
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 **April 2021**

Commission File Number: **001-36187**

EVOGENE LTD.

(Translation of Registrant's Name into English)

**13 Gad Feinstein Street
Park Rehovot P.O.B 2100
Rehovot 7612002 Israel**

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ____

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ____

CONTENTS

Attached hereto and incorporated by reference herein are the following exhibits:

- 99.1 Evogene Investor Presentation.
 - 99.2 AgPlenus Investor Presentation.
 - 99.3 Biomica Investor Presentation.
 - 99.4 Canonic Investor Presentation.
 - 99.5 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: April 19, 2021

By: /s/ Dorit Kreiner
Dorit Kreiner
Chief Financial Officer

EXHIBIT INDEX

<u>EXHIBIT NO.</u>	<u>DESCRIPTION</u>
<u>99.1</u>	<u>Evogene Investor Presentation.</u>
<u>99.2</u>	<u>AgPlenus Investor Presentation.</u>
<u>99.3</u>	<u>Biomica Investor Presentation.</u>
<u>99.4</u>	<u>Canonic Investor Presentation.</u>
<u>99.5</u>	<u>Lavie Bio Investor Presentation.</u>



INVESTOR PRESENTATION

Ofer Haviv, President & CEO
April 2021

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. 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. 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.

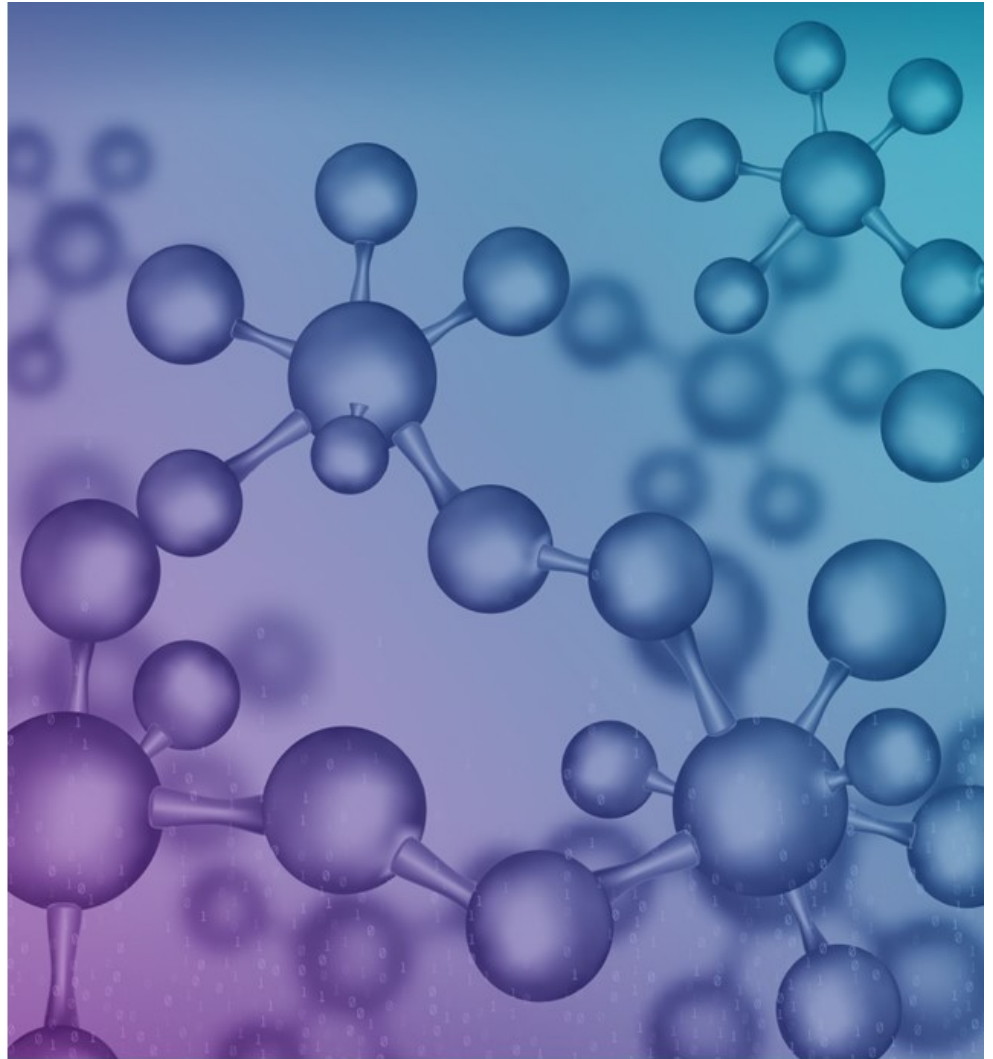
The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of our products or services.

Agenda

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

Annex I - Addressing the discovery and development challenges of life science-based product

Annex II - Financial Fundamentals





OUR VISION

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

DECODING BIOLOGY

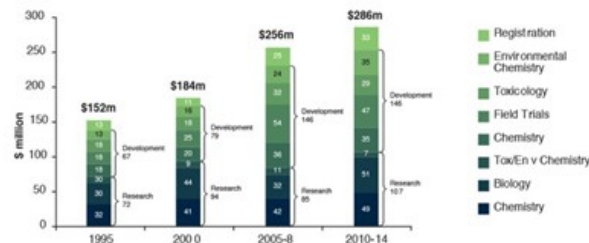
Life-science product discovery & development challenges

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

Ag-chemicals Industry



Discovery and development costs of a new crop protection product



Source: Phillips McDougall, 2016

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

Source: Phillips McDougall, 2016

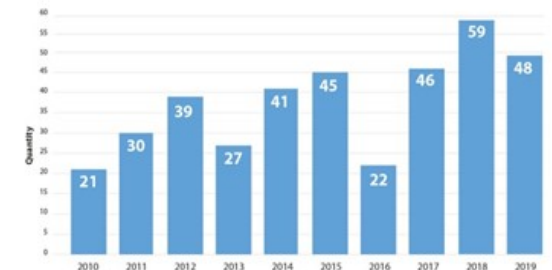
*Center for Drug Evaluation and Research

Pharmaceutical Industry



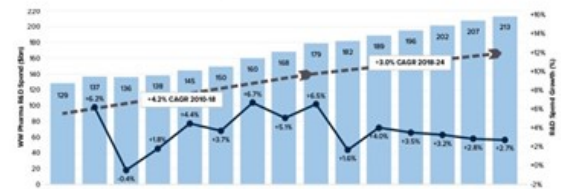
CDER'S* annual novel drug approvals: 2010-2019

In 2019, CDER approved 48 novel drugs. The 10-year graph below shows that from 2010 through 2018, CDER has averaged about 37 novel drug approvals per year.



Source: U.S. Food and Drug Administration

Worldwide total pharmaceutical R&D spend in 2010-2024



Source: Evaluate Pharma May 2019



HUMAN HEALTH

AGRICULTURE

OTHER
INDUSTRIES

evogene

The opportunity

Utilize comprehensive and integrated computational biology to substantially increase the probability of success, while reducing the time and cost of life-science product discovery & development.

When biology meets disruptive technologies; introducing–

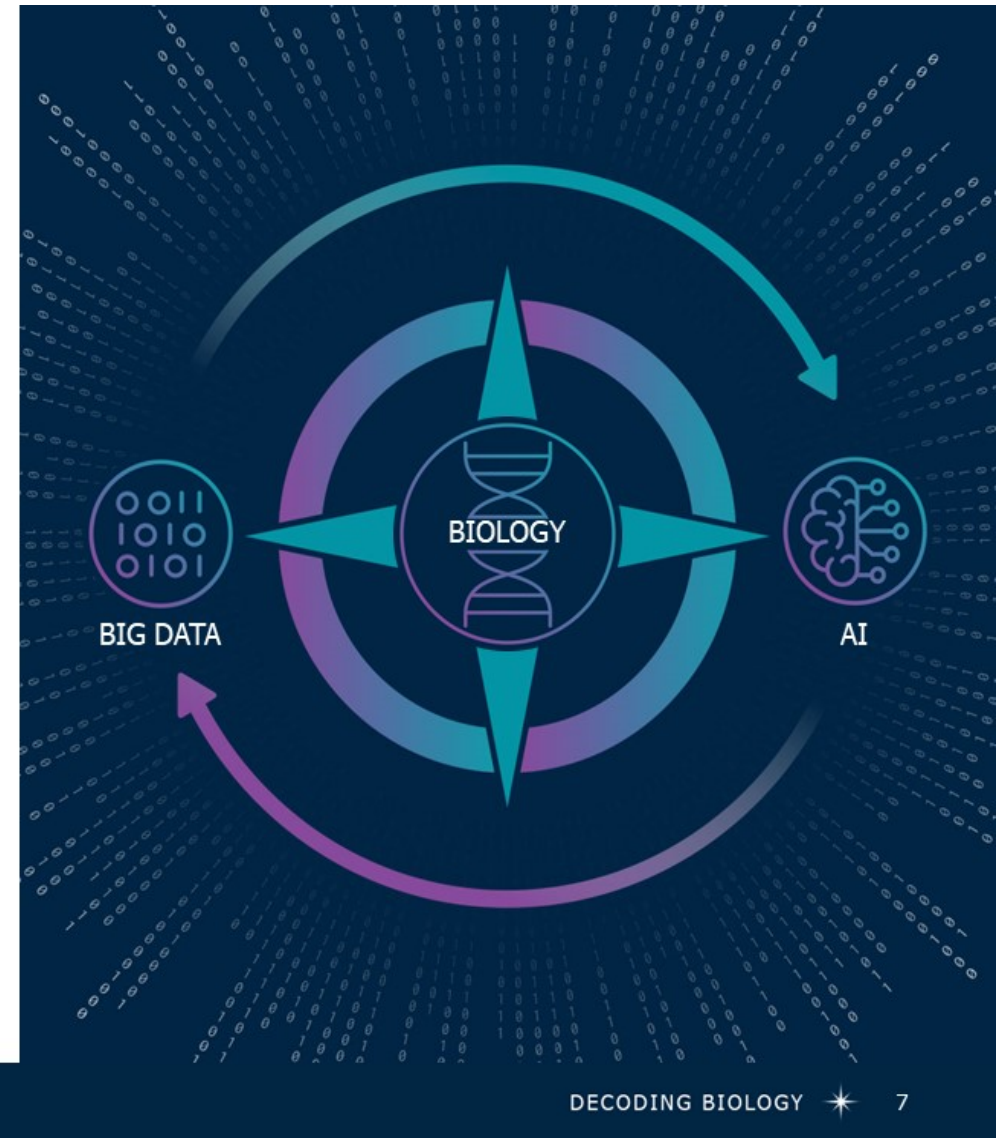
CPB⁺ platform

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.

Developed over two decades at an investment of tens of millions of dollars and validated through collaborations with industrial leaders & internal results

CPB⁺ – Computational Predictive Biology

evogene

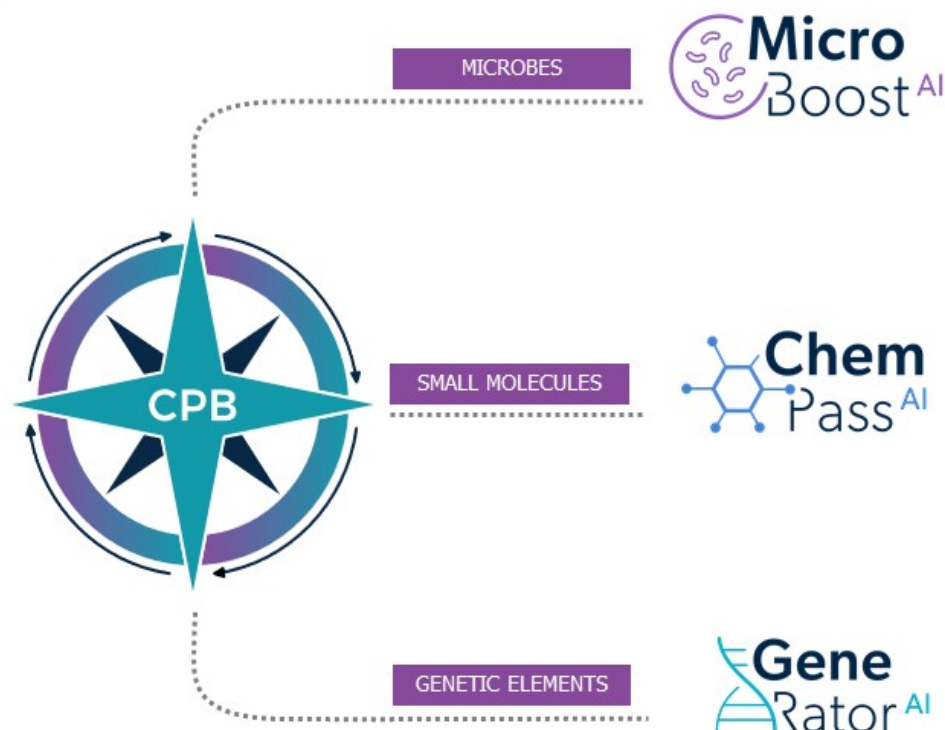


DECODING BIOLOGY ⁺ 7

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



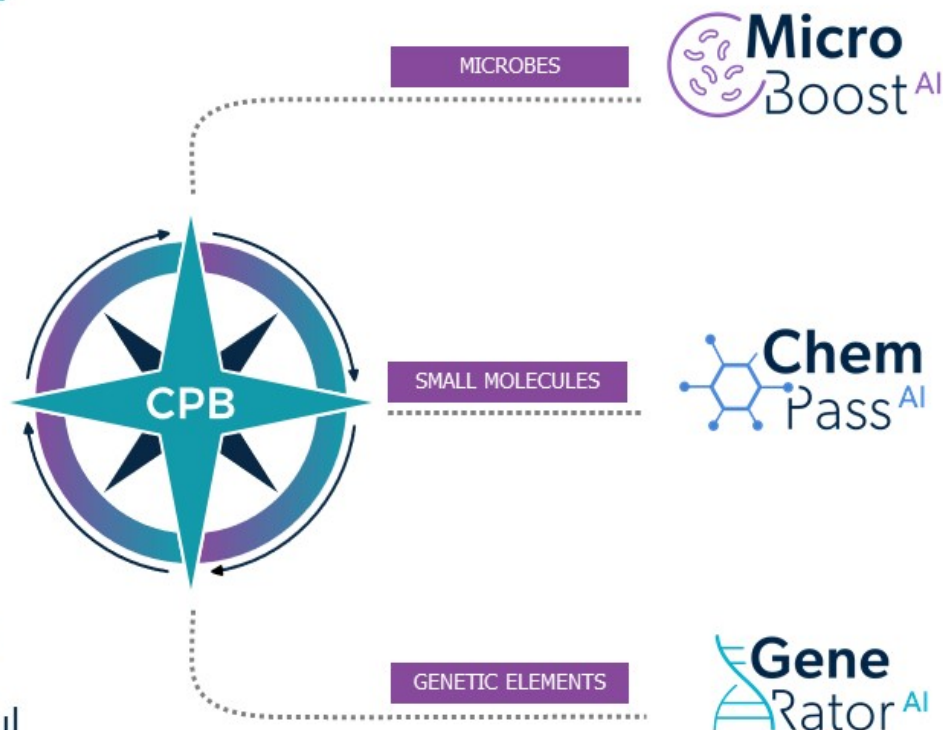
Tailor-made **Engines** for product development

✦ **Discovery**

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

✦ **Development**

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



Business Model



evogene

1

Product development through collaborations

Joint development with leading companies for defined products utilizing Evogene's unique solution. Later-stage development and commercialization of the product will likely be done by the partner.

Potential revenue for Evogene

- Licensing and research payments
- Milestone payments
- Revenue sharing

Main Business Model Until 2014:



- GMO seed traits for yield and abiotic stress for wheat



- GMO seed traits for yield and abiotic stress for corn
- GMO seed traits for ASR resistance for soybean



- GMO seed traits for yield and abiotic stress for corn and soybean
- GMO (2013) and genome editing (2019) seed traits for fusarium resistance



- GMO seed traits for nematode resistance

Business Model



evogene

2

Product development through subsidiaries

Establish independent entities focusing on a defined commercial field with an exclusive license to use Evogene's unique solutions for product development. The subsidiary may develop and commercialize products independently or through strategic collaborations.

