
**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 **March 2022**

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 March 10, 2022, Evogene Ltd. (“**Evogene**”) announced its financial results for the fourth quarter and fiscal year ended December 31, 2021. Also on March 10, 2021, Evogene made available an updated corporate presentation on its website. Copies of the press release announcing those results and presentation are furnished as Exhibit 99.1 and Exhibit 99.2, respectively, to this Report of Foreign Private Issuer on Form 6-K (this “**Form 6-K**”) and are incorporated herein by reference.

The contents of Exhibit 99.1 to this Form 6-K, excluding the statements of Evogene’s President and CEO contained therein, are incorporated by reference in the registration statements on Form F-3 (Securities and Exchange Commission (“**SEC**”) File No. 333-253300), and Form S-8 (SEC File Nos. 333-259215, 333-193788, 333-201443 and 333-203856) of Evogene, and will be a part thereof from the date on which this Form 6-K is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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: March 10, 2022

By: /s/ Dorit Kreiner

Dorit Kreiner

Chief Financial Officer

EXHIBIT INDEX

<u>EXHIBIT NO.</u>	<u>DESCRIPTION</u>
<u>99.1</u>	<u>Press Release: Evogene Reports Fourth Quarter and Full Year 2021 Financial Results.</u>
<u>99.2</u>	<u>Evogene Corporate Presentation – March 2022.</u>



Evogene Reports Fourth Quarter and Full Year 2021 Financial Results

Conference call and webcast: today, March 10, 2022, 9:00 am ET

Rehovot, Israel – March 10, 2022 – Evogene Ltd. (NASDAQ: EVGN, TASE: EVGN), a leading computational biology company targeting to revolutionize life-science product discovery and development across multiple market segments, announced today its financial results for the fourth quarter and full year of 2021, ended December 31, 2021.

Mr. Ofer Haviv, Evogene's President and Chief Executive Officer, stated, “With 2022 well on its way and our subsidiaries successfully advancing on their developmental activities, we believe that we are progressing to significant value enhancing milestones. Moreover, we are very proud that our subsidiaries, Lavie Bio and Canonic, recently began commercializing their products in target markets. The rapid advancement from concept to marketable product indicates the invaluable contribution Evogene’s technological engines MicroBoost AI, ChemPass AI and GeneRator AI have on life-science product development.

“As the activities of our subsidiaries mature, we continue to develop our engines with the goal of further improving their offering and potential, as engines underpinning and empowering the development of life-science products. In the years to come we intend to expand the eco-system of each of our technological engines, with the goal of expanding into new areas and new product types. Over the year, we hope to discuss this in more detail.

“It is important for us to state that we believe that our strong cash position of approximately \$54 million is a demonstration of financial strength, which is particularly important in current times of instability in the financial markets. Still, to support our subsidiaries’ growth and to strengthen their position as independent companies, we are currently evaluating different funding options for the group and are in different levels of discussions with potential strategic and financial investors,” - **Mr. Haviv concluded.**

2021 Achievements & 2022 Milestones:

Biomica Ltd.

Immuno-oncology program – Biomica recently received clearance from the Israeli Ministry of Health to proceed to a first-in-human phase I study, which is set to be held at the Rambam Healthcare Campus in Israel, following the completion of a series of pre-clinical trials with BMC128 given in combination with Immune Checkpoint Inhibitors immunotherapy, indicating significant improvement in anti-tumor activity. Biomica is currently advancing towards the initiation of the study.

Milestone for 2022 – readout from proof of concept, first in human study.

Inflammatory Bowel Disease (IBD) program – During 2021, Biomica achieved positive results from a series of pre-clinical studies, indicating reduction of intestinal tissue damage resulting from inflammation. These results provided the evidential groundwork to proceed to the scale up development process of BMC333.

Milestone for 2022 – initiate scale-up for GMP production of BMC333 as preparation for clinical trials.

Canonic Ltd.

MetaYield program – During October 2021, Canonic began initial commercial sales in Israel of G200 and G150, cannabis inflorescence products marketed under the T20/C4 and T15/C3 categories, respectively¹.

Milestone for 2022 – commercial launch of second-generation products in Israel and preparations towards commercialization in Europe in 2023.

Precise program – During 2021, Canonic conducted pre-clinical trials, identifying cannabis varieties with pain relief and anti-inflammatory properties, for which Canonic recently filed a patent application.

Milestone for 2022 – collect user data for clinical indications to support commercial launch in 2023 in Israel.

AgPlenus Ltd.

New Mode-of-Action (MoA) herbicides – In 2021, the company gathered additional information regarding its leading new MoA target protein, APTH1, for herbicide development and reached proof-of-concept regarding a seed trait presenting crop resistance to APH1 (a chemical compound that is the basis for the development of a herbicide).

The collaboration with Corteva, which is focused on other modes-of-action, is progressing according to plan.

Milestones for 2022 –

- enter an additional collaboration agreement.

¹ According to the product categories established by the Israeli Ministry of Health, T20/C4 category means 17%-24% THC & 1%-7% CBD and T15/C3 category means 11%-19% THC & 0.5%-5.5% CBD.

- expand data package for APTH1, AgPlenus' leading new MoA protein for the development of novel herbicides.

Lavie Bio Ltd.

Inoculant (bio-stimulant) for spring wheat – During late 2021, Lavie Bio began the commercialization of its inoculant result™ aiming at the improvement of yield based on microbes. The product's initial market penetration for spring wheat is planned for the upcoming 2022 sowing season and will be limited to target regions in North Dakota.

Milestone for 2022 – build infrastructure for scale-up in result™ sales in 2023.

Bio-fungicide fruit rot program – Following the completion of three consecutive years of vineyard trials, conducted in Europe and in the U.S., Lavie Bio has prioritized LAV311 as its lead candidate for final development and submission of a regulatory dossier, expected to be filed with the federal U.S. Environmental Protection Agency (EPA) and California EPA during 2022.

Milestone for 2022 – file for regulatory approval for leading product candidate LAV311 targeting fruit rot, as preparation for commercialization in 2024.

Consolidated Financial Results Summary

Cash position: Evogene maintains a strong financial position for its activities with \$53.9 million in consolidated cash, cash related accounts, bank deposits and marketable securities as of December 31, 2021, of which \$7.8 million is appropriated to its subsidiary, Lavie Bio.

During 2021, the consolidated cash usage was approximately \$25.8 million, or \$20.6 million, excluding Lavie Bio. These sums in 2021 are before giving effect to \$29.6 million net raised through Evogene's at-the-market, or ATM, programs and exclude \$1.8 million of proceeds from non-refundable grants and exercises of options. This is in comparison to 2020, during which the consolidated cash usage was \$19.3 million, or \$14.7 million, excluding Lavie Bio. The cash usage in 2020 was unusually low due to certain measures, regarding salary expenses, that the Company initiated to mitigate the impact of the COVID-19 pandemic during that year.

During the fourth quarter of 2021, the consolidated cash usage was approximately \$8.4 million, or \$7.0 million, excluding Lavie Bio. This is in comparison to the fourth quarter of 2020, during which the consolidated cash usage was approximately \$6.1 million, or \$5.1 million, excluding Lavie Bio.

The cash burn rate during 2021 and in the fourth quarter was higher than during the same periods in 2020, due to the following reasons:

- During the second and third quarters of 2020 the burn rate was significantly lower due to certain measures the Company initiated to mitigate the impact of the COVID-19 pandemic, as mentioned above.
- During 2021, Evogene's subsidiaries significantly expanded product development activities, including:
 - Biomica's ongoing preparations, including the GMP production of microbes, for the initiation of its first-in-human proof-of-concept study in the immuno-oncology program,
 - Lavie Bio's activities supporting the commercial launch of its inoculant product branded as *result*™ in 2022,
 - Canonic's product commercialization in Israel during the fourth quarter of 2021.
- Expenses related to accelerating and expanding Evogene's technological engines.

The Company's management estimates that the cash usage for the full year of 2022 will be within the range of \$26-\$28 million. These guidelines include the cash usage of Evogene's subsidiary Lavie Bio, which is estimated at approximately \$8 million.

Research and Development ("R&D") expenses:

R&D expenses for the fourth quarter of 2021, which are reported net of non-refundable grants received, were \$6.0 million, in comparison to \$4.8 million in the fourth quarter of 2020. For the full year 2021, these expenses were \$21.1 million, in comparison to \$17.3 million in 2020.

The increase in R&D expenses was mainly attributed to an increase in expenses due to an expansion in product development activities of the Company and its subsidiaries, as mentioned above.

Business Development ("BD") expenses:

BD expenses were approximately \$720 thousand for the fourth quarter of 2021, in comparison to \$670 thousand in the fourth quarter of 2020. Such expenses remained stable for the full year 2021 in comparison to 2020 and were approximately \$2.7 million.

General and Administrative ("G&A") expenses:

G&A expenses for the fourth quarter of 2021 were \$2.0 million, in comparison to \$1.7 million in the fourth quarter of 2020. G&A expenses for the full year 2021 were \$7.3 million, in comparison to \$5.3 million in 2020. The increase was mainly attributed to the increase of the costs of directors' and officers' insurance policies, an increase in salary-based expenses and an increase in other professional services.

