solutions

C

Broad & diverse pipeline of 8 bio-stimulant and bio-pesticide products targeting a new product launch every 1-2 years

D

Proven end-to-end product development capabilities with 2 graduated programs generating revenues: Thrivus (direct model) & LAV311 (licensing model)

E

Strong market acknowledgement - Corteva, ICL & Evogene as strategic investors & partners



lavie bio
better by nature



Thank you!