Potential revenue for Evogene

- Licensing and research payments
- Consolidated revenues
- Dividends (subject to profits generated by subsidiary)

Main Business Model from 2015:

 **agPlenus**
Ag-chemicals

 **BIOMICA**
Microbiome based therapeutics

 **CANONiC**
Medical cannabis

 **casterra**
Ag-solutions for castor

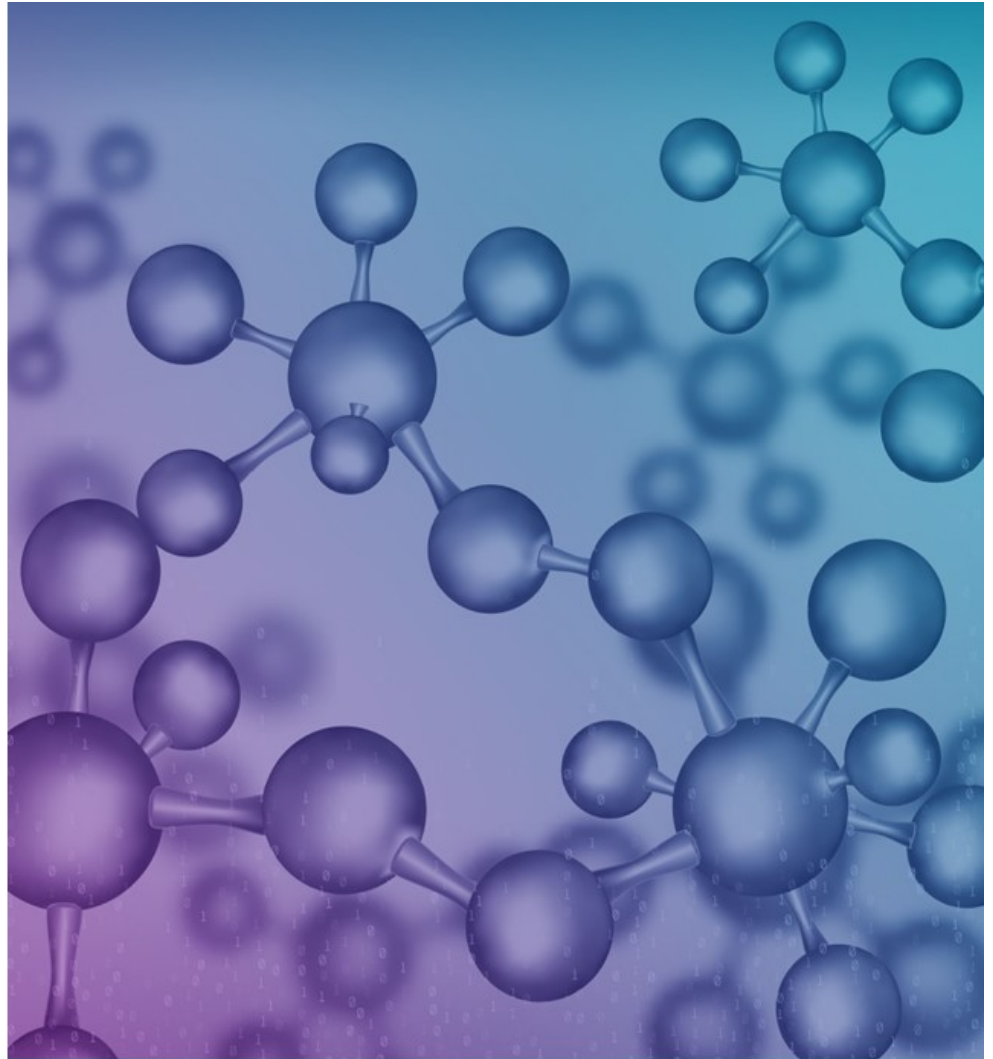
 **lavie bio**
Ag-biologicals

Agenda

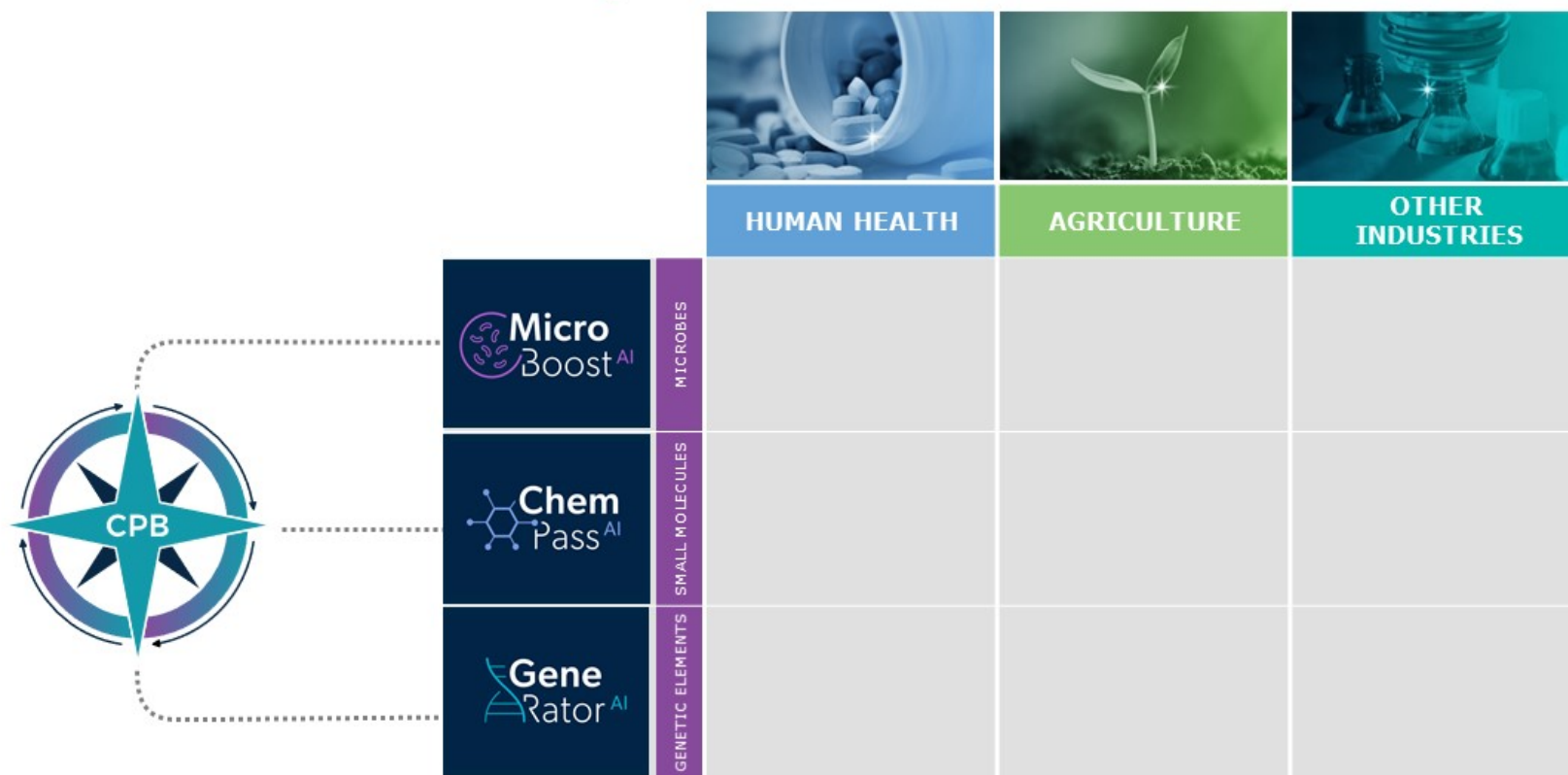
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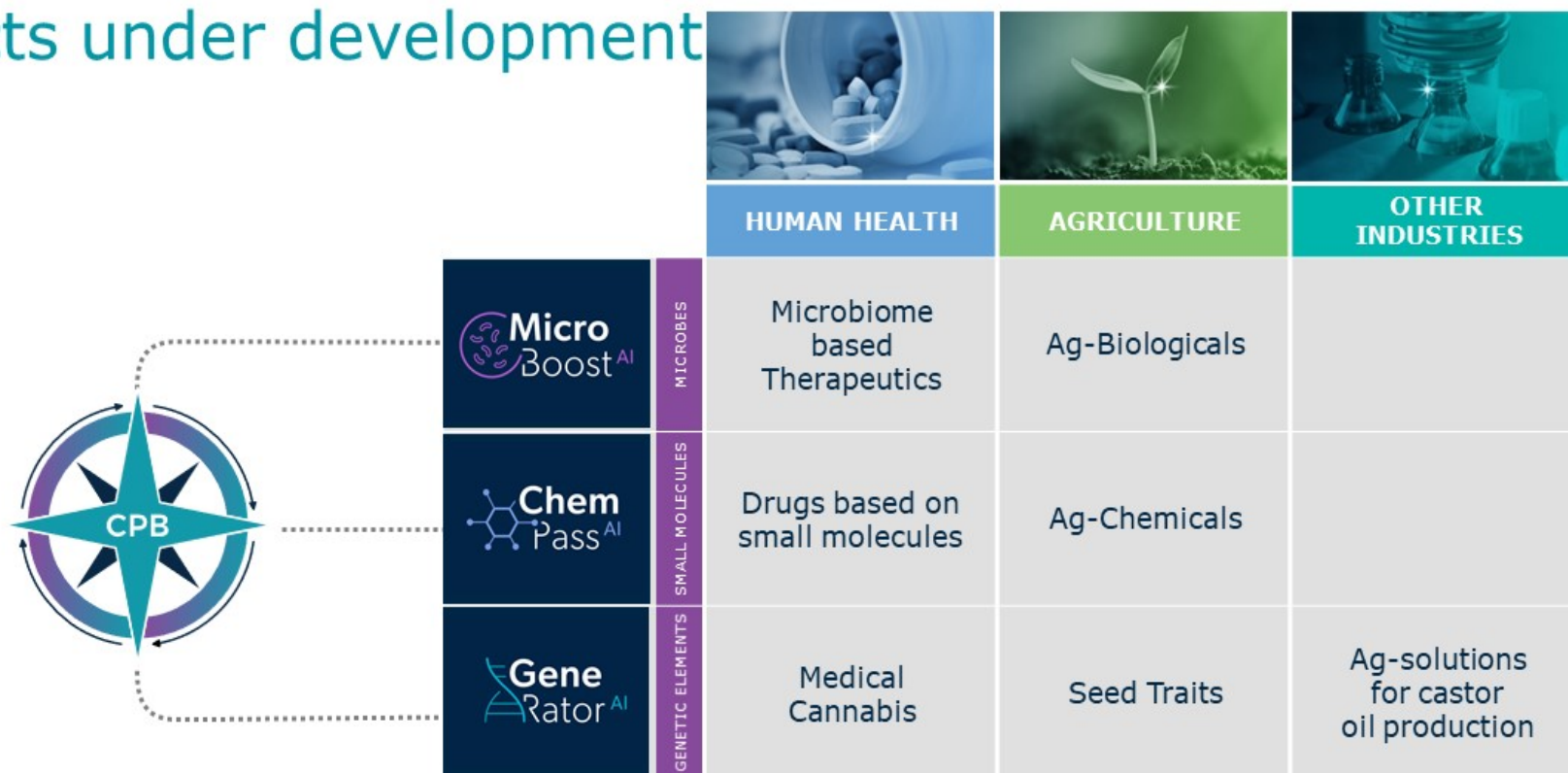
Annex II - Financial Fundamentals



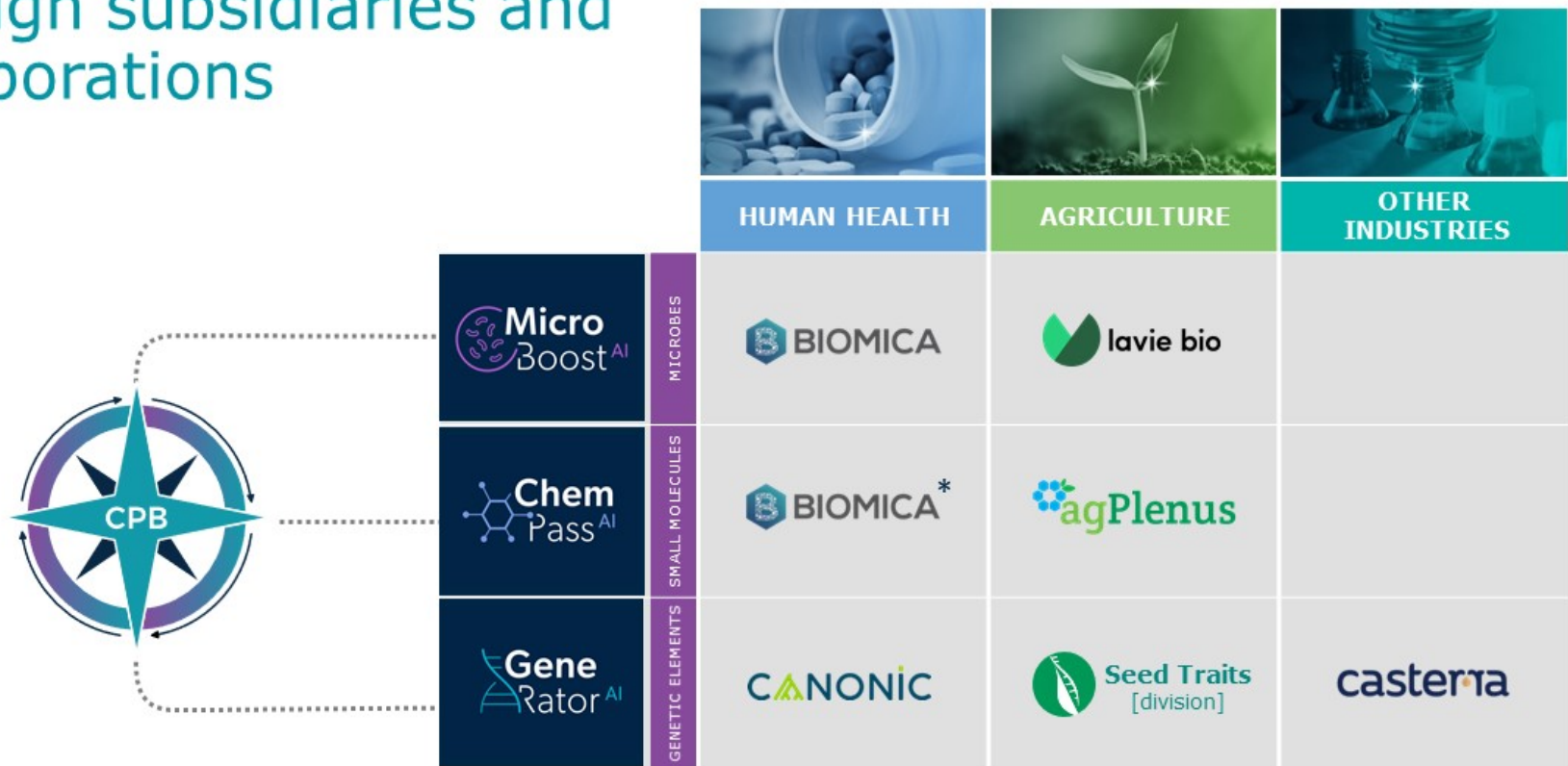
Potential fields of activity



Current life-science based products under development



Development & commercialization through subsidiaries and collaborations

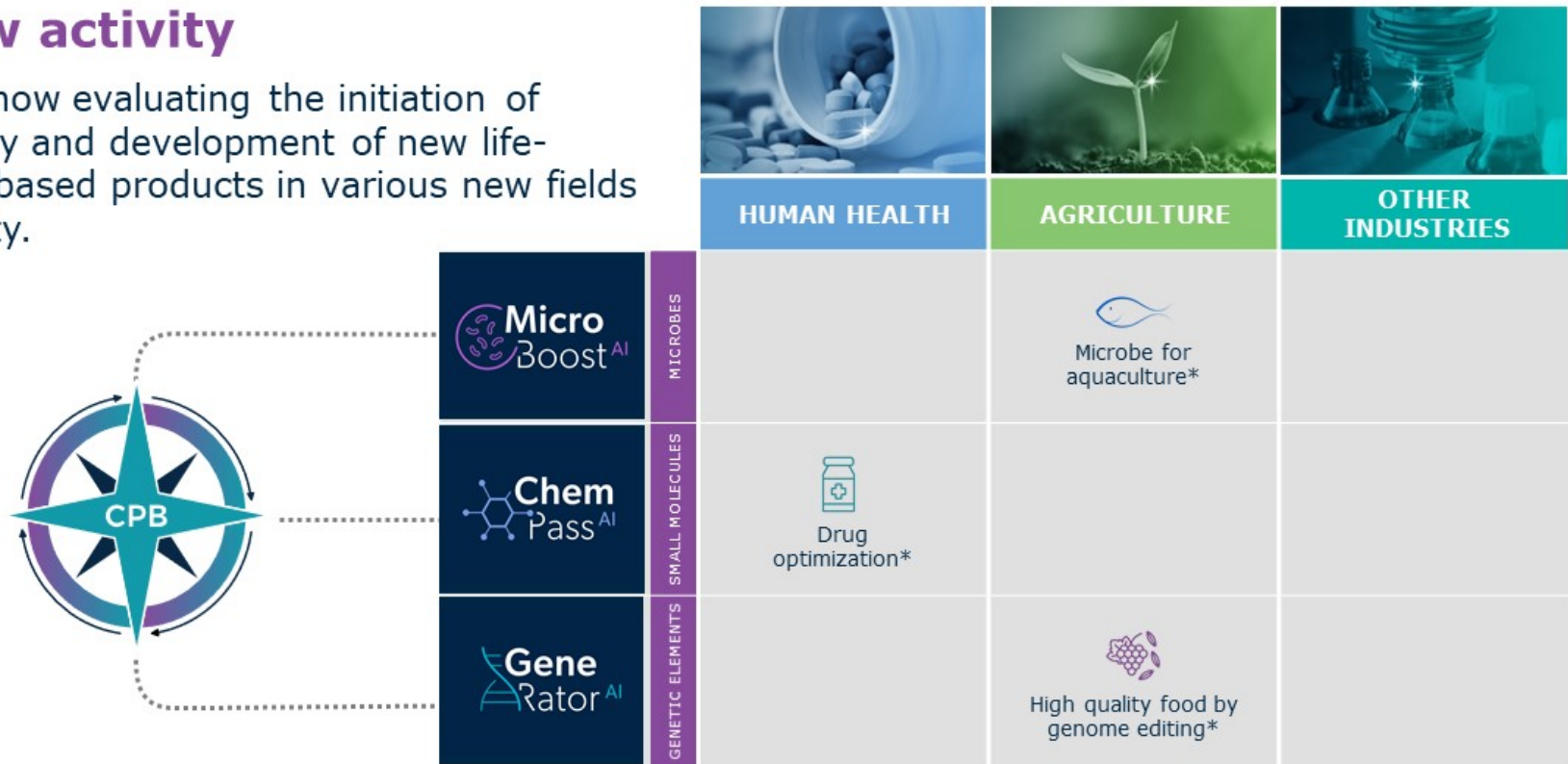


* non-exclusive license

Evogene Group – More to Come

✦ New activity

We are now evaluating the initiation of discovery and development of new life-science based products in various new fields of activity.