Operating loss:

Operating loss for the fourth quarter of 2021 was \$8.7 million in comparison to \$7.2 million in the fourth quarter of 2020. Operating loss for the full year 2021 was \$31.0 million in comparison to \$24.8 million in 2020. The operating loss increased due to an increase in overall operating expenses, as described above, as well as due to an increase in salary-based expenses in comparison to 2020, mainly for the following reasons:

- relatively low salary-based expenses in 2020 due to measures taken by the company to mitigate the impact of the COVID-19 pandemic; and
- an increase in salaries in 2021 due to an increase in the market demand for highly skilled workers.

Loss:

The loss for the fourth quarter of 2021 was \$8.1 million in comparison to a loss of \$8.8 million during the fourth quarter of 2020. The loss for the full year 2021 was \$30.4 million in comparison to a loss of \$26.2 million for 2020. The increase in loss is attributed mainly to the increase in operating expenses, as described above, which was partially offset by net financing income for 2021 in comparison to net financing expenses for 2020.

Conference Call & Webcast Details:

Date: March 10, 2022

Time: 9:00 am EST; 16:00 Israel time

Dial-in number: 1-888-281-1167 toll free from the United States, or +972-3-918-0609 internationally

Webcast: Link available at <https://www.evogene.com/investor-relations/presentations-and-webcasts/>

Replay Information: A replay of the conference call will be available approximately two hours following the completion of the call.

To access the replay, please dial 1-888-326-9310 toll free from the United States, or +972-3-925-5901 internationally. The replay will be accessible through March 11, 2022, and an archive of the webcast will be available on the Company's website.

The Company filed an updated presentation which can be viewed here: http://www.evogene.com/wp-content/uploads/2022/03/Evogene-Presentation_March_-2022_FINAL.pdf

About Evogene Ltd.:

Evogene (NASDAQ: EVGN, TASE: EVGN) is a computational biology company aiming to revolutionize the development of life-science based products by utilizing cutting edge technologies to increase probability of success while reducing development time and cost. Evogene established three unique technological engines - MicroBoost AI, ChemPass AI and GeneRator AI – leveraging Big Data and Artificial Intelligence and incorporating deep multidisciplinary understanding in life sciences. Each technological engine is focused on the discovery and development of products based on one of the following core components: microbes (MicroBoost AI), small molecules (ChemPass AI), and genetic elements (GeneRator AI). Evogene uses its technological engines to develop products through subsidiaries and with strategic partners. Currently, Evogene’s main subsidiaries utilize the technological engines to develop human microbiome-based therapeutics by Biomica Ltd., medical cannabis products by Canonic Ltd., ag-chemicals by AgPlenus and ag-biologicals by Lavie Bio 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", "hopes" "intends", "anticipates", "plans", "believes", "scheduled", "estimates" or words of similar meaning. For example, Evogene is using forward-looking statement in this press release when it discusses its expectations with respect to value creation, potential funding options, the expansion of the eco-system of its technological engines into new areas and product types, its and its' subsidiaries expected trials, studies, product advancements, pipelines, commercializations, sales, launches, milestones, target markets, cash usage and other plans for 2022 and on, and the potential advantages of its 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, those risk factors contained in Evogene's reports filed with the applicable securities authority. 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, 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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CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

U.S. dollars in thousands (except share and per share data)

	December 31, 2021	December 31, 2020
	(Unaudited)	(Audited)
CURRENT ASSETS:		
Cash and cash equivalents	\$ 32,325	\$ 46,229
Short-term bank deposits	3,000	2,000
Marketable securities	18,541	-
Trade receivables	281	222
Other receivables and prepaid expenses	2,651	3,372
Inventories	92	-
	<u>56,890</u>	<u>51,823</u>
LONG-TERM ASSETS:		
Long-term deposits	25	9
Right-of-use-assets	2,109	1,872
Property, plant and equipment, net	2,073	2,072
Intangible assets, net	15,207	16,139
	<u>19,414</u>	<u>20,092</u>
	<u>\$ 76,304</u>	<u>\$ 71,915</u>
CURRENT LIABILITIES:		
Trade payables	\$ 1,463	\$ 863
Employees and payroll accruals	2,662	2,535
Lease liability	974	777
Liabilities in respect of government grants	89	72
Pre-funded warrants	-	4,144
Deferred revenues and other advances	175	47
Other payables	1,519	1,238
	<u>6,882</u>	<u>9,676</u>
LONG-TERM LIABILITIES:		
Lease liability	1,695	1,663
Liabilities in respect of government grants	4,307	3,694
	<u>6,002</u>	<u>5,357</u>
SHAREHOLDERS' EQUITY:		
Ordinary shares of NIS 0.02 par value:		
Authorized - 150,000,000 ordinary shares; Issued and outstanding - 41,170,168 shares on December 31, 2021 and 35,600,088 shares on December 31, 2020	234	200
Share premium and other capital reserve	260,866	225,121
Accumulated deficit	(207,069)	(179,276)
	<u>54,031</u>	<u>46,045</u>
Equity attributable to equity holders of the Company	<u>54,031</u>	<u>46,045</u>
Non-controlling interests	9,389	10,837
	<u>63,420</u>	<u>56,882</u>
Total equity	<u>63,420</u>	<u>56,882</u>
	<u>\$ 76,304</u>	<u>\$ 71,915</u>

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS

U.S. dollars in thousands (except share and per share data)

	Year ended December 31,		Three months ended December 31,	
	2021	2020	2021	2020
	(Unaudited)	(Audited)	(Unaudited)	
Revenues	\$ 930	\$ 1,040	\$ 311	\$ 351
Cost of revenues	767	574	267	346
Gross profit	163	466	44	5
Operating expenses:				
Research and development, net	21,125	17,287	6,016	4,811
Business development	2,738	2,672	720	670
General and administrative	7,253	5,321	2,000	1,701
Total operating expenses	31,116	25,280	8,736	7,182
Operating loss	(30,953)	(24,814)	(8,692)	(7,177)
Financing income	1,935	1,591	938	733
Financing expenses	(1,414)	(2,951)	(336)	(2,294)
Financing income (expenses), net	521	(1,360)	602	(1,561)
Loss before taxes on income	(30,432)	(26,174)	(8,090)	(8,738)
Taxes on income (tax benefit)	13	32	(6)	25
Loss	\$ (30,445)	\$ (26,206)	\$ (8,084)	\$ (8,763)
Attributable to:				
Equity holders of the Company	(27,793)	(23,374)	(7,371)	(8,122)
Non-controlling interests	(2,652)	(2,832)	(713)	(641)
	\$ (30,445)	\$ (26,206)	\$ (8,084)	\$ (8,763)
Basic and diluted loss per share, attributable to equity holders of the Company	\$ (0.69)	\$ (0.83)	\$ (0.18)	\$ (0.25)
Weighted average number of shares used in computing basic and diluted loss per share	40,433,303	28,158,779	41,169,222	34,111,012

CONSOLIDATED STATEMENTS OF CASH FLOWS
U.S. dollars in thousands

	Year ended December 31,		Three months ended December 31,	
	2021	2020	2021	2020
	(Unaudited)	(Audited)	(Unaudited)	
Cash flows from operating activities				
Loss	\$ (30,445)	\$ (26,206)	\$ (8,084)	\$ (8,763)
Adjustments to reconcile loss to net cash used in operating activities:				
Adjustments to the profit or loss items:				
Depreciation	1,302	1,792	317	392
Amortization of Intangible assets	932	935	235	236
Share-based compensation	2,609	4,097	737	617
Pre-funded warrants issuance expenses	-	211	-	211
Net financing expenses (income)	(886)	967	(735)	1,224
Decrease (increase) in accrued bank interest	11	64	(4)	27
Taxes on income (tax benefit)	13	32	(6)	25
	<u>3,981</u>	<u>8,098</u>	<u>544</u>	<u>2,732</u>
Changes in asset and liability items:				
Increase in trade receivables	(59)	(150)	(130)	(188)
Decrease (increase) in other receivables	653	(1,300)	(791)	(1,441)
Increase in inventories	(92)	-	(92)	-
Increase in long-term deposits	(16)	-	-	-
Increase (decrease) in trade payables	625	(29)	(362)	122
Increase in employees and payroll accruals	127	456	301	805
Increase (decrease) in other payables	290	(87)	266	6
Increase (decrease) in deferred revenues and other advances	128	(339)	175	(85)
	<u>1,656</u>	<u>(1,449)</u>	<u>(633)</u>	<u>(781)</u>
Cash received (paid) during the period for:				
Interest received	297	294	52	3
Interest paid	(315)	(238)	(90)	(56)
Taxes (paid) received, net	<u>(13)</u>	<u>(13)</u>	<u>6</u>	<u>(6)</u>
Net cash used in operating activities	<u>\$ (24,839)</u>	<u>\$ (19,514)</u>	<u>\$ (8,205)</u>	<u>\$ (6,871)</u>