* under evaluation

Evogene Group



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Human Health



90%*

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



72%*

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 protocol

*Evogene holdings

evogene

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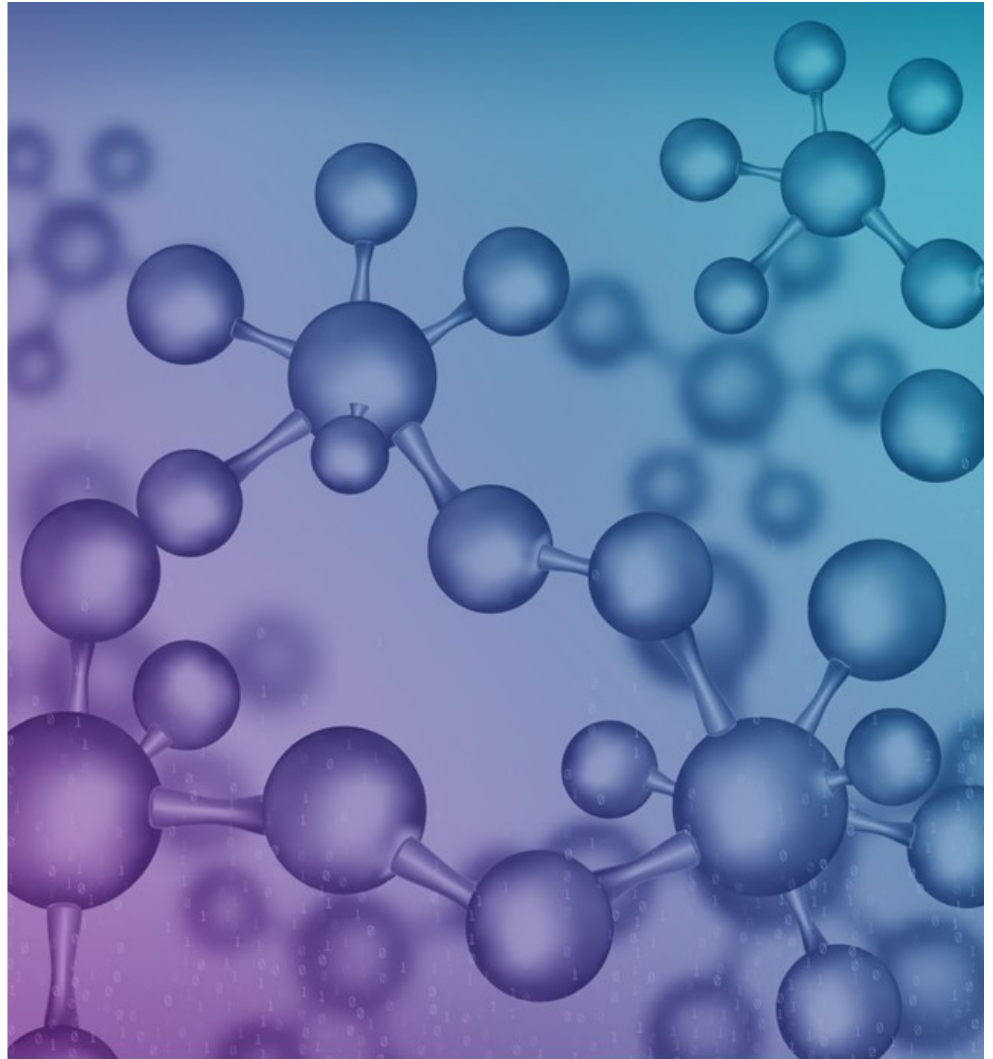
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Mission:

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

*<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.bloomberg.com/press-releases/2019-07-23/ibs-treatment-market-size-worth-3-3-billion-by-2026-cagr-10-1-grand-view-research-inc>

***www.globaldata.com/global-clostridium-difficile-infections-market-approach-1-7-billion-2026/

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

Expected main near-term value drivers:

2021

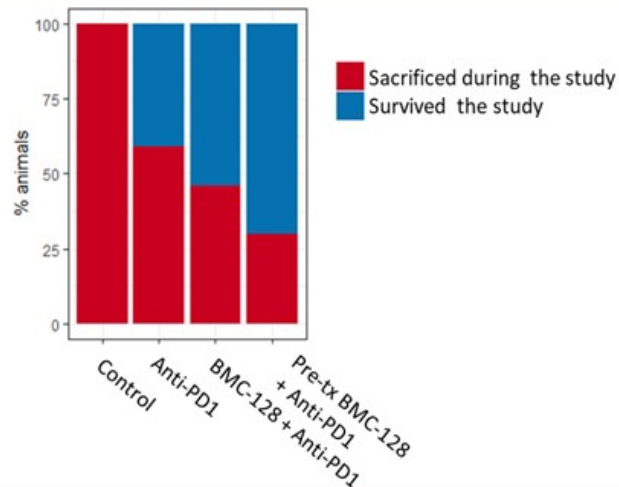
- **IBD** - extend pre-clinical study
- **Immuno-oncology** - initiate proof of concept, first in human study

2022

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

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 in its Immuno-Oncology Program

Biomica's, a subsidiary of Evogene Ltd., live biotherapeutic drug candidate BMC128 administered in combination with Immune Checkpoint Inhibitors (ICI) significantly improved anti-tumor activity. Proof-of-concept first-in-man studies expected next year

Rehovot, Israel – September 8, 2020 – Biomica Ltd., an emerging biopharmaceutical company developing innovative microbiome-based therapeutics, and a subsidiary of Evogene Ltd. (NASDAQ: EVGN, TASE: EVGN), today announced positive pre-clinical in-vivo results in its immuno-oncology program for a follow-on combination of bacterial strains. In these studies, Biomica tested BMC128, which consists of four live bacterial strains derived from Biomica's drug candidates BMC121 and BMC127. Treatment with BMC128, both prior to and in combination with ICI, significantly improved anti-tumor activity in mice.

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

Rehovot, Israel – April 13, 2021 – Biomica Ltd., an emerging biopharmaceutical company developing innovative microbiome-based therapeutics and a subsidiary of Evogene Ltd. (NASDAQ: EVGN, TASE: EVGN), today announced additional positive pre-clinical results in its immuno-oncology program demonstrating efficacy of its live biotherapeutic product (LBP) consortium BMC128, this time in melanoma. In these studies, Biomica tested BMC128, which consists of four live bacterial strains, in a mouse model of melanoma.

Mission:

Commercialize precise & stable medical cannabis products for better therapeutic effects using computational biology.



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
- Medical Cannabis market size expected by 2024 – \$25.6B*

*Source: Arcview Market research/BDS Analytics 2020

Expected main near-term value drivers:

2021

- **MetaYield** - reach 1st commercial variety; sign production and distribution agreements in anticipation for commercialization in 2022
- **Precise** - identify specific lines that exhibit distinct effect in model systems for reducing pain or inflammation

2022

- **MetaYield** - commercial launch and initial sales of first product in Israel
- **Precise** - reach 1st commercial variety for reducing pain or inflammation as preparation for commercial launch in 2023

Example Results:

MetaYield products under development – increased compounds per area, addressing the T20/C4 (THC 16%-24% and CBD 0%-7%) market segment, which currently consists of 70% of the Israeli medical cannabis market



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

Cannbit, subsidiary of Tikun Olam-Cannbit, and Canonic of Evogene group announce collaboration for the development of novel medical cannabis products

Collaboration to combine the cannabis expertise of both parties, including extensive clinical and related data of Cannbit and leading computational predictive biology capabilities and genomic data of Canonic

Tel-Aviv and Rehovot, Israel – February 24th, 2021 – Cannbit Ltd., a subsidiary of Tikun Olam-Cannbit Ltd. (TASE: TKUN), a leading medical cannabis company, and Canonic Ltd., a subsidiary of Evogene Ltd. (NASDAQ: EVGN) (TASE: EVGN), focused on the development of medical cannabis products, today announced that they have entered into a collaboration agreement for the development of novel medical cannabis products.

Canonic of Evogene Group and Tikun Olam (Israel)-Cannbit, sign production and distribution agreements for Canonic products in Israel

Rehovot and Tel-Aviv, Israel – March 25th, 2021 – Canonic Ltd., a subsidiary of Evogene Ltd. (NASDAQ: EVGN) (TASE: EVGN), focused on the development of medical cannabis products and Tikun Olam-Cannbit Pharmaceuticals Ltd. (TASE: TKUN), a leading medical cannabis company, today announced that they have entered into agreements for the production and distribution in Israel of Canonic's medical cannabis products. Canonic's first product is expected to be launched in Israel next year.

Mission:

Design of next-generation effective, sustainable and safer crop protection products by leveraging computational biology and 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:

2021

- **New MoA Herbicide** - reach a herbicide tolerance trait POC for a 'Lead' herbicide under development
- **New MoA Herbicide/SoA Insecticide** - sign a licensing agreement for a leading candidate

2022

- **New MoA Herbicide** - sign a strategic agreement for the development of an 'Optimized Lead' compound
- **New MoA Herbicide** - reach an 'Optimized Lead' phase in the herbicide program

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

Example Results:

Leading novel MoA herbicide candidate – displaying efficacy in eradicating multiple important weed species in field tests



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

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

Rehovot, Israel – December 15, 2020 – AgPlenus Ltd., an innovative company designing effective, sustainable crop protection products by leveraging computational biology and chemistry, and a subsidiary of Evogene Ltd. (NASDAQ: EVGN), (TASE: EVGN), announced today that it has reached the 'Lead' stage in its novel Mode-of-Action (MoA) herbicide program. The achievement of this milestone follows the conclusion of field tests that demonstrated that product candidate APH1, at commercial dose rates, effectively controlled a broad panel of weeds, including weeds that are known to have resistance to existing herbicides. These results were confirmed in independent field tests conducted by SynTech Research, an agricultural R&D contract research organization located in California.

Mission:

Improve food quality, sustainability and agricultural productivity through the introduction of microbiome based ag-biological products using computational biology.



Product Pipeline:

Bio-stimulants (live microbials for yield improvement):



- Spring wheat – seed treatment/soil application – development stage 2
- Corn – seed treatment – pre-development stage
- Addressable market size*: corn – 120M acres, spring wheat – 25M acres

Bio-pesticides (live microbials for pest protection):



- Mildew, fruit rot for fruit and vegetables (initial focus on grapes) – foliar application – development stage 1
- Seedling disease for corn, soy – seed treatment for disease protection – pre-development stage
- Bio-insecticides – initial focus corn (seed treatment), soy (foliar) – pre-development stage
- Addressable market size*: mildew, fruit rot – \$550M, seedling diseases – \$500M, bio-insecticides – \$1.5B.

*Company estimation

Expected main near-term value drivers:

2021

- **Fruit rot bio-fungicide** – product advancement of LAV311 or 312 development towards regulation
- **Bio-stimulant** – conduct pre-commercial trials for LAV211 in spring wheat

2022

- **Bio-stimulant** – initial product sales of LAV211 for spring wheat
- **Fruit rot bio-fungicide** – file for regulatory approval for leading product candidate LAV311 or LAV312



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



Lavie Bio's wheat field in the USA during harvest

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

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

























Rehovot, Israel – October 29, 2020 – Lavie Bio Ltd. (Lavie Bio), a leading ag-biologicals company focusing on improving food quality, sustainability and agriculture productivity through the introduction of microbiome based products, and a subsidiary of Evogene Ltd. (NASDAQ: EVGN) (TASE: EVGN), announced today positive trial results for two of its leading bio-fungicide product candidates. The successful results for LAV311 and LAV312, targeting bunch rot diseases, mark the advancement of these candidates to "Development Stage 2" [1]. These vineyard trials, conducted in target locations in Europe and the U.S., resulted in significantly better efficacy and consistency than existing comparable commercial biological benchmarks, and competitive to commercial chemical benchmarks, both tested as part of these trials. The positive results will support Lavie Bio's current plan to launch its first bio-fungicide product for controlling bunch rots for use in fruit and vegetables in 2024.

Lavie Bio Provides Product Pipeline Update for 2020

LAV211 bio-stimulant advancing towards anticipated 2022 commercial launch in spring wheat; Product advancement achieved in multiple programs

Rehovot, Israel – December 29, 2020 – Lavie Bio Ltd. (Lavie Bio), a leading ag-biologicals company focusing on improving food quality, sustainability and agriculture productivity through the introduction of microbiome-based products, and a subsidiary of Evogene Ltd. (NASDAQ: EVGN) (TASE: EVGN), has announced an update on certain advancements achieved in its pipeline in 2020, including phase advancement of bio-stimulant LAV211, towards an anticipated commercial launch in 2022.

Subsidiaries - expected main near-term value drivers

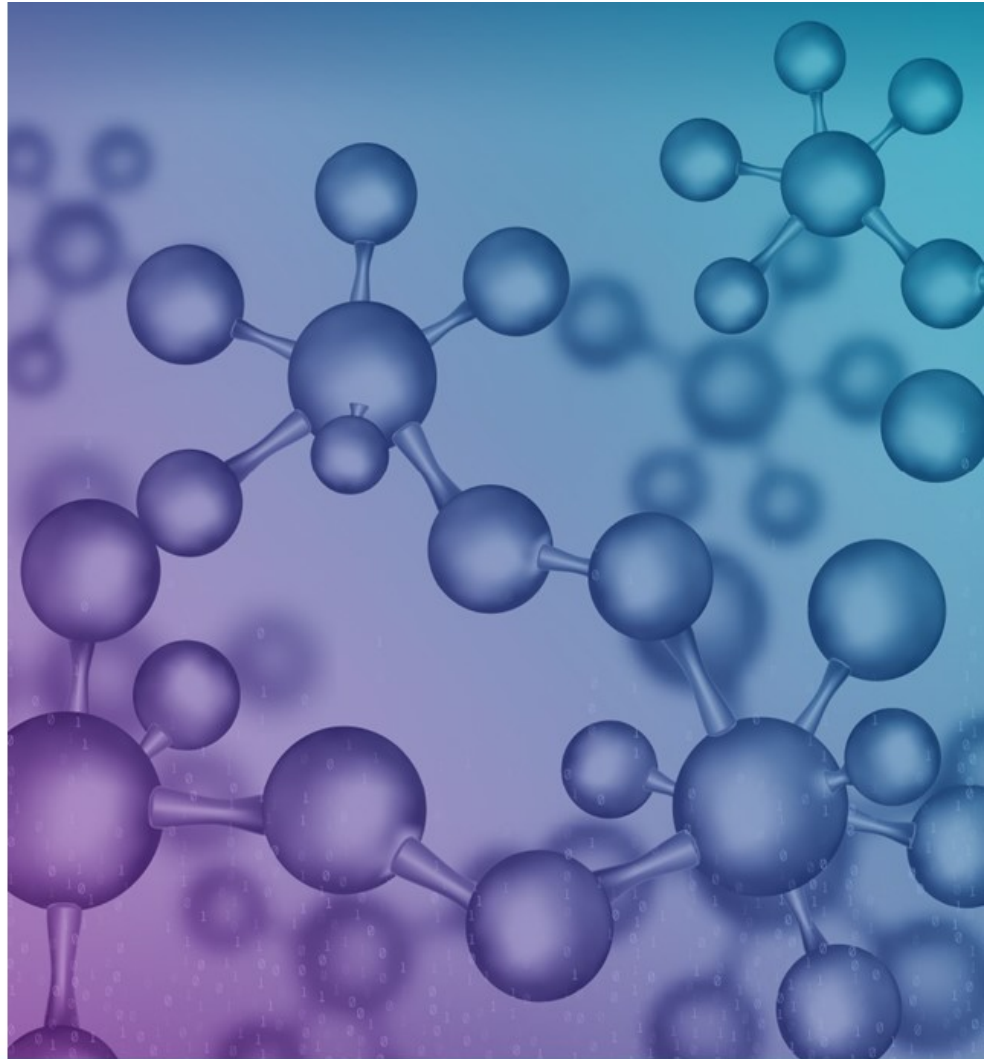
	2021		2022	
	 Inflammatory Bowel Disease (IBD) - extend pre-clinical study	 Immuno-oncology - initiate proof of concept, first in human study	 IBD - initiate first GMP production of drug candidates for IBD	 Immuno-oncology - readout from proof of concept, first in human study
	 MetaYield - reach 1 st commercial variety; sign production and distribution agreements in anticipation for commercialization in 2022	 Precise - identify specific lines that exhibit distinct effect in model systems for reducing pain or inflammation	 MetaYield - commercial launch and initial sales of first product in Israel	 Precise - reach 1 st commercial variety for reducing pain or inflammation as preparation for commercial launch in 2023
	 New MoA Herbicide - reach a herbicide tolerance trait POC for a 'Lead' herbicide under development	 New MoA Herbicide/SoA Insecticide - sign a licensing agreement for a leading candidate	 New MoA Herbicide - sign a strategic agreement for the development of an 'Optimized Lead' compound	 New MoA Herbicide - reach an 'Optimized Lead' phase in the herbicide program
	 Fruit rot bio -fungicide - product advancement of LAV311 or 312 development towards regulation	 Bio-stimulant - conduct pre-commercial trials for LAV211 in spring wheat	 Bio-stimulant - initial product sales of LAV211 for spring wheat	 Bunch rot bio-fungicide - file for regulatory approval for leading product candidate LAV311 or LAV312
 Pipeline  Regulation  Collaboration  Product Launch				