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

	Year ended December 31,		Three months ended December 31,	
	2021	2020	2021	2020
	(Unaudited)	(Audited)	(Unaudited)	
Cash flows from investing activities				
Purchase of property, plant and equipment	\$ (724)	\$ (682)	\$ (137)	\$ (103)
Proceeds from sale of marketable securities	4,395	2,097	3,378	-
Purchase of marketable securities	(23,114)	-	(1,710)	-
Withdrawal from (investment in) bank deposits, net	(1,000)	8,000	600	-
Net cash provided by (used in) investing activities	(20,443)	9,415	2,131	(103)
Cash flows from financing activities				
Proceeds from issuance of ordinary shares, net of issuance expenses	29,582	18,658	-	8,857
Proceeds from issuance of pre-funded warrants	-	1,989	-	1,989
Proceeds from advances for pre-funded warrants	-	9	-	9
Proceeds from exercise of options	484	59	8	46
Repayment of lease liability	(580)	(639)	(143)	(155)
Proceeds from government grants	824	320	32	-
Repayment of government grants	(34)	(22)	-	-
Net cash provided by (used in) financing activities	30,276	20,374	(103)	10,746
Exchange rate differences - cash and cash equivalent balances	1,102	1,206	869	963
Increase (decrease) in cash and cash equivalents	(13,904)	11,481	(5,308)	4,735
Cash and cash equivalents beginning of the period	46,229	34,748	37,633	41,494
Cash and cash equivalents end of the period	\$ 32,325	\$ 46,229	\$ 32,325	\$ 46,229
Significant non-cash activities				
Acquisition of property, plant and equipment	\$ 32	\$ 57	\$ 32	\$ 57
Increase (decrease) of right-of-use-asset recognized with corresponding lease liability	\$ 794	\$ (41)	\$ 53	\$ (18)
Exercise of options	\$ -	\$ 57	\$ -	\$ 57
Exercise of pre-funded warrants	\$ 4,356	\$ -	\$ -	\$ -



INVESTOR PRESENTATION

Ofer Haviv, President & CEO
March 2022

DECODING BIOLOGY

Forward Looking Statement

This presentation contains "forward-looking statements" relating to future events, and Evogene Ltd (the "Company"), 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, 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.

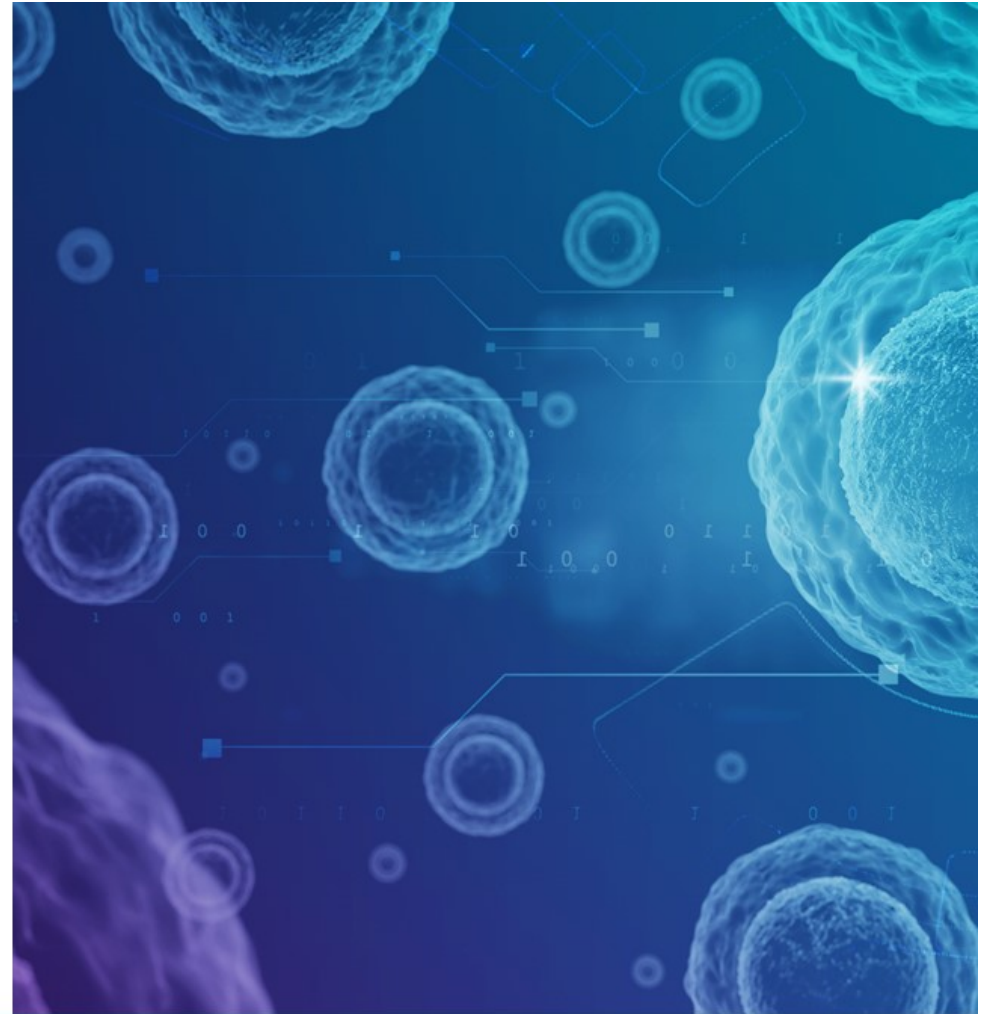
The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of our products or services.

Agenda

- ✦ **Introduction**
- ✦ Fields of activity
- ✦ Main subsidiaries
- ✦ Summary

Annex I - Technology

Annex II - Financial Fundamentals





OUR VISION

Revolutionizing life-science based product discovery & development, utilizing cutting edge computational biology technologies.

DECODING BIOLOGY

Life-science product development

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

Pharmaceutical
Industry



Cost of developing a single pharmaceutical drug

In the 1970's
\$180 million

2000's – 2017
\$2.7 billion

Ag-chemicals
Industry



Time to develop a new crop protection product

	1995	2000	2005-8	2010-15
Number of years between the first synthesis and first sale of product	8.3	9.1	9.8	11.3

Sources: CDER (Center for Drug Evaluation and Research), Food and Drug Administration, Tufts Center for the Study of Drug Development: <https://www.sciencedirect.com/science/article/abs/pii/S0167629616000291?via%3Dihub>
<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>

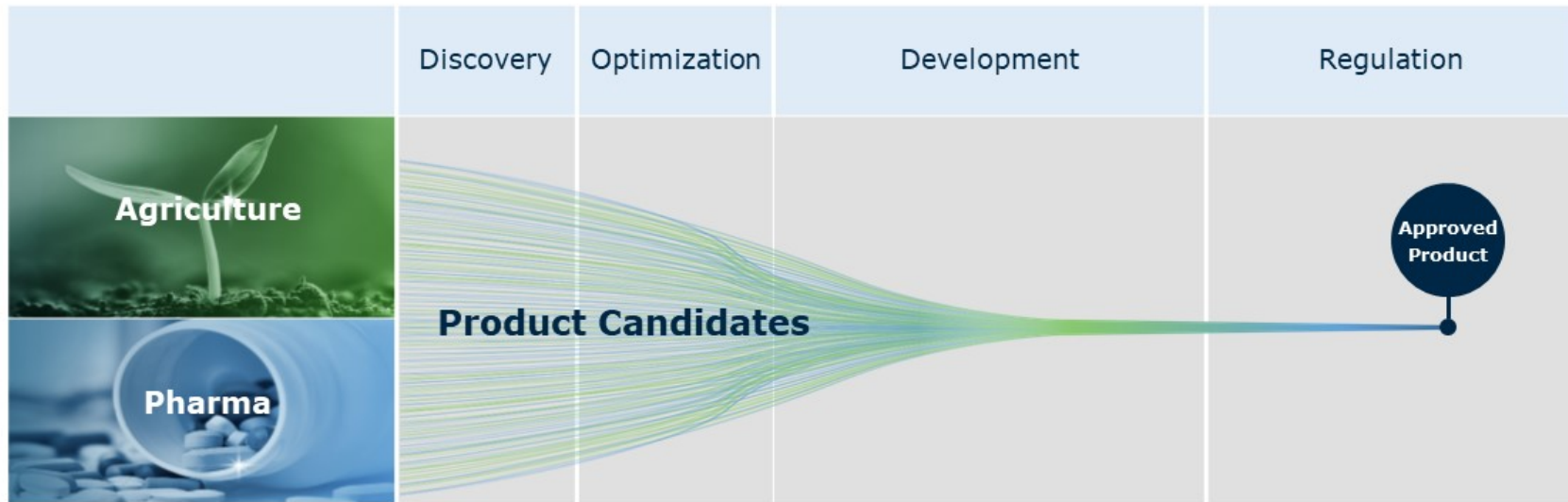
Source: Phillips McDougall, 2016

evogene

DECODING BIOLOGY ✨

Life-science product development

The ultimate case of a 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



HUMAN HEALTH

AGRICULTURE

OTHER
INDUSTRIES

evogene

The opportunity

Utilizing an **advanced computational biology platform**, to identify the most promising candidates addressing multiple development challenges, towards successful **life-science products**:

- Increase probability of success
- Reducing time and cost

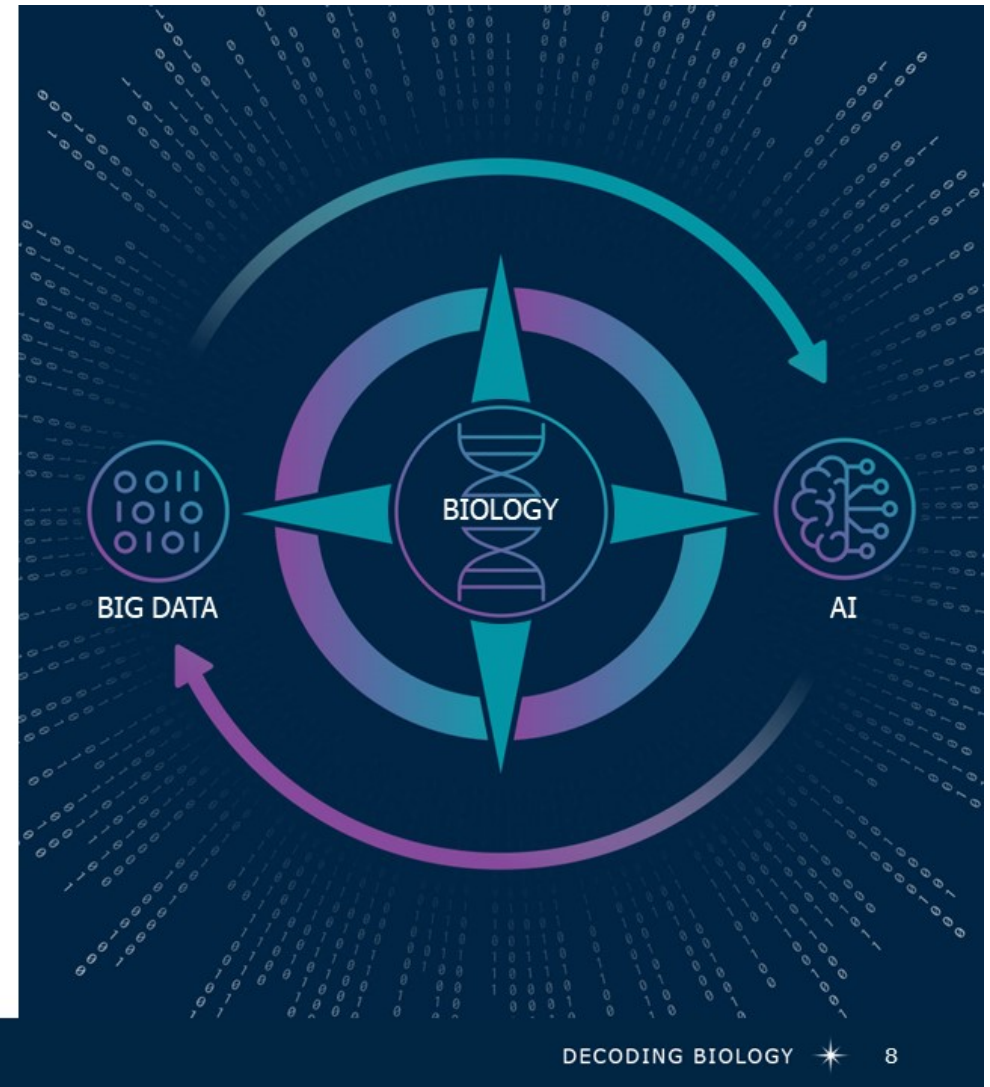
When biology meets disruptive technologies

CPB[★] platform

Incorporating deep scientific understandings together with big data and advanced artificial intelligence technologies (AI), to successfully discover & guide the development of novel life-science based products.

CPB[★] – Computational Predictive Biology

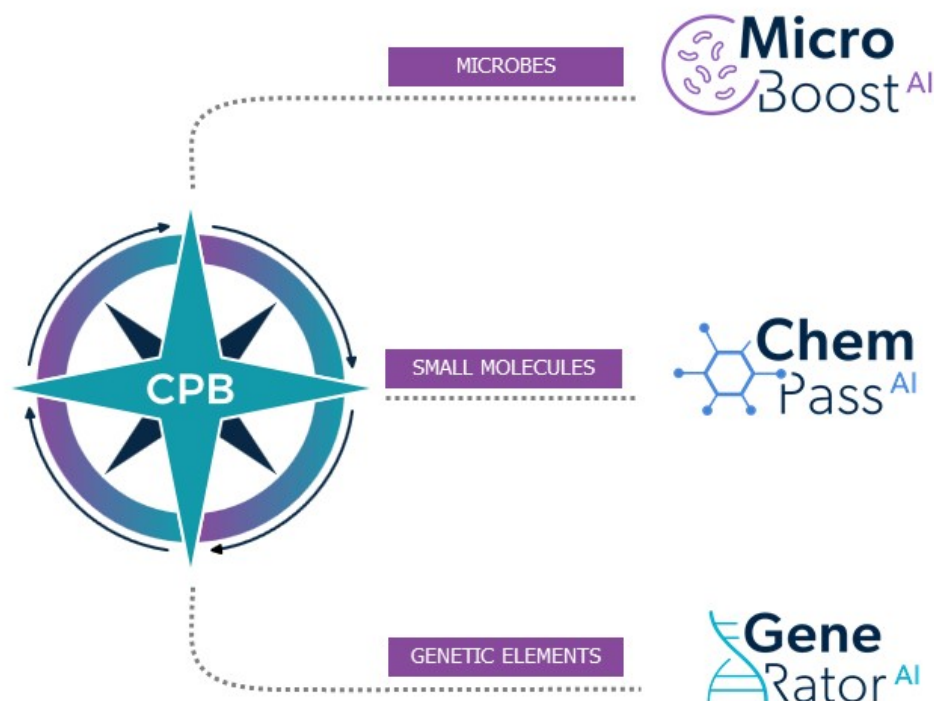
evogene



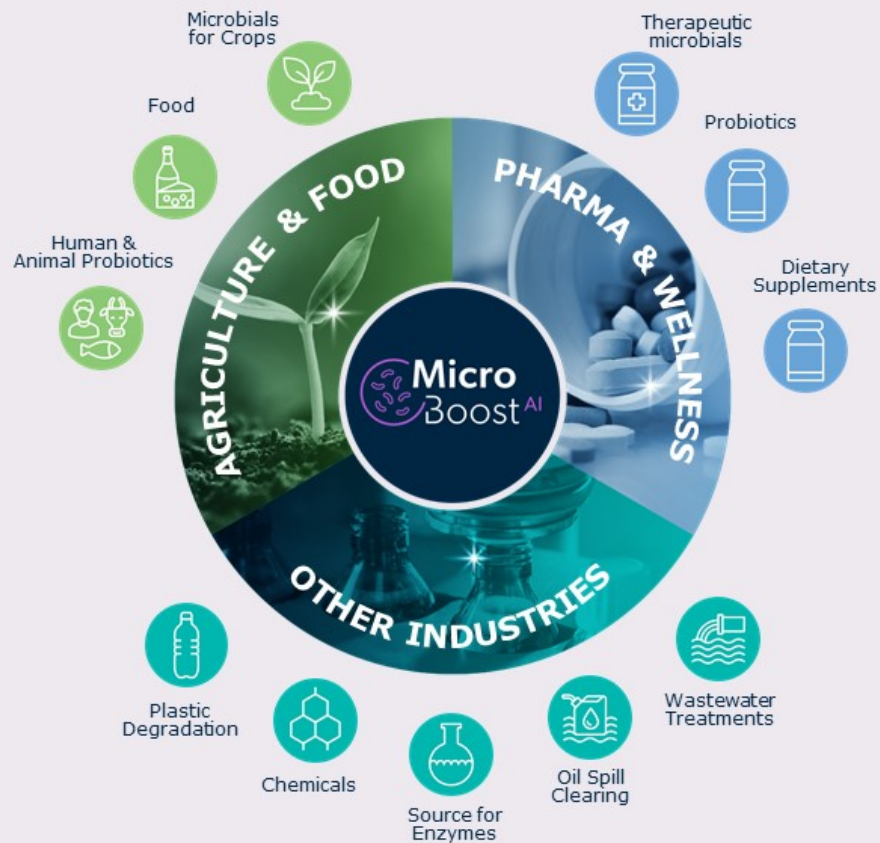
Tailor-made Engines for product discovery & development

The CPB platform enhances product discovery and development through dedicated **Engines** for products based on three core components:

- Microbes
- Small molecules
- Genetic elements



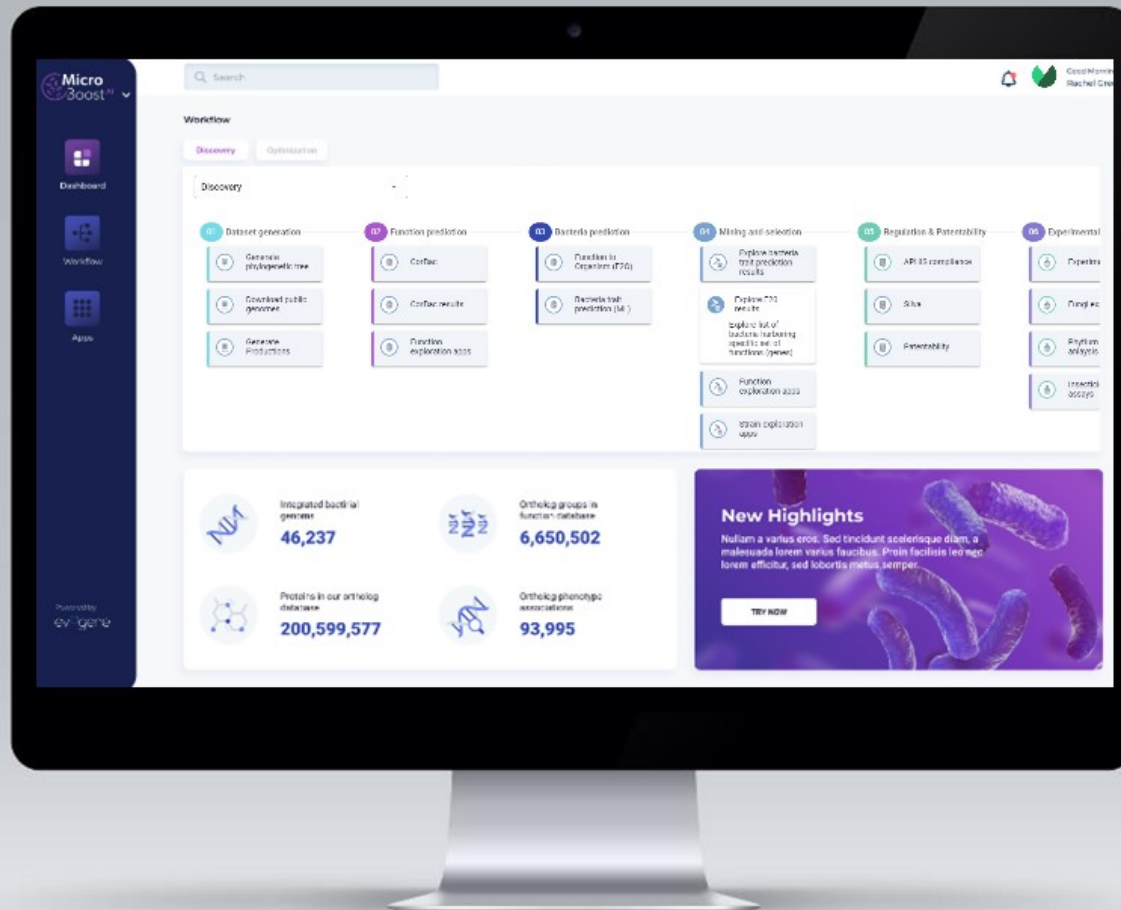
Case Study – Potential uses for MicroBoost AI



Developing an
eco-system around
our tech engines



User Interface



Business Model



evogene

1

Product-oriented subsidiaries powered by Evogene's technology

Establish independent entities focusing on a defined commercial field with an exclusive license to use Evogene's unique solutions for product development.

Subsidiaries:



Licensed to use Evogene's technological engines:



Business Model

2

Collaborations powered by Evogene's technology for the development of innovative products

Joint development with leading companies for defined products utilizing Evogene's unique solution. Typically, partner leads later-stage development and product commercialization.

Collaborations for product development:



Powered by Evogene's technological engines:

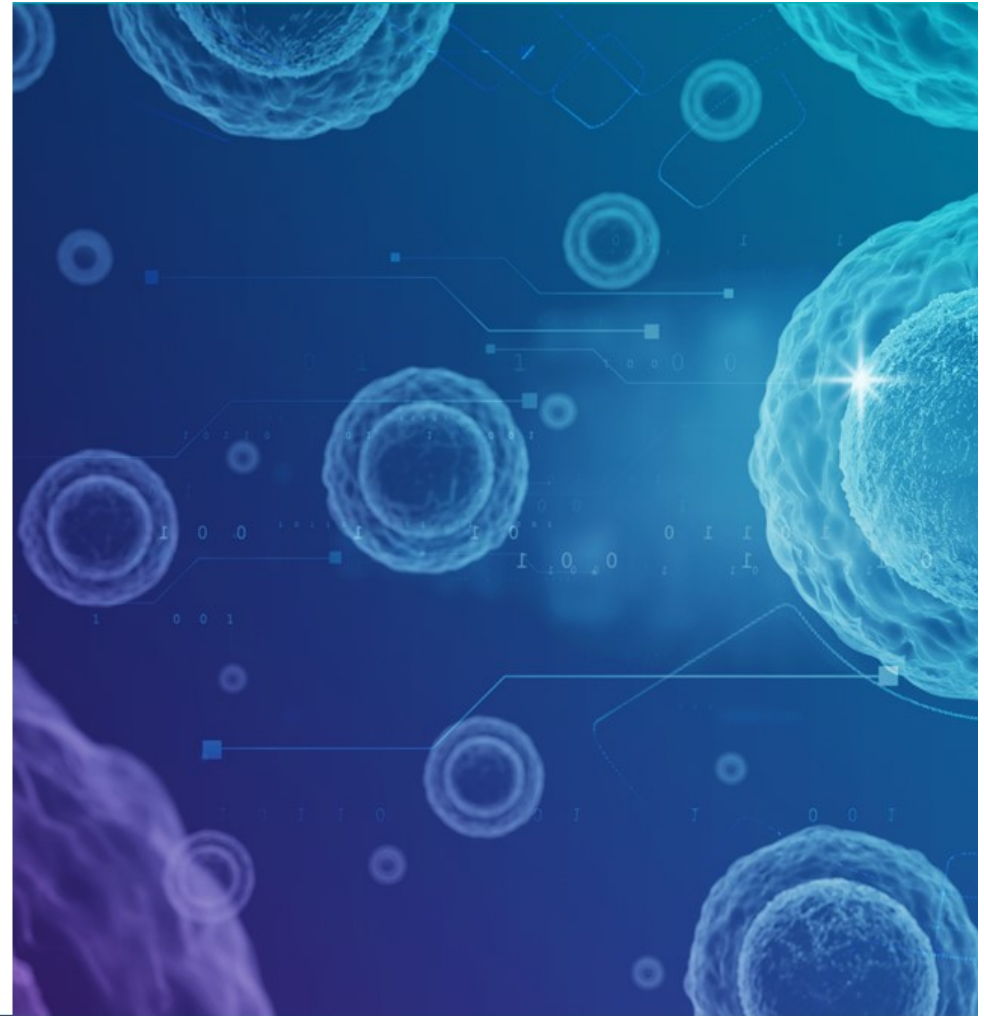


Agenda

- ✦ Introduction
- ✦ **Fields of activity**
- ✦ Main subsidiaries
- ✦ Summary







Annex I - Technology

Annex II - Financial Fundamentals

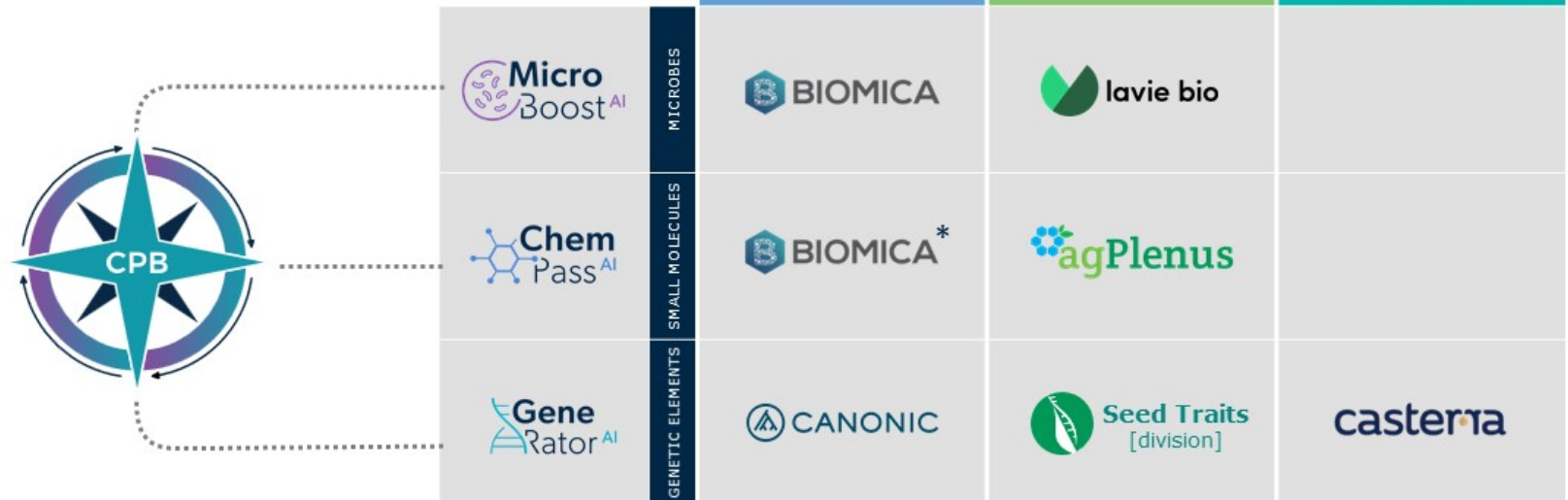


Current life-science based products powered by Evogene's tech-engines



		 HUMAN HEALTH	 AGRICULTURE	 OTHER INDUSTRIES
	MICROBES	Microbiome based Therapeutics	Ag-Biologicals	
	SMALL MOLECULES	Drugs based on small molecules	Ag-Chemicals	
	GENETIC ELEMENTS	Medical Cannabis	Seed Traits	Ag-solutions for castor oil production