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Annex I - Addressing the discovery and development challenges of life science-based product

Annex II - Financial Fundamentals



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 collaborations
2. Product development & commercialization through subsidiaries

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

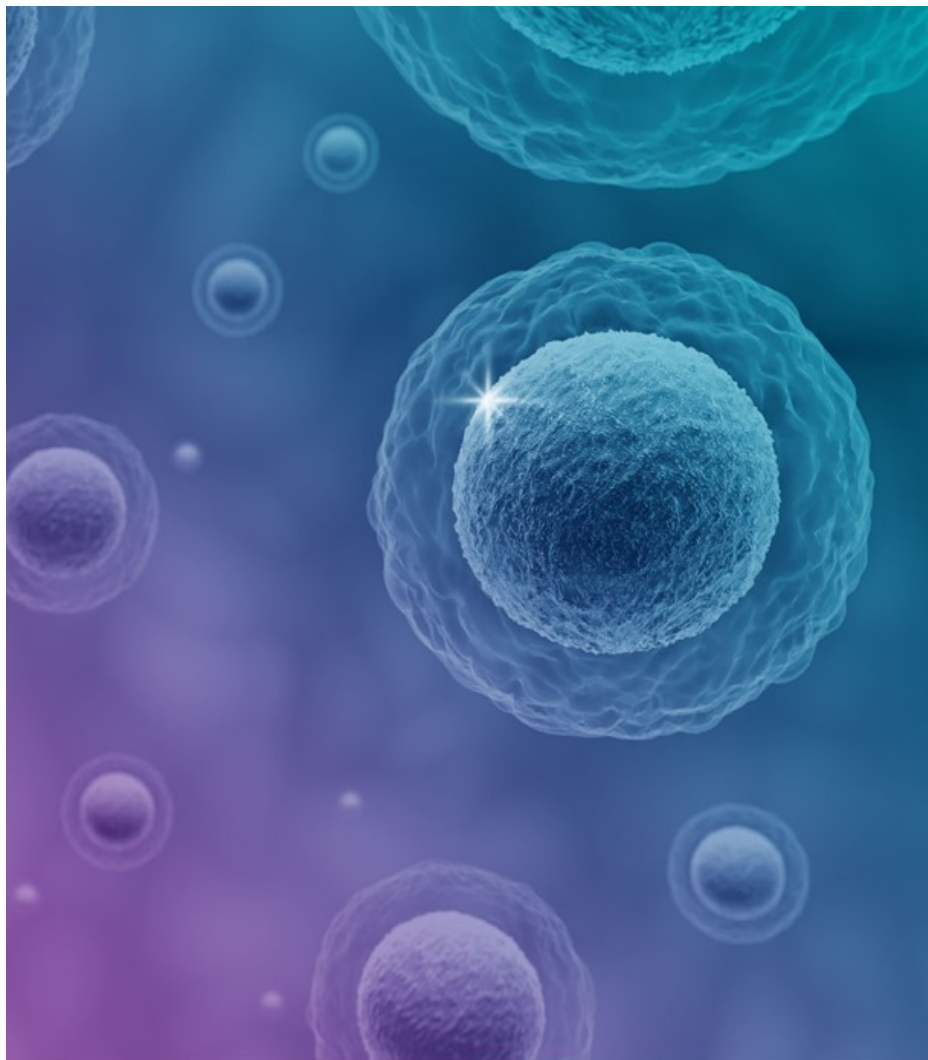
1. Biomica – human-microbiome based therapeutics
2. Canonic – medical cannabis
3. AgPlenus – ag-chemicals
4. Lavie Bio – ag-biologicals

Significant catalysts expected in the next 12 months towards 2022 product commercialization & strategic collaborations

A hand in a white glove holds a glowing blue ring. From the ring, numerous lines of digital data (0s and 1s) radiate outwards, creating a starburst effect. The background is a gradient of blue and purple.

THANK YOU!

evOgene
DECODING BIOLOGY



Annex I: Addressing the discovery and development challenges of life science-based product

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



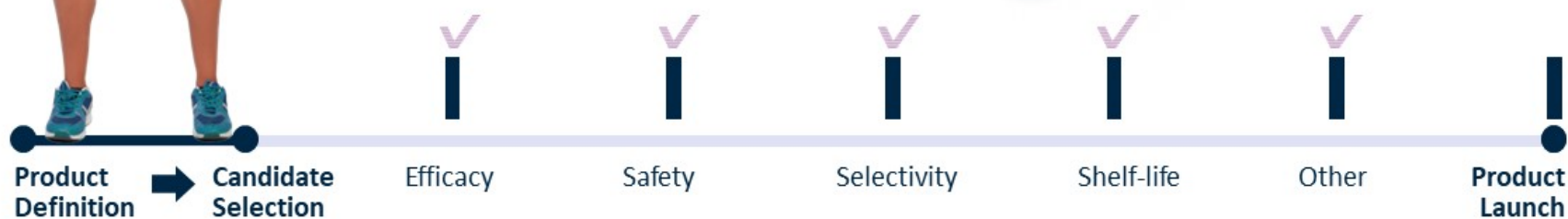
- ✗ Low probability of success
- ✗ Long time to market
- ✗ High development costs





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: ~\$48.2 million as of 31.12.2020, ~\$13 million appropriated to Lavie Bio
- No bank debt
- Estimated net cash usage for 2021, excluding Lavie Bio: \$20-\$22 million
- Listed on TASE (2007) and NASDAQ (2016)

Thousands of US \$	31.12.2020	31.12.2019
Current Assets	51,823	49,027
Long-Term Assets	20,092	22,337
Total Assets	71,915	71,364
Current Liabilities	9,676	5,746
Long-Term Liabilities	5,357	5,401
Equity attributable to equity holders of the Company	46,045	50,144
Non-controlling interest	10,837	10,073
Total Liabilities & Shareholders Equity	71,915	71,364



Company Introduction

April 2021



Forward-Looking Statements

This presentation contains "forward-looking statements" relating to future events, and AgPlenus (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. 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. 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

- Company introduction
- Business model
- Product pipeline
- Technology
- Milestone roadmap

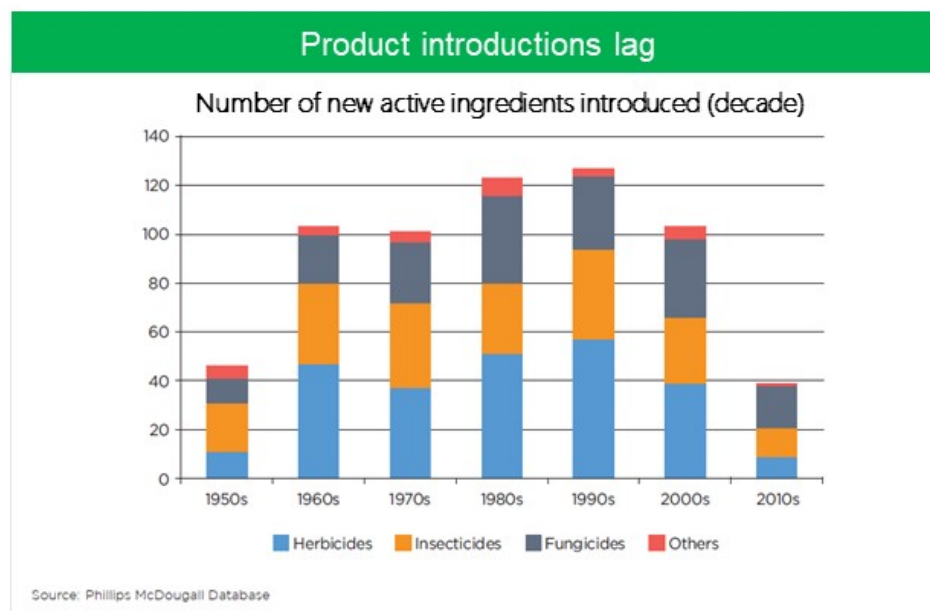
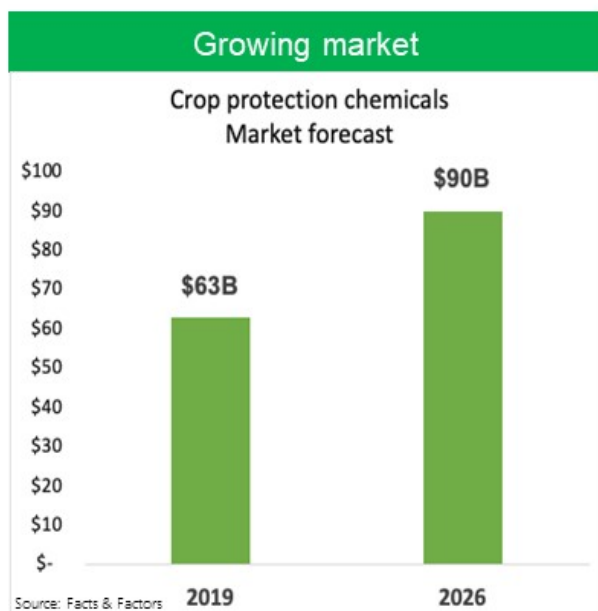




OUR VISION

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

Growing market for Crop Protection products with need for innovation



No new Mode-of-Action (MoAs) for 3 decades
Major Ag companies have failed to meet the demand for innovation

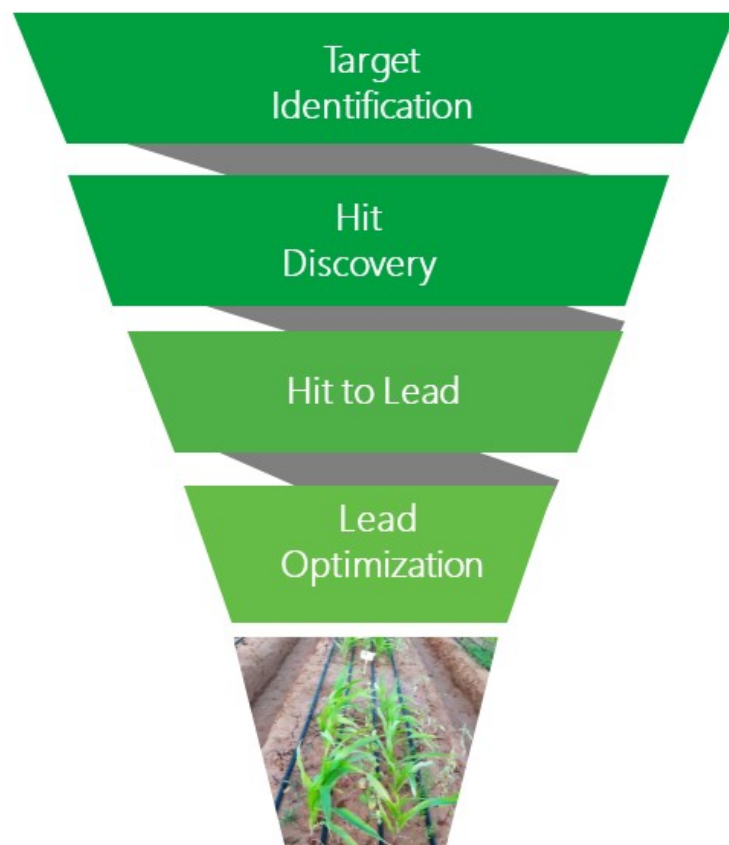
Herbicide resistant weeds have flourished

- Overuse of existing Modes of Actions (MoAs) has generated selection pressure
 - 263 herbicide-resistant weed species have evolved*
- Substantial economic cost to farmers
 - Increase costs and reduce yields
 - United States:
 - Soybeans: \$35/acre additional costs**
 - \$2 billion / year increased costs and lost yields***

Sources * Intl. Herbicide Resistant Weed Database
** AgriBusiness Global, Farm Progress
*** Michigan Farm News

Glyphosate-resistant
Palmer Amaranth

AgPlenus' target-based technology addresses the challenges



Discovery

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

Optimization

Computationally driven solution addressing **optimization development** challenges for the selected candidates, supporting the way to successful commercialization.



AgPlenus' Technology

Powered by:

evogene
ACCELERATING BIOLOGY

Chem
Pass^{AI}

Experienced board of directors



Ofer Haviv
Chairman of the board

- Evogene, President & CEO



Robert A. Woods

- Marrone Bio Innovations, Inc., Chairman
- Bioenterprise capital private equity
- Previously, Syngenta, President USA



Eli Assraf

- Galam Ltd., Director
- Previously, Makhteshim Agan (Adama), CFO & COO
- Strauss Group, CFO



Eran Kosover

- Previously AgPlenus Ltd., CEO
- Evogene EVP & GM Crop Protection, Evogene VP of collaborations,
- Atera Networks

Innovative & experienced management team



Douglas A. Eisner
CEO

Previous positions:

- AgroSpheres, Inc., CEO
- GrassRoots Biotechnology, Inc., Co-founder and COO



Boaz Inbal
VP R&D

Previous positions:

- Epix pharmaceuticals, Director
- Insilicore, CEO
- Promining therapeutics, CTO



Mirit Ram
Director of Project Management

Previous positions:

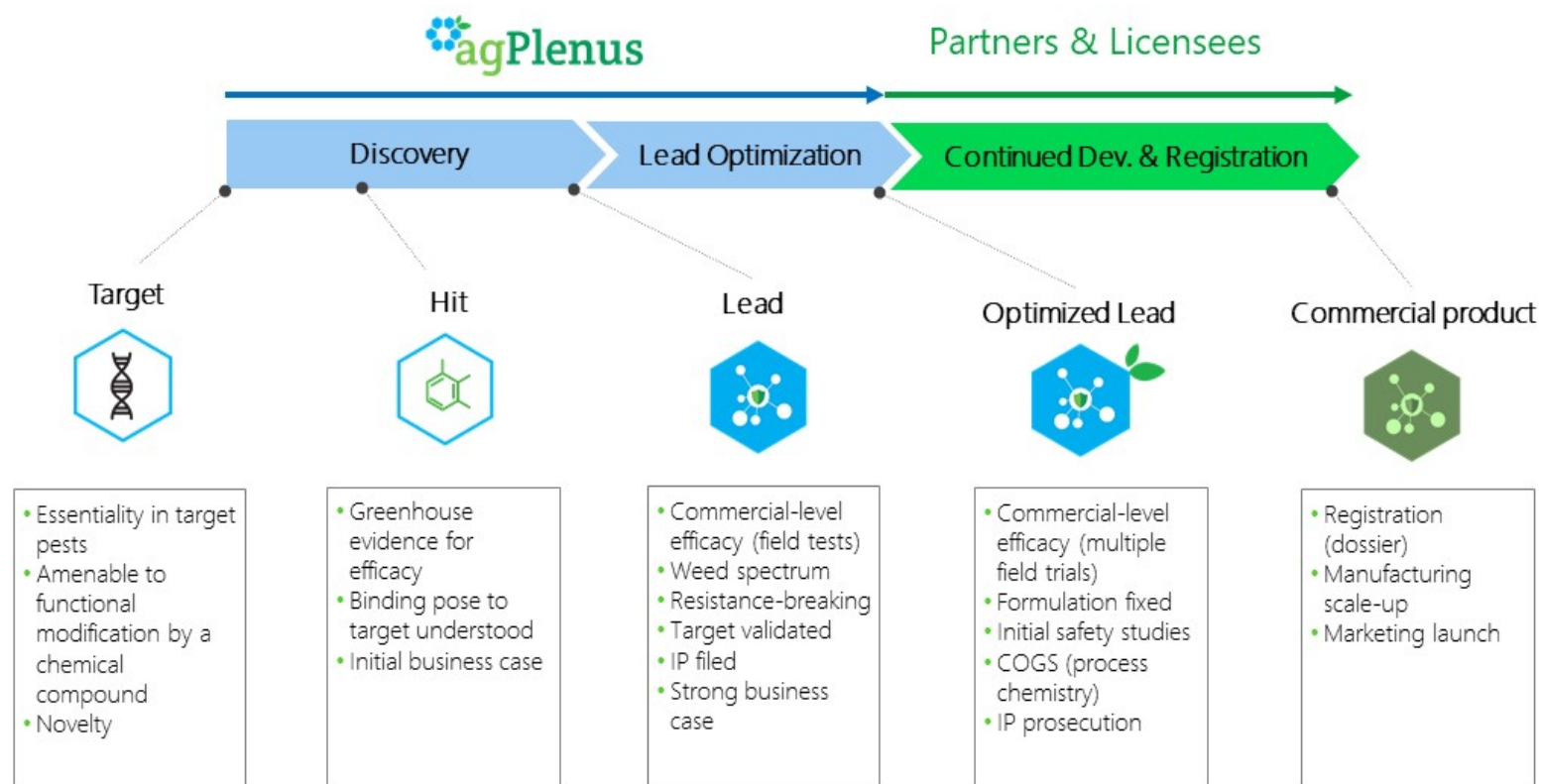
- Evogene, PM
- FMC, PM
- HP

Agenda

- Company introduction
- **Business model**
- Product pipeline
- Technology
- Milestone roadmap

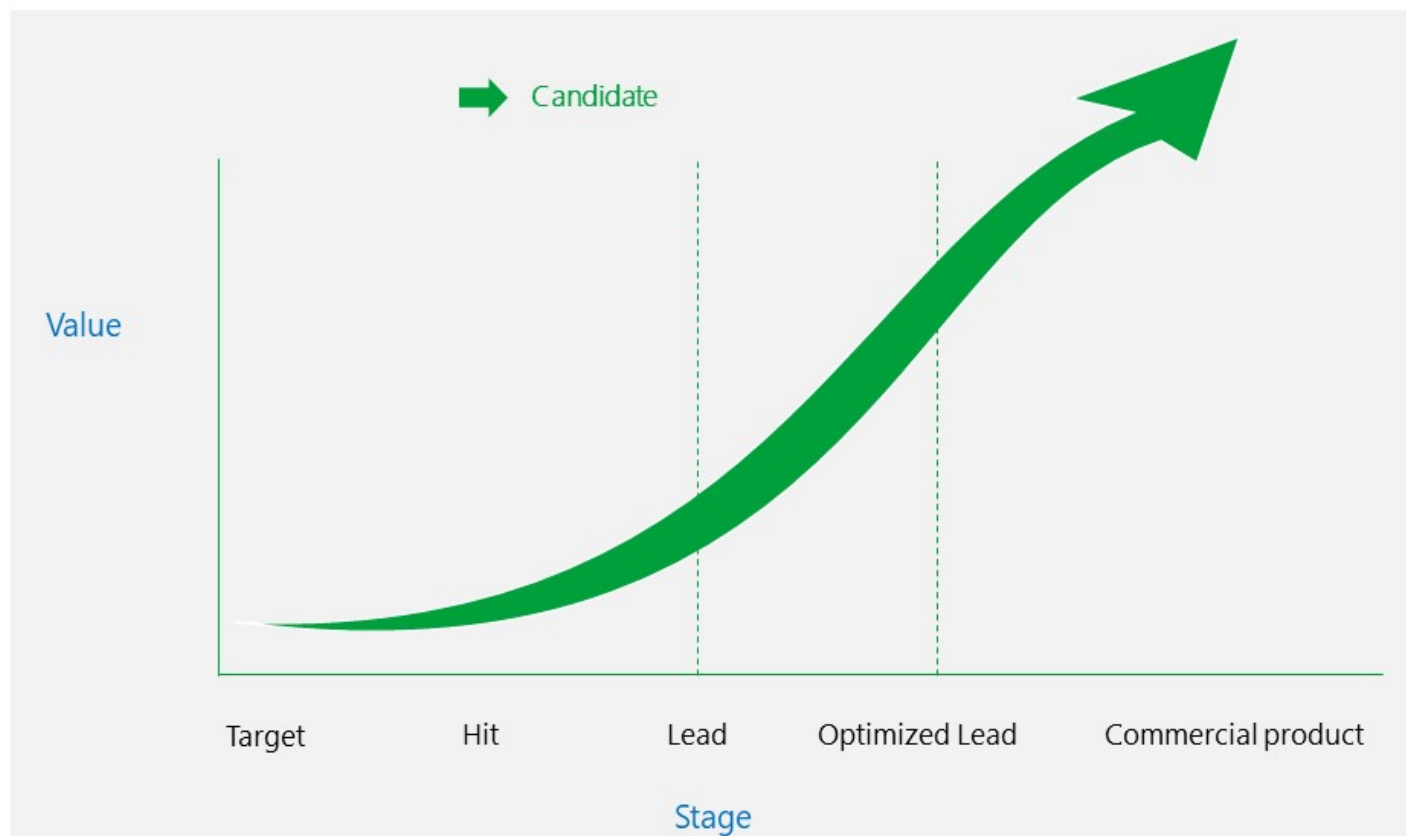


Product development stages



Business model – value creation through product development process

As candidates move further through our pipeline, we expect to receive higher fees from collaborators and licensees.



Crop protection industry

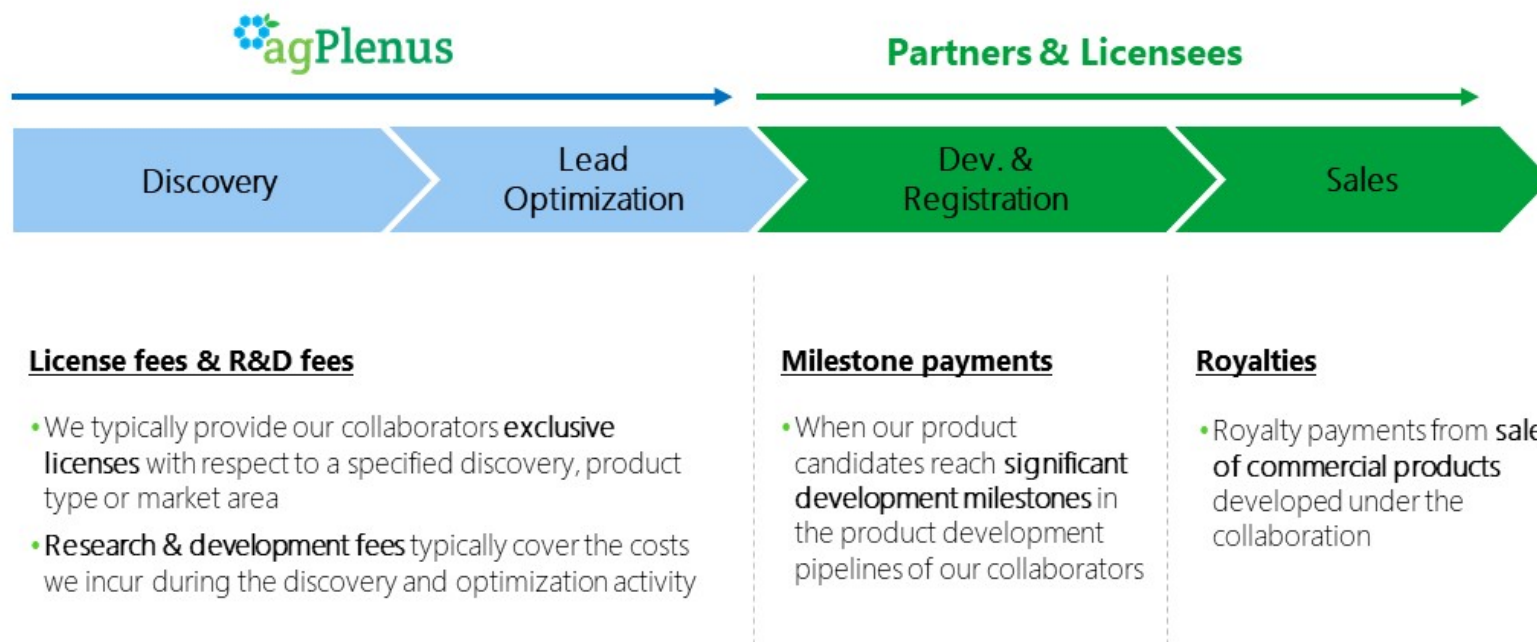
- Dominated by four Major ag-chemical companies



- 70%* of ag-chemical crop protection market
 - Pace of innovation and new product introductions have slowed
-
- Looking to smaller, ag-tech companies to develop new small-molecule candidates
 - AgPlenus is leading the integration of computational technology to discover small molecules
 - Focusing on developing products with new MoAs

* Canadian Council on Food Safety and Health

Business model & potential revenue stream



Corteva collaboration



- **Develop new MoA herbicides to target resistant weeds**

- Entered March 2020
- AgPlenus will discover and optimize herbicide candidates
- Corteva will conduct testing and product development



- **License to Corteva**

- Corteva has exclusive license to products of collaboration
- AgPlenus receives research fees, milestones and royalties upon commercialization



- **Goal for 2021**

- Advance development of collaboration compounds



Agenda

- Company introduction
- Business model
- **Product pipeline**
- Technology
- Milestone roadmap



Products under development



Herbicides:

- Novel MoA (Mode-of-Action) herbicides
- Optimize existing herbicides to overcome resistance
- High value crops – Corn, Soybean, Cereals, Rice, Cotton, Canola ...
- By 2022, addressable market expected: \$34B

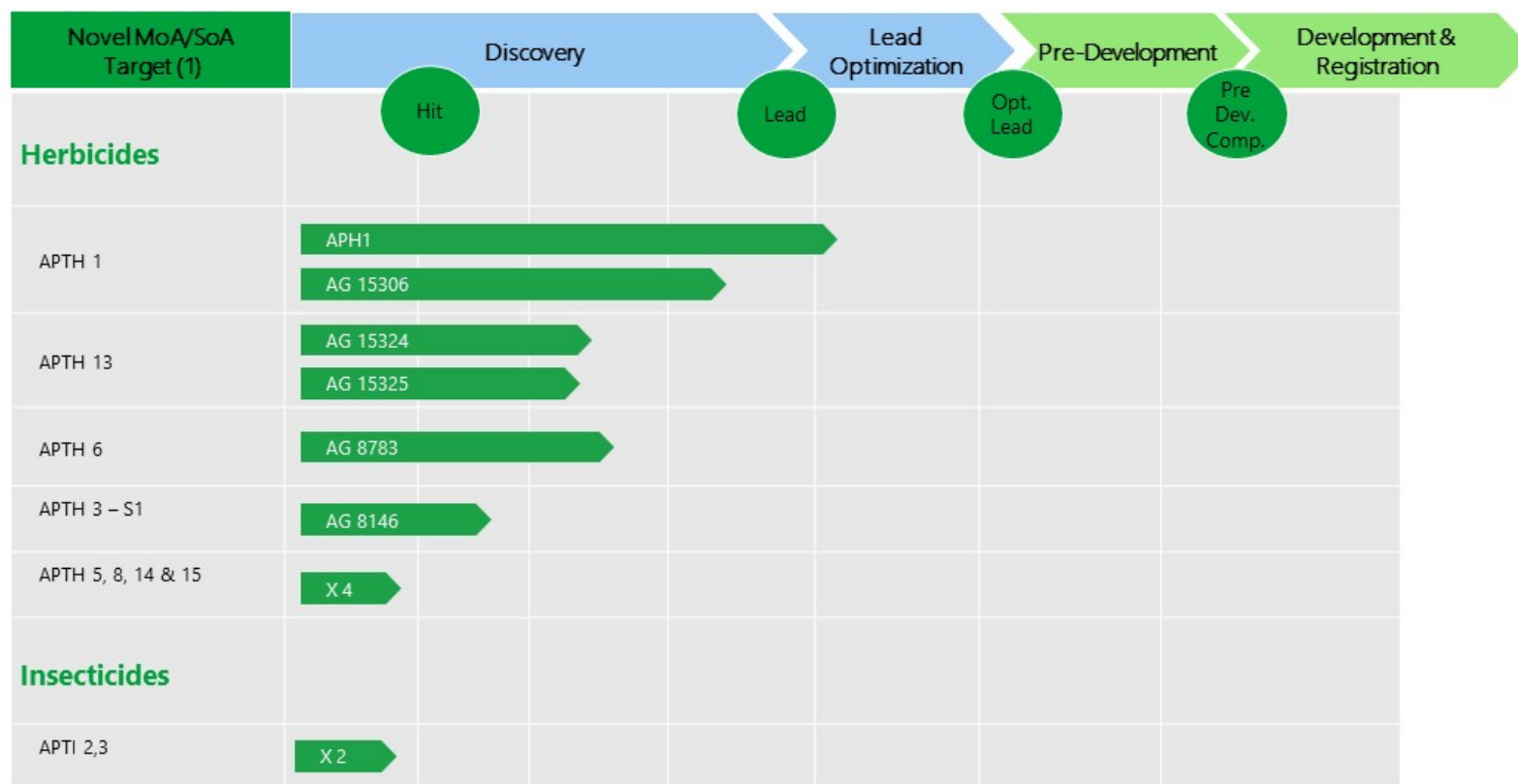


Insecticides:

- Novel SoA (Site-of-Action)
- By 2022, addressable market expected : \$19B

Sources: Research and Markets, Markets and Markets

AgPlenus product pipeline









APH 1 – New MoA herbicide reached Lead stage

- Broad-spectrum weed control at commercial dosage rates
- Effective against resistant weed strains – including *Palmer Amaranth*



(16DAA) (Rehovot, Israel; Aug. 2020)

APH 1 - a new MoA non-selective herbicide candidate

	Product Efficacy	<ul style="list-style-type: none">APH 1 displays herbicidal activity on multiple important weed species, both grasses and broad-leaves
	New MoA	<ul style="list-style-type: none">APH 1 active on a new MoA – providing a solution to the rising resistance problem
	Market Potential	<ul style="list-style-type: none">Relevant target crops – Cereals, Rice, Corn, Soybean, Cotton, Canola, Sugar beetLeading relevant geographies
	Safety	<ul style="list-style-type: none">APH 1 target/MoA does not exist in human – high safety potentialMolecule safety predicted using multiple computational tools
	Production	<ul style="list-style-type: none">Molecule and several analogs synthesizedOngoing efforts to reduce production costs
	Product Application	<ul style="list-style-type: none">Good solubility, APH 1 active in water-based formulationsAPH 1 active both in pre- and post-emergence applications



New MoA Herbicide active at commercial concentrations

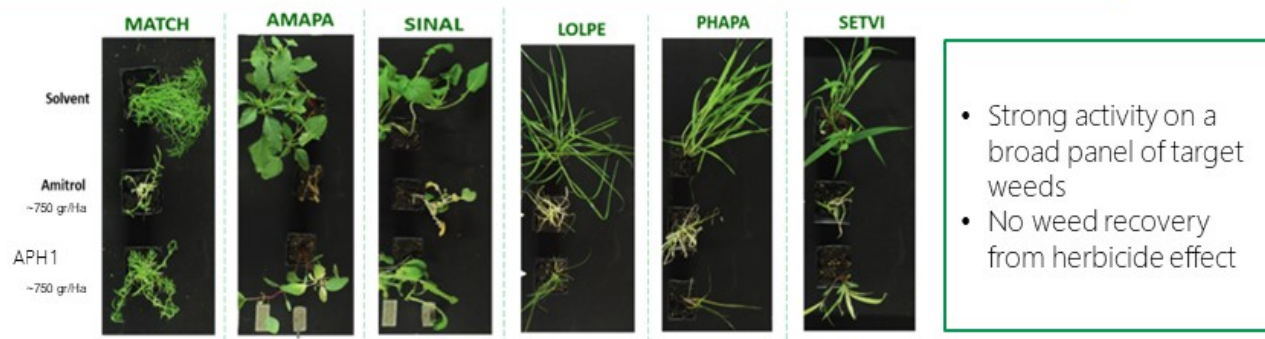


APH 1 – Product efficacy



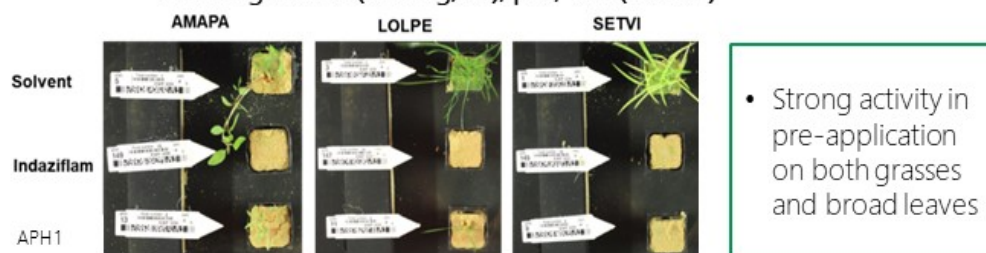
Product Efficacy

- APH 1 displays herbicidal activity on multiple important weed species, both grasses and broad-leaves