Development & commercialization through subsidiaries and collaborations



* Non-exclusive license

Evogene Group



evogene
DECODING BIOLOGY

Human Health



93%*

Microbiome based Therapeutics

- Immuno-oncology
- GI- gastrointestinal-related disorders
- MDRO – multi-drug resistant organisms



100%*

Medical Cannabis

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

Agriculture



98%*

Ag Chemicals

- Herbicides
- Insecticides
- Fungicides



70%* (28% Corteva)

Ag Biologicals

- Bio-Stimulants
- Bio-Pesticides



Internal division of Evogene

Seed Traits

- Yield improvement and drought tolerance
- Plant disease
- Insect control

Other Industries



100%*

Castor Oil Production

- Castor seeds & growth protocols
















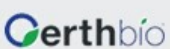


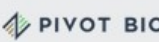

*Evogene holdings

evogene

DECODING BIOLOGY

17

Main Subsidiaries: Industry Landscape

 BIOMICA		 CANONIC		 lavie bio		 agPlenus	
Microbiome Based Therapeutics		Medical Cannabis		Ag-Biologicals		Ag-Chemicals	
Company Name	Market Cap/Funds Raised	Company Name	Market Cap/Funds Raised	Company Name	Market Cap/Funds Raised	Company Name	Market Cap/Funds Raised
 EVELO	\$166m*	 CRESCOLABS	\$1.6B*	 AGBIOME	Raised \$116m# (Sep 2021)	 agrimetis	Raised \$24m# (Jan 2017)
 FINCH	\$320m*	 curaleaf	\$4.3B*	 biotalys	€192m*	 enko	Raised \$45m# (June 2020)
 SERES THERAPEUTICS	\$651m*	 IMCO	\$141m*	 Marrone Bio Innovations	\$126m*	 Certhbio	Raised \$55m# (Feb 2020)
 4D pharma plc	\$68m*	 INTERCURE	\$290m*	 PIVOT BIO	Raised \$430m \$2.0B## rep. (July 2021)	 5Metis	Raised \$10m# (Oct 2021)

* Public company – market cap as of March 9, 2022 (yahoo.finance.com)

Private company – amount raised in most recent financing round (crunchbase.com)

Private company - <https://www.forbes.com/sites/amyfeldman/2021/07/19/pivot-bio-nears-2-billion-valuation-as-it-raises-whopping-430-million-to-replace-synthetic-fertilizers-on-corn-and-wheat-sustainability/?sh=96ed3572273a>

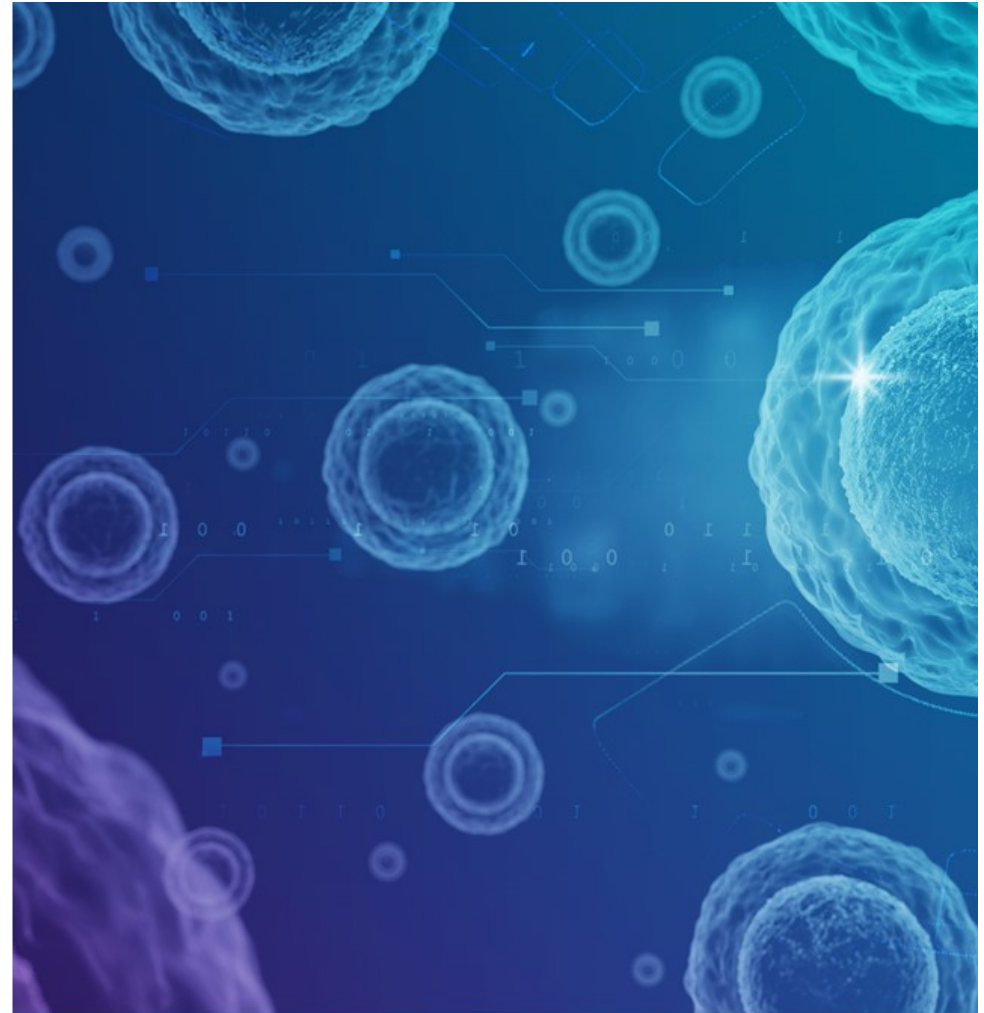
The table presents valuation or amount raised in last financing round for a selected number of companies active in the same industries as our subsidiaries, is not a comprehensive list, and is presented for informational purposes only. There may be significant differences between companies active in each industry, and therefore the table does not indicate potential value for our subsidiaries, which may have no correlation to the information presented in the table and may differ significantly. Such differences may include, among others, company maturity stage, volume of sales, if any, product types, target market segments, pipeline maturity, technology, and financial position.

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Annex I - Technology

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Mission:

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

Product Pipeline:



Immuno-oncology program:

- Combination therapy for cancer with checkpoint inhibitors
- Pre-clinical stage
- Addressable market size expected by 2026* – \$243B



GI related disorders:

- Inflammatory Bowel Disorder (IBD) – pre-clinical stage
- Irritable Bowel Syndrome (IBS) – discovery stage
- Addressable market size expected by 2026: Inflammatory Bowel Disorder \$22.4B, Irritable Bowel Syndrome** \$3.3B



MDRO:

- Multi Drug Resistant Organisms (antimicrobial resistance)
- Clostridium Difficile Infection (CDI) – discovery stage
- Methicillin-resistant Staphylococcus aureus (MRSA) – discovery stage
- Addressable market size expected by 2026: CDI*** \$1.7B, MRSA**** \$3.9B

Expected main near-term value drivers:

2022

- **IBD** - initiate scale-up for GMP production of drug candidate for IBD
- **Immuno-oncology** - readout from proof of concept, first in human study

2023

- **IBD** - Clinical batch production of drug candidate for IBD as preparation for Phase 1 in USA
- **Immuno-oncology** - Pre-IND Meeting with FDA

*<https://www.globenewswire.com/news-release/2019/07/17/1884118/0/en/Cancer-Immunotherapy-Market-To-Reach-USD-242-86-Billion-By-2026-Reports-And-Data.html>

**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-cagr-10-1-grand-view-research-inc>

***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-cagr-10-1-grand-view-research-inc>

****<https://www.pnwswire.com/news-releases/global-methicillin-resistant-staphylococcus-aureus-mrsa-drugs-market-to-reach-over-us-39-billion-by-2025-uptake-in-the-consumption-of-antibiotics-across-the-globe-to-fuel-market-growth-observes-transparency-market-research-676949593.html>

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 Announces Positive Pre-Clinical Results, Demonstrating Efficacy of BMC128 in Melanoma