- Strong activity on a broad panel of target weeds
- No weed recovery from herbicide effect

LTP single dose (0.75 kg/ha), pre, TP2 (18DAA)



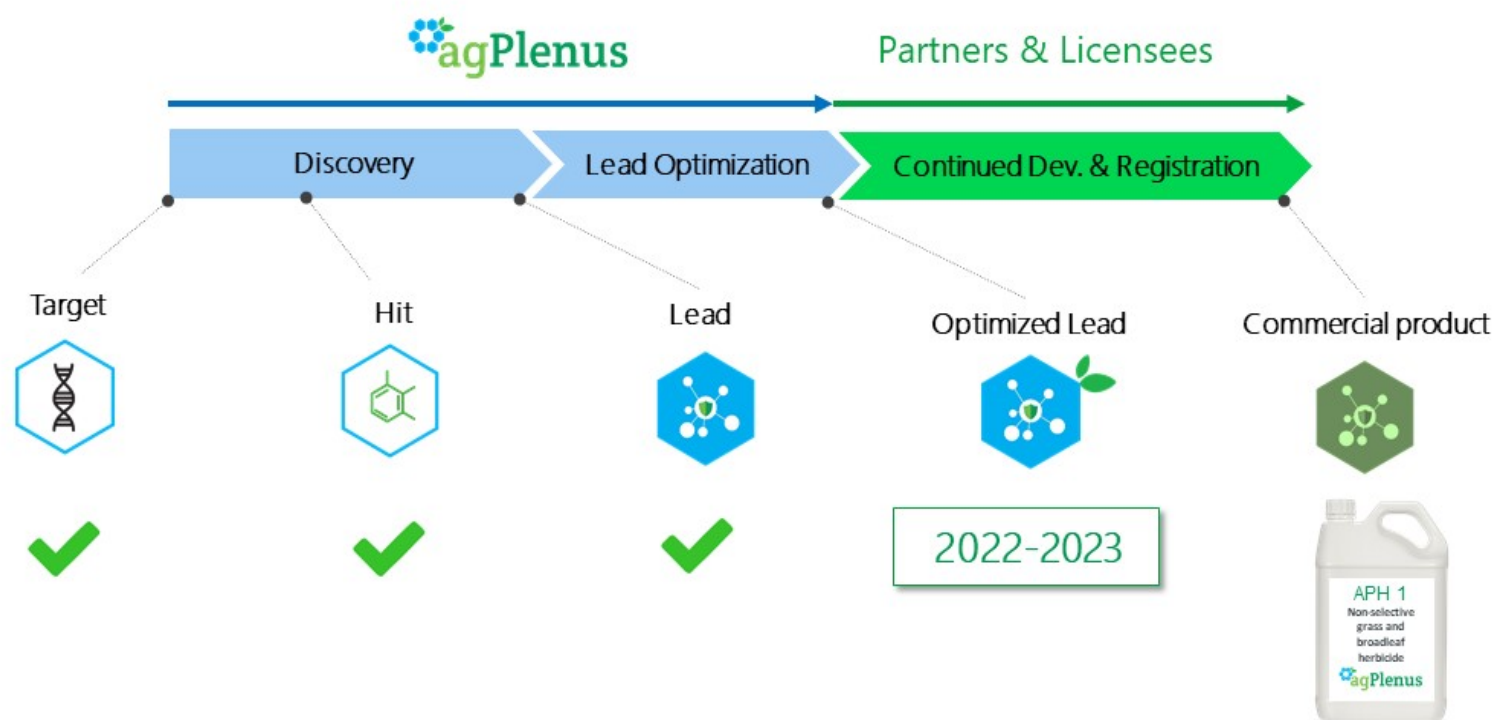
- Strong activity in pre-application on both grasses and broad leaves



Broad activity, pre and post application

APH 1 is a new MoA non-selective herbicide candidate

Key next milestones

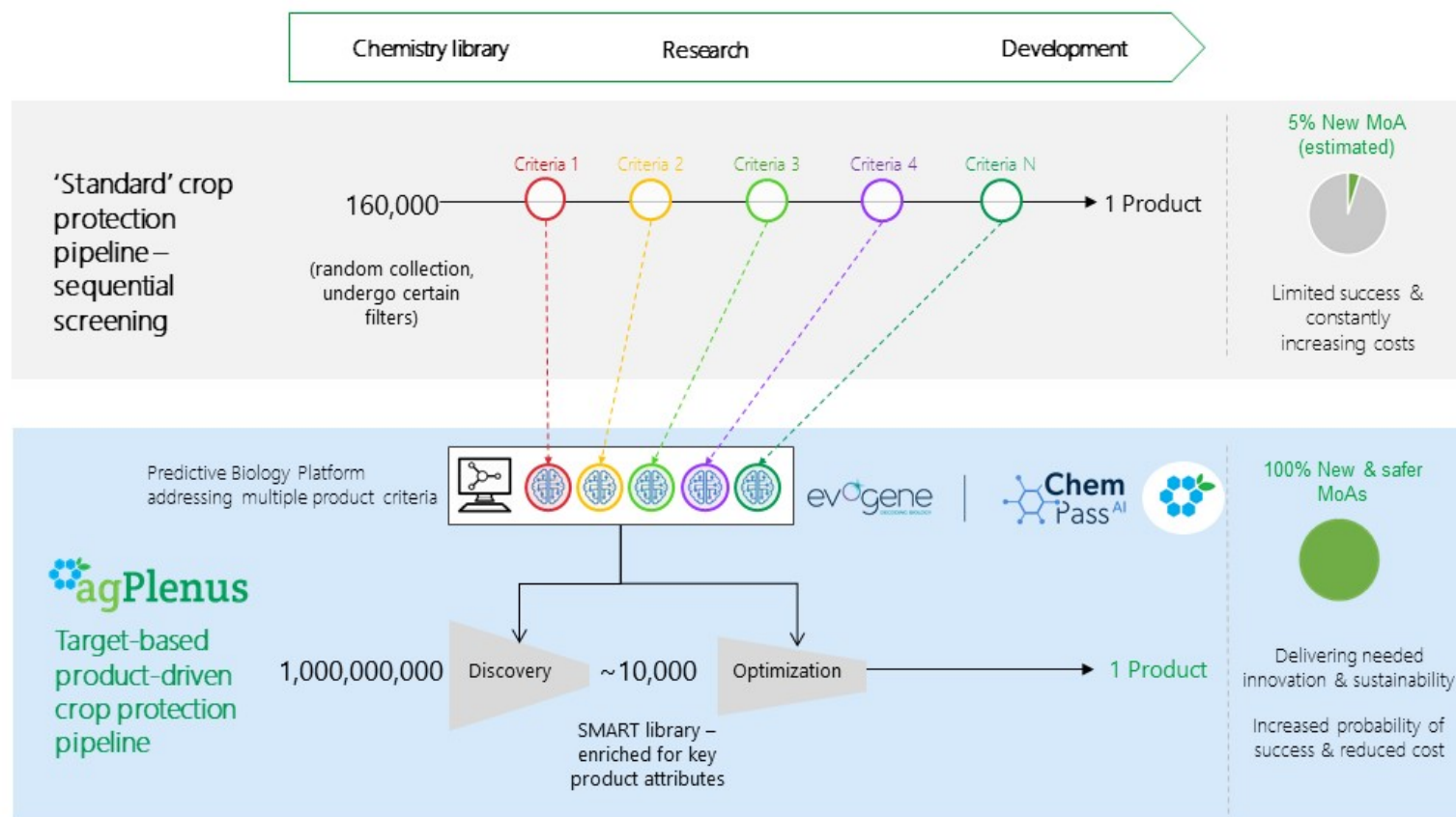


Agenda

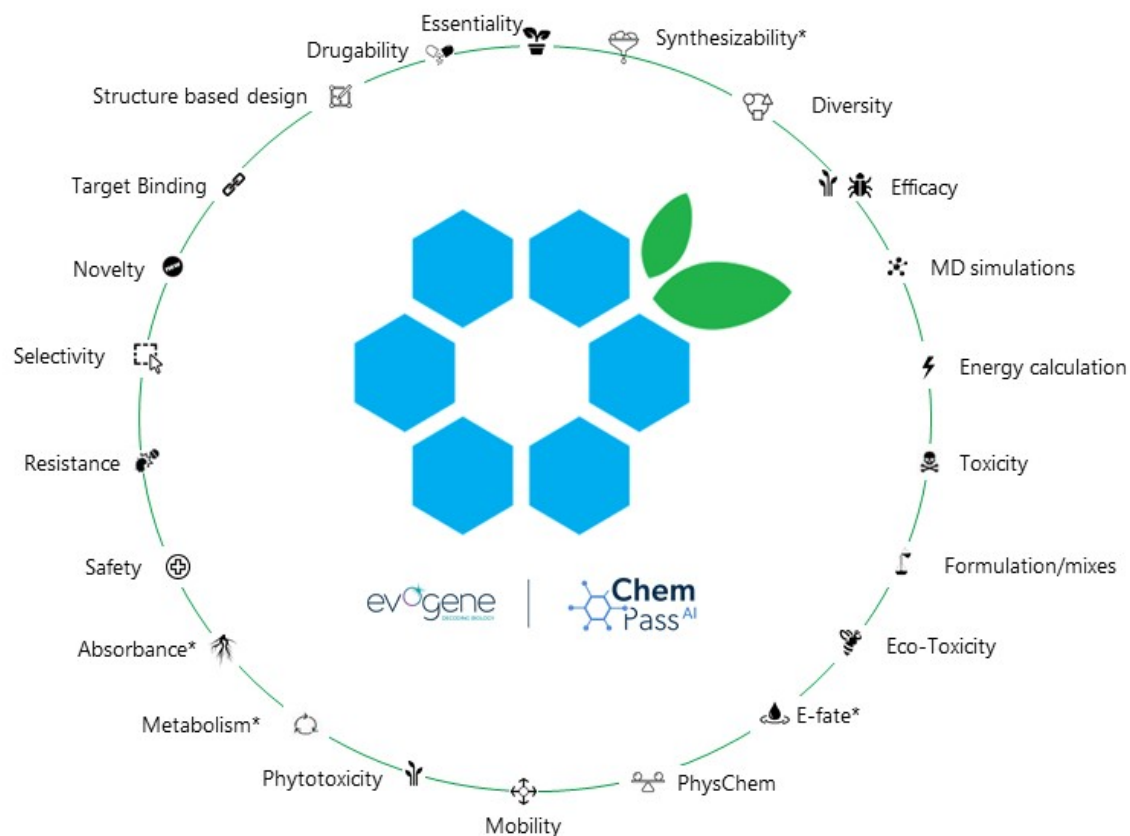
- Company introduction
- Business model
- Product pipeline
- **Technology**
- Milestone roadmap



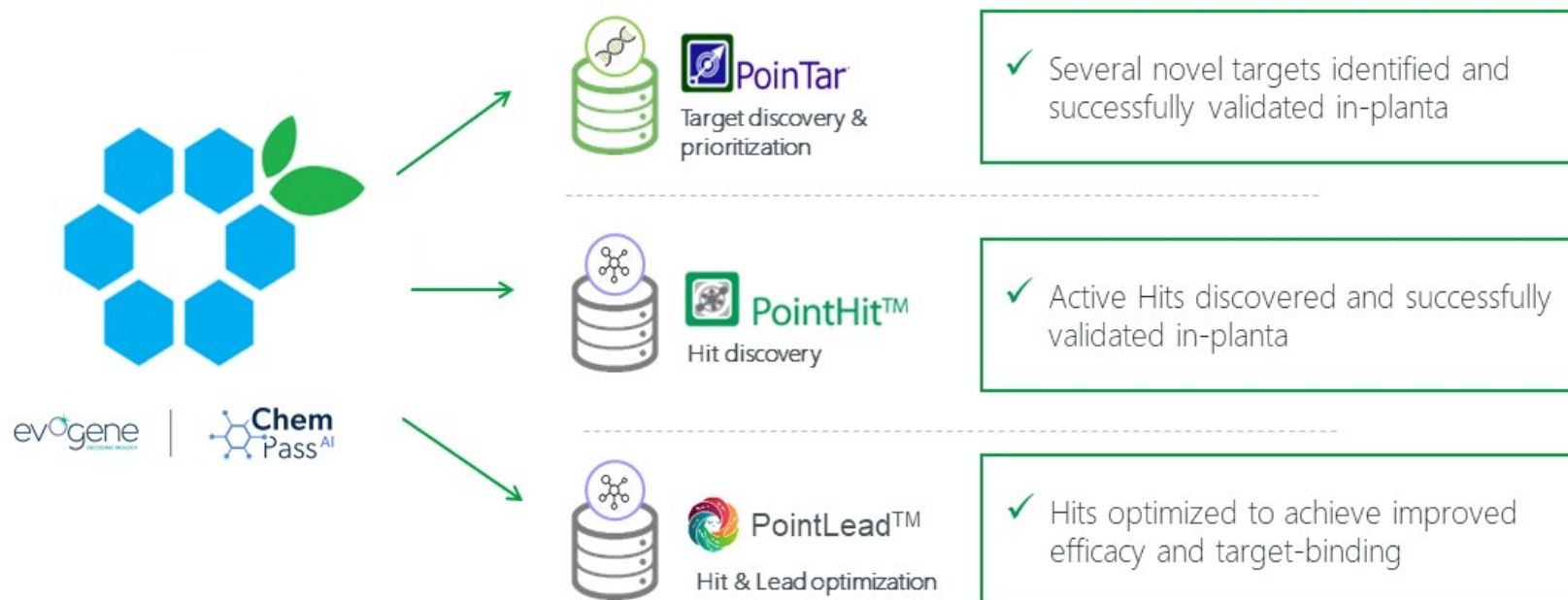
AgPlenus technology empowered by Evogene's ChemPass AI



Computational prediction of multiple product attributes



From target to an optimized lead



Experimental pipeline up to 'Lead' stage



Agenda

- Company introduction
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- **Milestone roadmap**



Expected main near-term value drivers

2021

- **New MoA Herbicide** – reach a herbicide tolerance trait POC for a 'Lead' herbicide under development
- **New MoA Herbicide/SoA Insecticide** – sign a licensing agreement for a leading candidate

2022

- **New MoA Herbicide** – reach an 'Optimized Lead' phase in the herbicide program
- **New MoA Herbicide** – sign a strategic agreement for the development of an 'Optimized Lead' compound

We are AgPlenus

Creating effective,
sustainable and safer
crop protection
products





THANK YOU





BIOMICA

Microbiome-Empowered Therapeutics

April 2021

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HIGHLIGHTS

Mission

Developing innovative microbiome-based therapeutics

Emerging biopharmaceutical company

Focus

Treatment of immune-mediated and infectious diseases:

- Immuno-Oncology
- Gastrointestinal (GI) related disorders
- Antimicrobial resistance (AMR)

Pipeline

Enabled by a unique computational predictive biology platform (combining 'Big-Data' & Artificial Intelligence technologies)

Founded Israel, 2017

evogene

Subsidiary of Evogene Ltd.
(NASDAQ, TASE: EVGN)

A pioneer in the field of
applied computational
predictive biology

Holds Approx. 90%



The Microbiome and its Functions

The human gastrointestinal tract comprises approximately 10^{14} microbes and amounts to a biomass of approximately 2kg!