Biomica's live biotherapeutic drug candidate, BMC128, significantly increased anti-tumor activity in combination with Immune Checkpoint Inhibitors in Melanoma. First-in-human, proof of concept study expected later this year

Biomica Announces Clearance for First-in-Human Phase I Study of BMC-128 in Combination with Bristol Myers Squibb's Anti-PD-1 Opdivo®

Clearance for Proof-of-Concept Phase I human trial in oncology received from Israeli Ministry of Health

Mission:

Commercialize effective, precise and stable medical cannabis products, based on decoding plant genetics, for optimized therapeutic effect

Product Pipeline:

MetaYield⁺ Products:



- Stable enhancement of total plant compounds:
 - Increased compounds per plant
 - Increased compounds per area
- Total Cannabis market size expected by 2024 – \$42.7B*

Precise⁺ Products:



- Stable enhancement of specific active compounds for pain and inflammation:
 - Medical indication focus
 - Compound profile focus
- Total Medical Cannabis market size expected by 2024 – \$25.6B*

*Source: Arcview Market research/BDS Analytics 2020

Expected main near-term value drivers:

2022

- **MetaYield⁺** - commercial launch and sales of second-generation products in Israel
- **Precise⁺** - Collect clinical data to support commercial launch in 2023 of variety reducing pain or inflammation

2023

- **MetaYield⁺** - commercial launch and initial sales of first product in Europe
- **Precise⁺** - Commercial launch of variety reducing pain or inflammation

First Products:

MetaYield products– increased compounds per area, addressing the T20/C4 (17%-24% THC & 1%-7% CBD) and T15/C3 (11%-19% THC & 0.5%-5.5% CBD) market segments.



Medical Cannabis aiming at high THC, high yield, big inflorescence and dense trichomes

Canonic Announces Full Commercial Launch of its First Medical Cannabis Products in Israel

Canonic moves ahead of schedule with the full commercial launch of its G-nnovation products, following positive feedback from patients during the company's pre-launch campaign

Canonic Announces Positive Results in Pre-Clinical Studies in its Precise Product Program for Medical Cannabis

The results support the successful identification of specific cannabis varieties with anti-inflammatory and pain relief properties, for which Canonic recently filed a patent application

Mission:

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

Product Pipeline:



Herbicides:

- Novel MoA (Mode-of-Action) selective/non-selective herbicides
- Relevant target crops – Cereals, Rice, Corn, Soybean, Cotton, Canola, Sugar Beet, Other TBD
- Addressable market size expected by 2022*: \$34B
- Lead stage



Insecticides:

- Novel SoA (Site-of-Action)
- Addressable market size expected by 2022*: \$19B
- Hit-to-Lead stage

Expected main near-term value drivers:

2022

- **New MoA Herbicide** – enter an additional collaboration agreement
- **New MoA Herbicide** – expand data package for APTH1, AgPlenus' leading new MoA protein for the development of novel herbicides

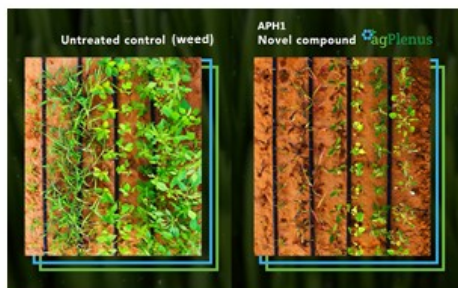
2023

- **New MoA Herbicide** – phase advancement in one of the ongoing collaborations
- **New MoA Fungicide program** – initial greenhouse readouts

*<https://www.prnewswire.com/news-releases/global-3410-billion-herbicide-market-2022---research-and-markets-300458389.html>;
<https://www.marketsandmarkets.com/Market-Reports/insecticide-market-142427569.html>

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 – modified tobacco plants with resistance trait vs unmodified control

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

This significant development milestone was achieved following positive results for product candidate APH1 in field tests with commercial level application rates on a broad panel of weeds

AgPlenus Announces Positive Results for a Herbicide Resistance Trait to its Leading Herbicide Product Candidate

Greenhouse proof-of-concept testing demonstrates resistance of modified model plants to AgPlenus' APH1 herbicide candidate

Mission:

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

Product Pipeline:

Bio-stimulants (yield enhancement):



- Bio-stimulants 1 – focus on wheat and additional cereals. Seed treatment/soil application. Commercial stage, first sales planned in 2022. Addressable market size*: for spring wheat ±25M acres.
- Bio-stimulants 2 – focus on corn and additional crops. Seed treatment. Pre-development stage. Addressable market size*: for corn – 120M acres.

Bio-pesticides (crop protection):



- Fruit rots – focus on fruit and vegetables. Foliar application. Target market*: >\$1B of chemicals usage. Development stage 2.
- Downey Mildew – Focus on fruit and vegetables. Foliar application. Development stage 1. Target market*: >\$350M of chemicals usage.
- Seedling disease – for corn and soy. Seed treatment, pre-development stage. Target market*: >\$500M.
- Bio-insecticides – for corn and soy. Seed treatment/foliar. Pre-development stage. Target market*: >\$1.5B existing traits & chemicals market.

Expected main near-term value drivers:

2022

- **Bio-stimulants** – build infrastructure for scale-up in 'result™' sales for spring wheat in 2023
- **Fruit rot bio-fungicides** – file for regulatory approval for leading product candidate LAV311 for fruit rot

2023

- **Bio-stimulants** – 'result™' product sales expansion in US and Canada for spring wheat
- **Bio-fungicides** – file for regulatory approval for leading product candidate LAV321 or LAV322 for downy mildew

*Dean ,R ,et al. (2012). The top 10 fungal pathogens in molecular plant pathology. Molecular Plant Pathology 13:414-430 (<https://academic.oup.com/fqs/article/2/3/111/5057759>)

Example Results:

- result™ inoculant (bio-stimulant)
- LAV 311 & LAV 312 leading bio-fungicide candidates for fruit rot



Lavie Bio's wheat field in the USA during harvest – initial sales in 2022



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

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





result™ inoculant initially introduced for spring wheat in North Dakota, following positive four-year field trials

Lavie Bio Reports Advancement in its Bio-Fungicide Program for Fruit Rots

Advancement to the pre-commercial stage follows positive results from three consecutive years of vineyard trials for fruit rot diseases

Subsidiaries

Expected main near-term value drivers

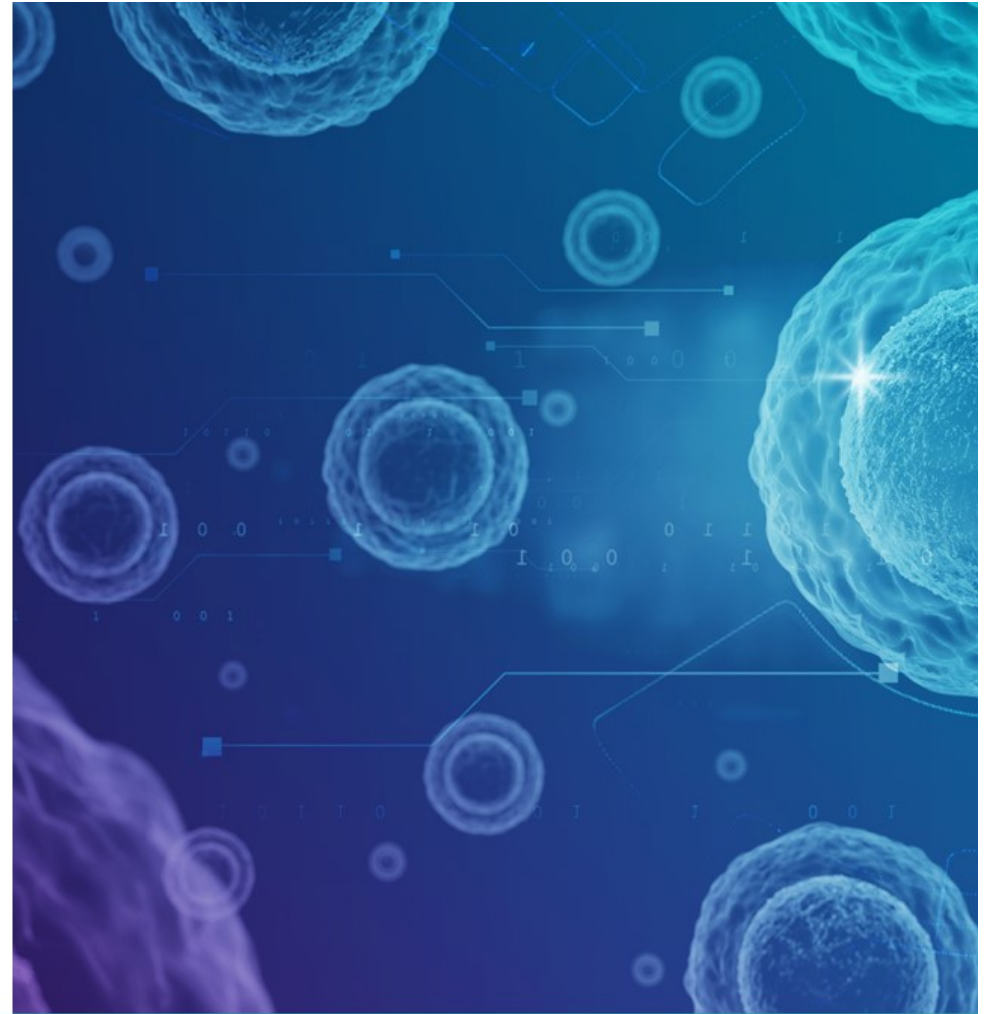
	2022		2023	
 BIOMICA	IBD – initiate scale-up for GMP production of drug candidate for IBD	Immuno-oncology – readout from proof-of-concept, first in human study	IBD – clinical batch production of drug candidate for IBD as preparation for Phase 1 clinical trials in USA	Immuno-oncology – pre-IND meeting with FDA
 CANONIC	MetaYield – commercial launch of second- generation products in Israel	Precise – collect user data for clinical indications to support commercial launch in 2023	MetaYield – commercial launch of first product in Europe	Precise – commercial launch of first product in Israel
 agPlenus	New MoA herbicides – enter an additional collaboration agreement	New MoA herbicide – expand data package for APTH1, AgPlenus' leading new MoA protein for the development of novel herbicides	New MoA herbicides – reach milestone in one of the ongoing collaborations	New MoA fungicide – initial greenhouse readouts
 lavie bio	Bio-stimulants – build infrastructure for scale-up in 'result™' sales for spring wheat in 2023	Bio-fungicides – file for regulatory approval for leading product candidate LAV311 for fruit rot	Bio-stimulants – 'result™' product sales expansion in US and Canada for spring wheat	Bio-fungicides – file for regulatory approval for leading product candidate LAV321 or LAV322 for downy mildew