Trillions of microbes living in & on our bodies, acting as a "**Other Genome**"

For every human gene there are 100 microbial genes

Microbes play a **critical role** in food digestion, protection from diseases and production of nutrients

Clinical evidence is accumulating for microbiome's role in a wide array of illnesses

Solving dysbiosis, a state of microbial imbalance in the body, is at the **core of new therapeutic approaches**

Market Landscape

↑ Rapid growing industry

2024

70%
CAGR

Multi \$Bn
market opportunity

> \$4Bn
invested in microbiome
companies since 2014

2018

A record
in Microbiome investment levels are
set in 2017 & 2018, and growing

Key Drivers

Big Pharma



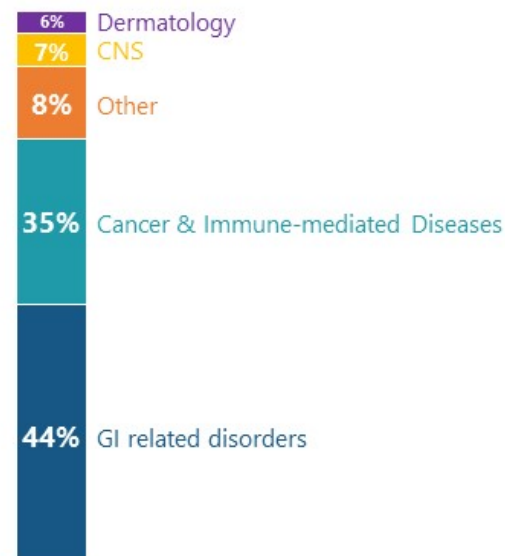
Prominent VCs



Active companies



Current areas of focus



Most candidates are still in the
discovery & preclinical stages;
few are in clinical stage (Ph. II/III)

Biomica's Mission and Focus



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

The Challenge

Microbiome space is Big-Data driven

Multi-OMICS big-data & clinical meta-data needed for addressing specific biological questions

How to cope with enormous amount of information?

The common practice:
The biological (trial and error) approach

It has 2 disadvantages:

A needle in a haystack...



Guessing the lottery numbers

The Competitive Edge

Our computational technologies enable
data integration, analysis & prediction

CPB⁺ platform

Databases generated
via data integration
capabilities

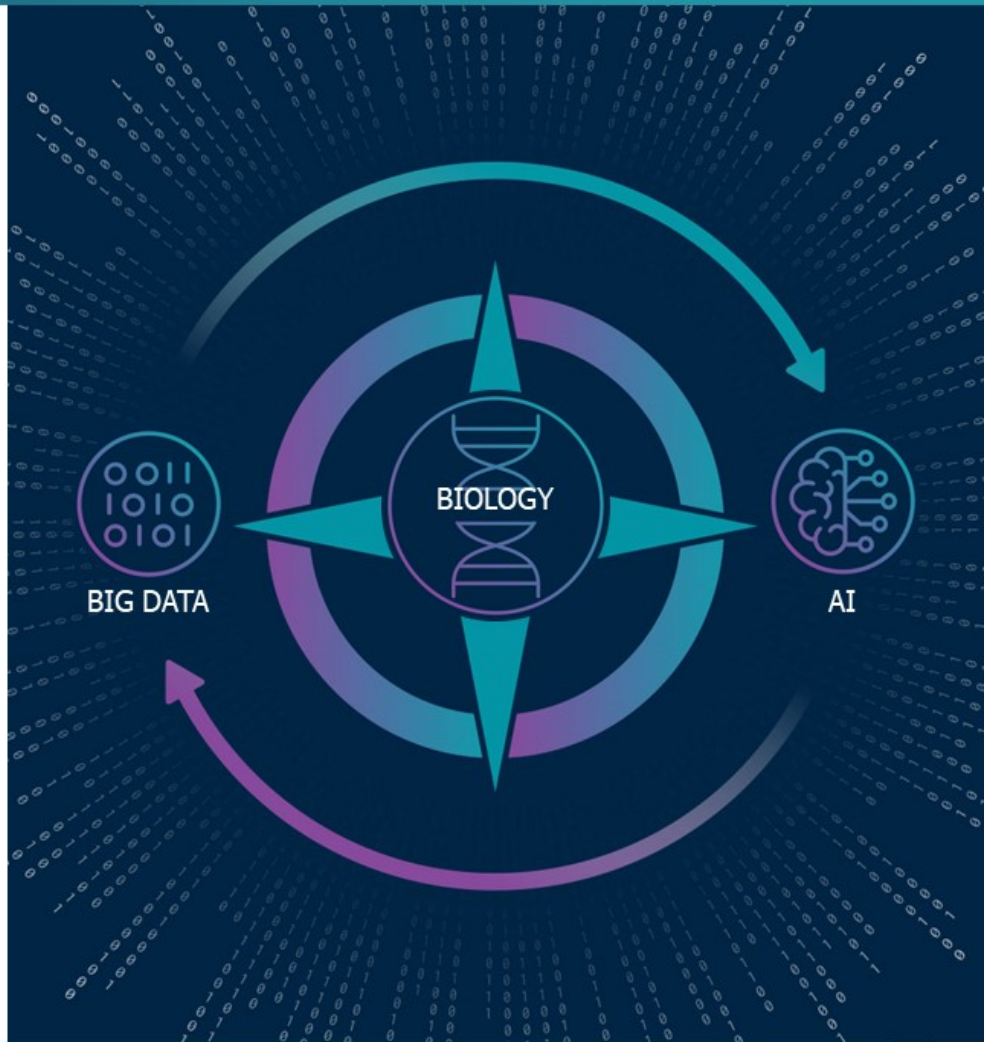


Proprietary
computational
algorithms (AI) utilized
to mine data

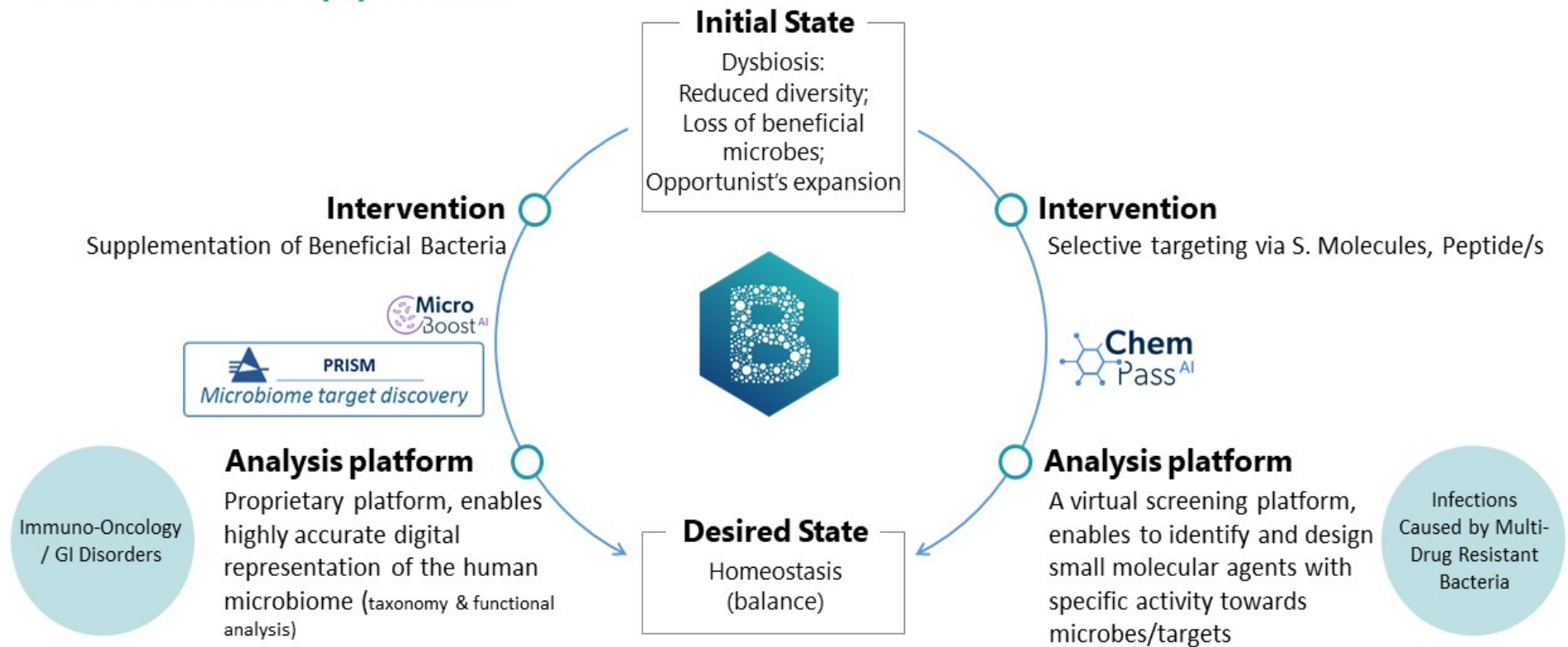
*Developed over two decades at an investment of tens
of millions of dollars and validated through
collaborations with industrial leaders & internal results*



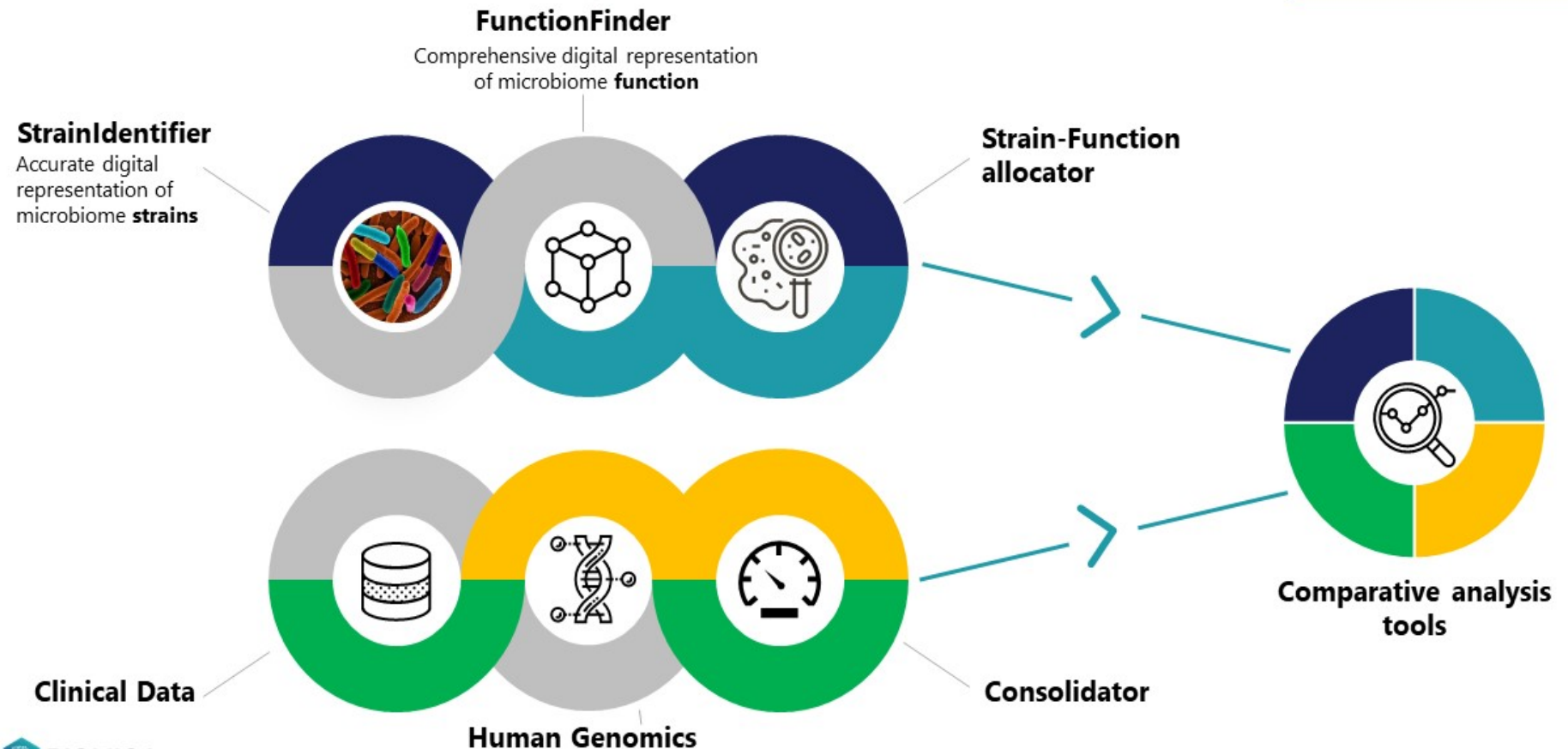
CPB⁺ – Computational Predictive Biology



Scientific Approach



PRISM - Platform Capabilities



Biomica's Edge

Our computational platform is capable of **unprecedented high-resolution** microbiome analysis

Pioneers in the field of **functional microbiome analysis**, leading innovative technology

Minimum Microbial Strains















Maximum Relevant Functions

Maximal Therapeutic Impact

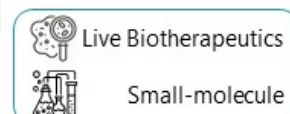
Advantages of our approach Vs. others in the field:

- Fecal Microbiota Transplant (FMT): Collection of 10,000s entities, no QC
- Single-strain method: We bring higher efficiency due to multiple MoAs
- Other multi-strain rationally-designed LBPs: We optimize a consortium for better efficacy with less adverse effects (due to fewer & carefully selected entities)

Biomica's Discovery Pipeline

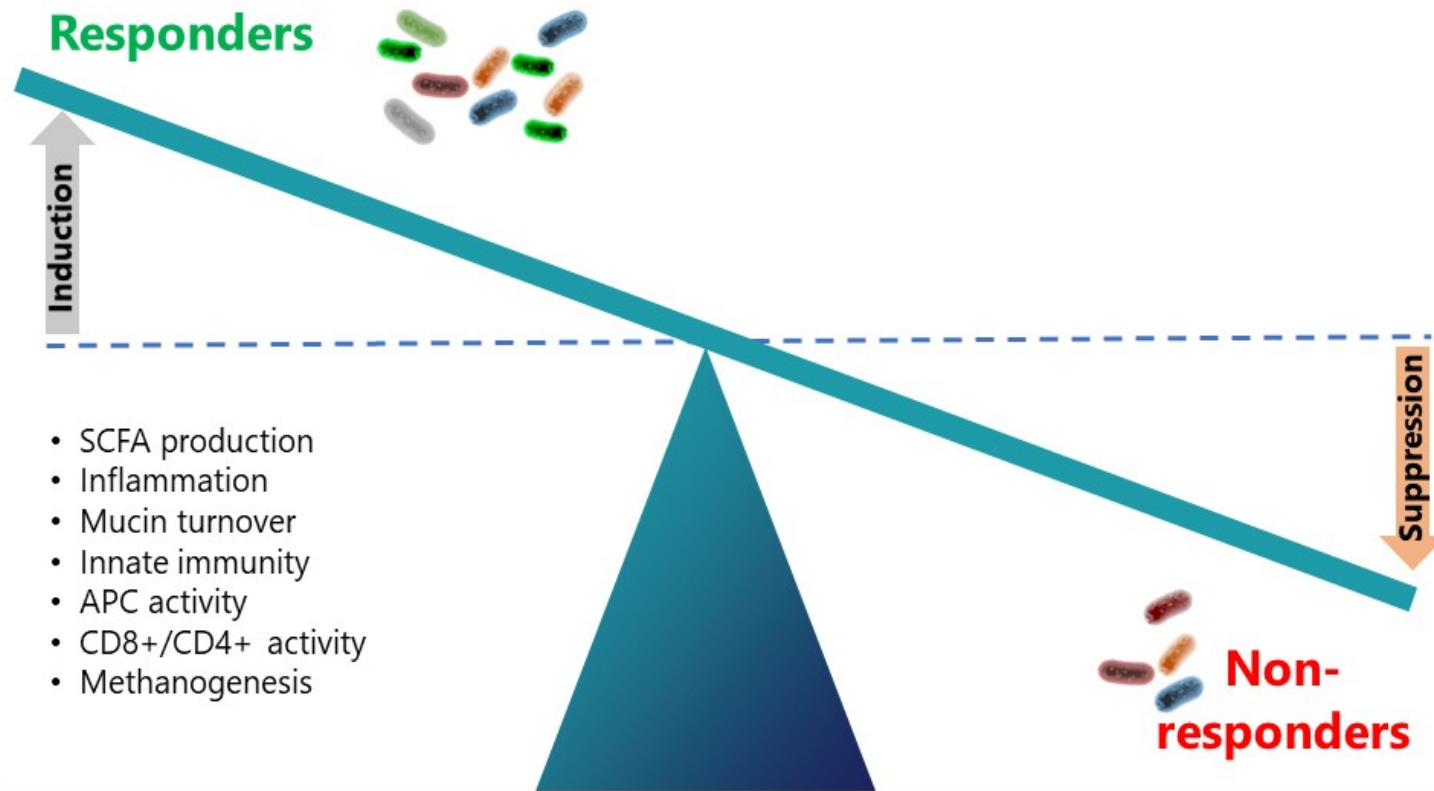
	Program	Indication / Target	Discovery	Preclinical	Phase 1	Phase 2	Approach
Immuno-oncology (with ICI*)	BMC121	Combination Therapy for NSCLC**					
	BMC127	Combination Therapy for NSCLC					
	BMC128	Combination Therapy for NSCLC					
GI related disorders	BMC321	IBD					
	BMC322	IBD					
	BMC426	IBS					
Antimicrobial resistance (AMR***)	BMC202	C. difficile toxin-B					

In the AMR Program, Biomica has a collaboration with Nobel Prize Laureate Prof. Ada Yonath at Weizmann Institute of Science to develop a selective treatment for MRSA



*Immune Checkpoint Inhibitors, ** Non-small-cell lung carcinoma (NSCLC), ***Previously this program was referred to as "Multi-drug resistant organisms"

Response to Immunotherapy is Modulated Through Specific Bacterial Functions



Fecal Microbiota Transplantation (FMT) and re-Induction of anti-PD-1 Therapy in Refractory Patients - POC

AAAS Become a Member

Science

Contents ▾

News ▾

Careers ▾

Journals ▾



Clinical studies are testing whether cancer immunotherapy drugs work better when patients receive a fecal transplant. JEFF MCINTOSH/THE CANADIAN PRESS/AP PHOTO

Fecal transplants could help patients on cancer immunotherapy drugs

By Jocelyn Kaiser | Apr. 5, 2019, 1:45 PM

"...Now, another potential therapy is being tested in clinical studies: fecal transplants. Early results from two groups described at the annual meeting of the American Association for Cancer Research (AACR) here this week suggest some patients who initially did not benefit from immunotherapy drugs saw their tumors stop growing or even shrink after receiving a stool sample from patients for whom the drugs worked..."