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Annex I - Technology

Annex II - Financial Fundamentals





140
Employees

Computational systems biology

Computational chemistry

Bioinformatics Molecular biology

Microbiology Genetics Biochemistry



30 %
PhDs



56 %
Women

**Incl. chairperson
of the board**

Summary

Our vision – Revolutionizing life-science based product discovery & development, utilizing cutting edge computational biology technologies.

CPB platform – a unique technology platform stemming from the incorporation of deep scientific understandings of biology together with big-data and artificial intelligence technologies

The CPB's three unique engines target to improve the development of products based on the following core components:

1. MicroBoost AI – for products based on microbes
2. ChemPass AI – for products based on small molecules
3. GeneRator AI – for products based on genetic elements

Dual based business model – utilizing Evogene's solutions for:

1. Product development & commercialization through subsidiaries
2. Product development & commercialization through collaborations

Four main market-oriented subsidiaries, each with a clear milestone roadmap:

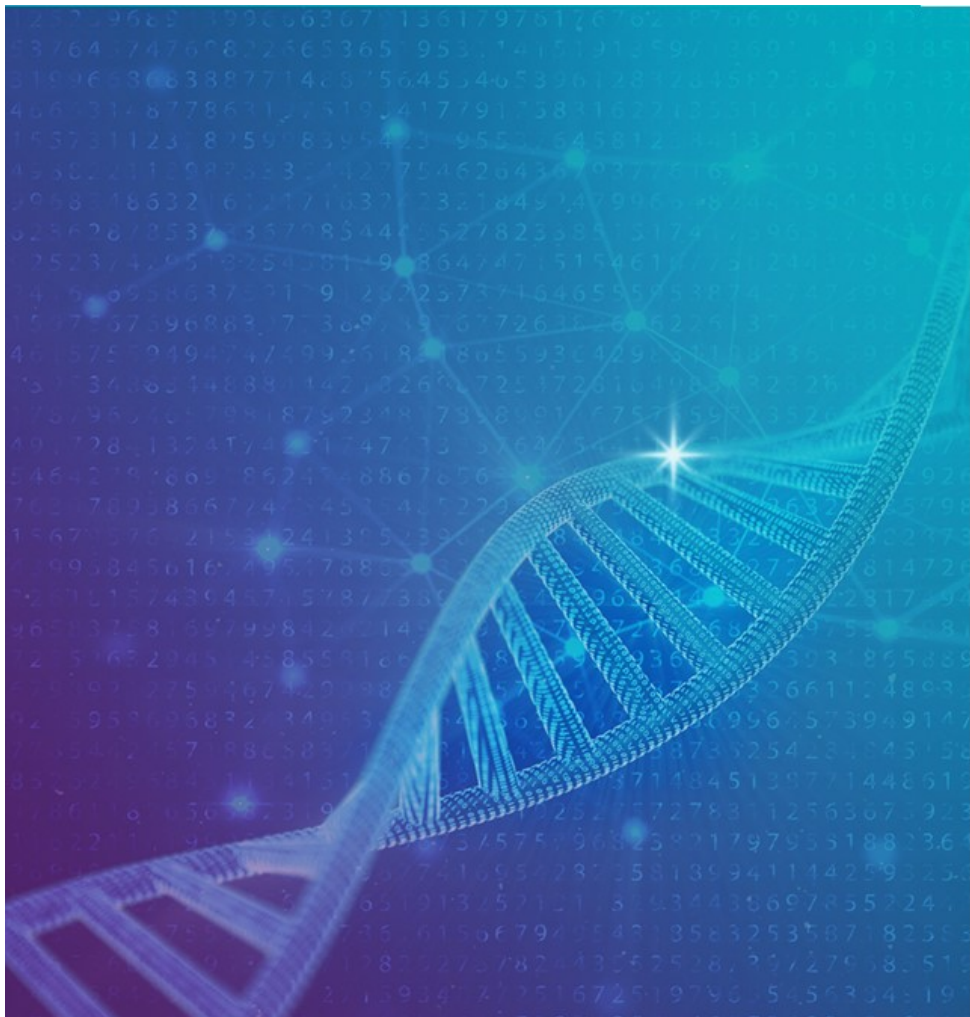
1. Biomica – human-microbiome based therapeutics
2. Canonic – medical cannabis
3. AgPlenus – ag-chemicals
4. Lavie Bio – ag-biologicals

Significant catalysts expected in the next 12 months across the subsidiaries and in Evogene's technological offering



THANK YOU!

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Annex I: Technology

The **challenge** in creating life-science based products



The **challenge** in creating life-science based products

Common practice

Discovery – selection of product candidates mainly addressing efficacy



Product Definition



Candidate Selection

Efficacy

Safety

Selectivity

Shelf-life

Other

Product Launch

The **challenge** in creating life-science based products

Common practice

Discovery – selection of product candidates mainly addressing efficacy

Development – inefficient optimization & difficulty in addressing a single challenge without impairing others



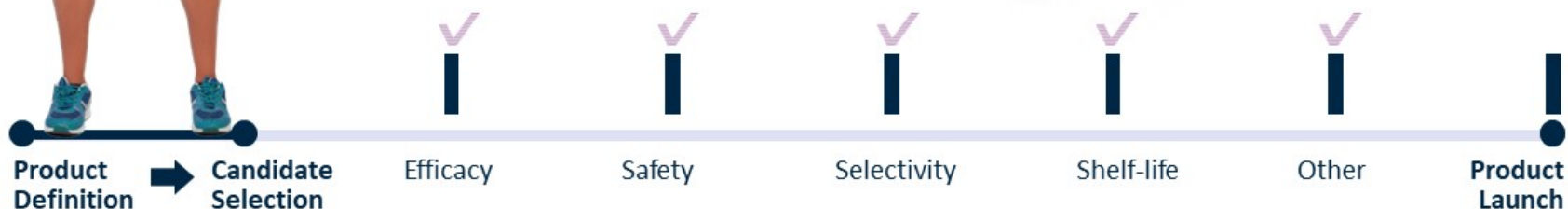
- X Low probability of success
- X Long time to market
- X High development costs





Evogene's AI-based solution: Discovery

A multi-attribute computational selection of product candidates, addressing relevant challenges using dedicated training data sets and AI.



Evogene's AI-based solution: Development

A multi-attribute computational analysis, addressing a specific development challenge of the selected candidate, without impairing its ability to address other product attributes.



Evogene's AI engines provide tailor-made solutions

✦ Discovery

Computational prediction of candidates, to serve as the **product's core-component**, addressing multiple key product attributes.

✦ Development

Computational driven solution for guiding and assessing the optimization process of the **selected core component**, without impairing other key product attributes.





Annex II: Financial Fundamentals

Key Financials: Balance Sheet

Key Points:

- Consolidated cash position: ~\$54 million as of 31.12.2021, of which ~\$8 million is appropriated to Lavie Bio
- No bank debt
- Listed on TASE (2007) and NASDAQ (2016)

Thousands of US \$	31.12.2021	31.12.2020
Current Assets	56,890	51,823
Long-Term Assets	19,414	20,092
Total Assets	76,304	71,915
Current Liabilities	6,882	9,676
Long-Term Liabilities	6,002	5,357
Equity attributable to equity holders of the Company	54,031	46,045
Non-controlling interest	9,389	10,837
Total Liabilities & Shareholders Equity	76,304	71,915