"...One unresolved question is exactly which microbes help ramp up the desired immune activity..."

Modulating gut microbiota to treat cancer

Science

REPORTS

Cite as: E. N. Baruch *et al.*, *Science* 10.1126/science.abb5920 (2020).

Fecal microbiota transplant promotes response in immunotherapy-refractory melanoma patients

Erez N. Baruch^{1,2,*†}, Ilan Youngster^{3,4}, Guy Ben-Betzalel¹, Rona Ortenberg¹, Adi Lahat⁵, Lior Katz⁶, Katerina Adler⁷, Daniela Dick-Necula⁸, Stephen Raskin^{4,9}, Naamah Bloch¹⁰, Daniil Rotin⁸, Liat Anafi⁸, Camila Avivi⁸, Jenny Melnichenko¹, Yael Steinberg-Silman¹, Ronac Mantani¹¹, Hagit Harati¹, Nethanel Asher¹, Ronnie Shapira-Frommer¹, Tal Brosh-Nissimov¹², Yael Eshet^{4,8,13}, Shira Ben-Simon¹⁰, Oren Ziv¹⁰, Md Abdul Wadud Khan¹⁴, Moran Amit¹⁵, Nadim J. Ajami¹⁴, Iris Barshack^{4,8}, Jacob Schachter^{1,4}, Jennifer A. Wargo^{14,16}, Omry Koren¹⁰, Gal Markel^{1,2,17,*†}, Ben Boursi^{4,18,19,†}

CLINICAL TRIALS

Fecal microbiota transplant overcomes resistance to anti-PD-1 therapy in melanoma patients

Diwakar Davar^{1*}, Amiran K. Dzutsev^{2*}, John A. McCulloch², Richard R. Rodrigues^{2,3}, Joe-Marc Chauvin¹, Robert M. Morrison¹, Richelle N. Deblasio¹, Carmine Menna¹, Quanquan Ding¹, Ornella Pagliano¹, Bochra Zidi¹, Shuowen Zhang^{1†}, Jonathan H. Badger², Marie Vetizou², Alicia M. Cole², Miriam R. Fernandes², Stephanie Prescott², Raquel G. F. Costa², Ascharya K. Balaji², Andrey Morgun⁴, Ivan Vujkovic-Cvijin⁵, Hong Wang⁶, Amir A. Borhani⁷, Marc B. Schwartz⁸, Howard M. Dubner⁸, Scarlett J. Ernst¹, Amy Rose¹, Yana G. Najjar¹, Yasmine Belkaid⁶, John M. Kirkwood¹, Giorgio Trinchieri^{2†§}, Hassane M. Zarour^{1,9†§}

Anti-programmed cell death protein 1 (PD-1) therapy provides long-term clinical benefits to patients with advanced melanoma. The composition of the gut microbiota correlates with anti-PD-1 efficacy in preclinical models and cancer patients. To investigate whether resistance to anti-PD-1 can be overcome by changing the gut microbiota, this clinical trial evaluated the safety and efficacy of responder-derived fecal microbiota transplantation (FMT) together with anti-PD-1 in patients with PD-1-refractory melanoma. This combination was well tolerated, provided clinical benefit in 6 of 15 patients, and induced rapid and durable microbiota perturbation. Responders exhibited increased abundance of taxa that were previously shown to be associated with response to anti-PD-1, increased CD8⁺ T cell activation, and decreased frequency of interleukin-8-expressing myeloid cells. Responders had distinct proteomic and metabolomic signatures, and transkingdom network analyses confirmed that the gut microbiome regulated these changes. Collectively, our findings show that FMT and anti-PD-1 changed the gut microbiome and reprogrammed the tumor microenvironment to overcome resistance to anti-PD-1 in a subset of PD-1 advanced melanoma.

Davar *et al.*, *Science* **371**, 595–602 (2021) 5 February 2021

1 | Cancer Immunotherapy - Combination Therapy

Initial Focus on Lung Cancer (NSCLC)

- Non-small cell lung cancer (NSCLC) is the leading cause of cancer-related mortality worldwide
- Current solutions reach only an average of **17%-20%*** overall response rate



Biomica aims to improve clinical response of ICI through immunomodulating combination therapy

BMC121 & BMC127

Rationally designed consortia aimed to facilitate anti-tumor activity in combination with ICI

- Orally administered capsule, comprised of 4 bacterial strains each, detected through Biomica's proprietary computational functional genomic analysis platform
- Strains were selected based on specific functional capabilities and their immuno-stimulatory potential
- The combination of 4 different microbial strains in a consortium is aimed to achieve effective immune activation through several underlying and complementary mechanisms

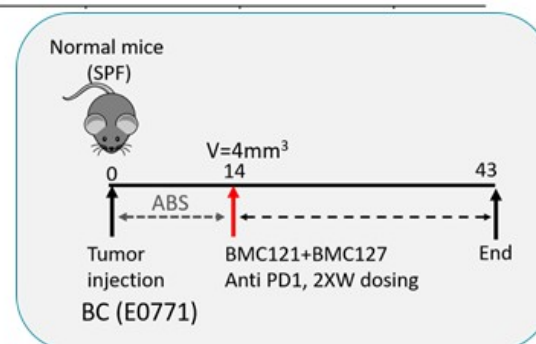
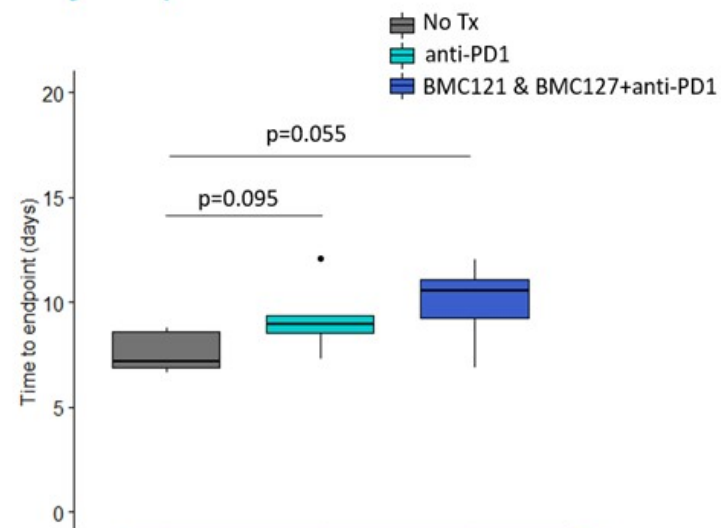
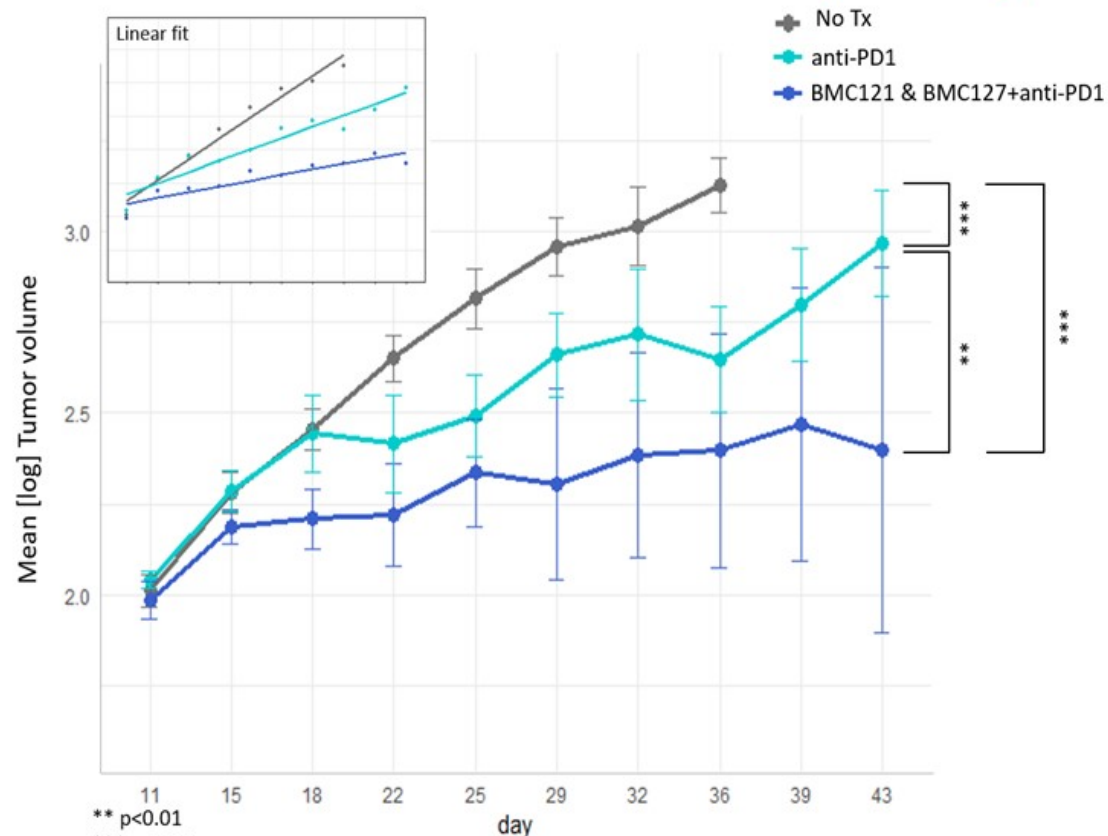
Consortium	Microorganism	Microbial component / function					Host response					Interactions with other microorganisms		
		Cell envelope component	SCFA production	Lactate production	Flagella	Mucin degradation	Dendritic cell activation and Th1 response	CD4/8 activation	NF- κ B activation	TLR activation	TNF α	Gut health	Consortium members	General gut
BMC121	BMCS111	■	■	■	■	■	■	■	■	■	■	■	■	■
	BMCS114	■	■	■	■	■	■	■	■	■	■	■	■	■
	BMCS115	■	■	■	■	■	■	■	■	■	■	■	■	■
	BMCS117	■	■	■	■	■	■	■	■	■	■	■	■	■



* American Cancer Society: Cancer Facts and Figures 2018. Atlanta, Ga: American Cancer Society, 2018.

BMC121 & BMC127 potentiate the effect of anti-PD1 therapy *in vivo*

Mean Tumor Volume and Time To Endpoint significantly improved



Optimizing our IO consortia: BMC128

Consortium	Microorganism	Microbial component / function					Host response					Interactions with other microorganisms		
		Cell envelope component	SCFA production	Lactate production	Flagella	Mucin degradation	Dendritic cell activation and Th1 response	CD4 ⁺ activation	IELs activation	TLR activation	Tregs	Gut health	Consortium members	General gut residents
BMC121	BMC111													
	BMC114													
	BMC115													
	BMC117													

Consortium	Microorganism	Microbial component / function					Host response					Interactions with other microorganisms	
		Cell envelope component	SCFA production	Lactate production	Polysaccharides degradation	Mucin degradation	Dendritic cell activation and Th1 response	CD4 ⁺ activation	IELs activation	TLR activation	Gut health	Consortium members	General gut residents
BMC127	BMC119												
	BMC113												
	BMC116												
	BMC1111												

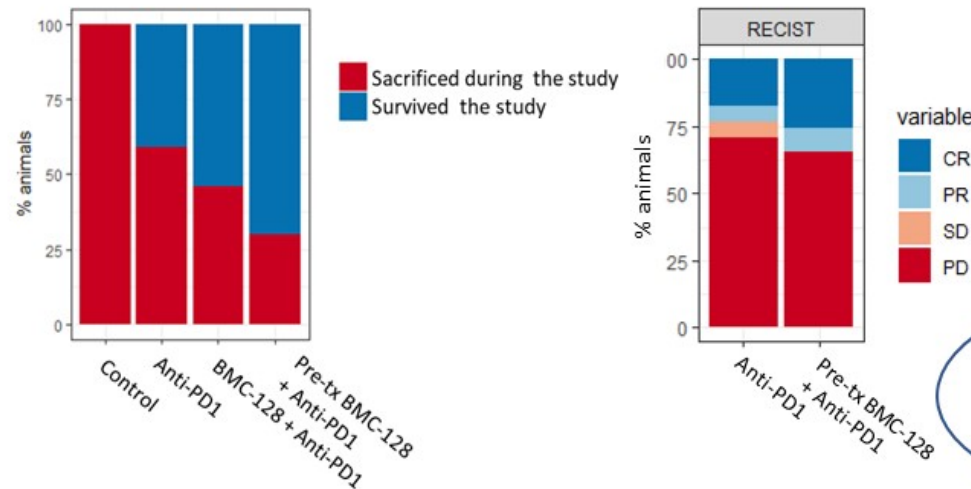
A new combination providing all microbial functions & presenting higher likelihood for survival in GI.



BMC128



BMC128 administered prior to and in combination with anti-PD1 significantly improved anti-tumor activity



Biomica Announces Positive Pre-Clinical Results in its Immuno-Oncology Program

Biomica's, a subsidiary of Evogene Ltd., live biotherapeutic drug candidate BMC128 administered in combination with Immune Checkpoint Inhibitors (ICI) significantly improved anti-tumor activity. Proof-of-concept first-in-man studies expected next year

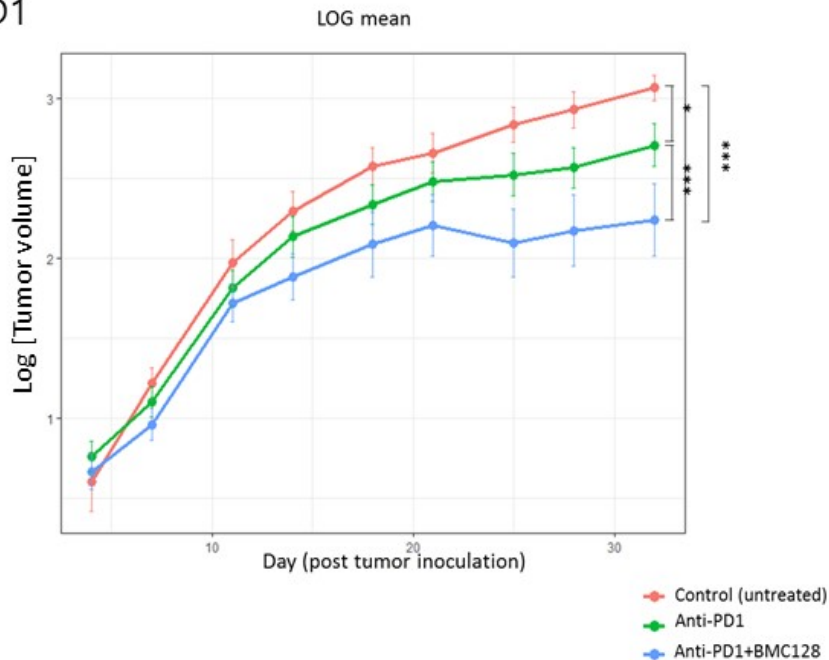
Rehovot, Israel – September 8, 2020 – Biomica Ltd., an emerging biopharmaceutical company developing innovative microbiome-based therapeutics, and a subsidiary of Evogene Ltd. (NASDAQ: EVGN, TASE: EVGN), today announced positive pre-clinical in-vivo results in its immuno-oncology program for a follow-on combination of bacterial strains. In these studies, Biomica tested BMC128, which consists of four live bacterial strains derived from Biomica's drug candidates BMC121 and BMC127. Treatment with BMC128, both prior to and in combination with ICI, significantly improved anti-tumor activity in mice.

ORR (CR+PR):
23.5% vs 34.8%
48% increase in responders

The study indicates that pre-treatment with BMC128 conditions the immune system and primes it for an efficient anti-tumor response

BMC128 Demonstrating Efficacy of in Melanoma

BMC128 significantly enhanced anti-tumor activity, resulting in an increased response of melanoma tumors to anti-PD1



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

NEWS PROVIDED BY
Biomica
Apr 13, 2021, 07:00 ET

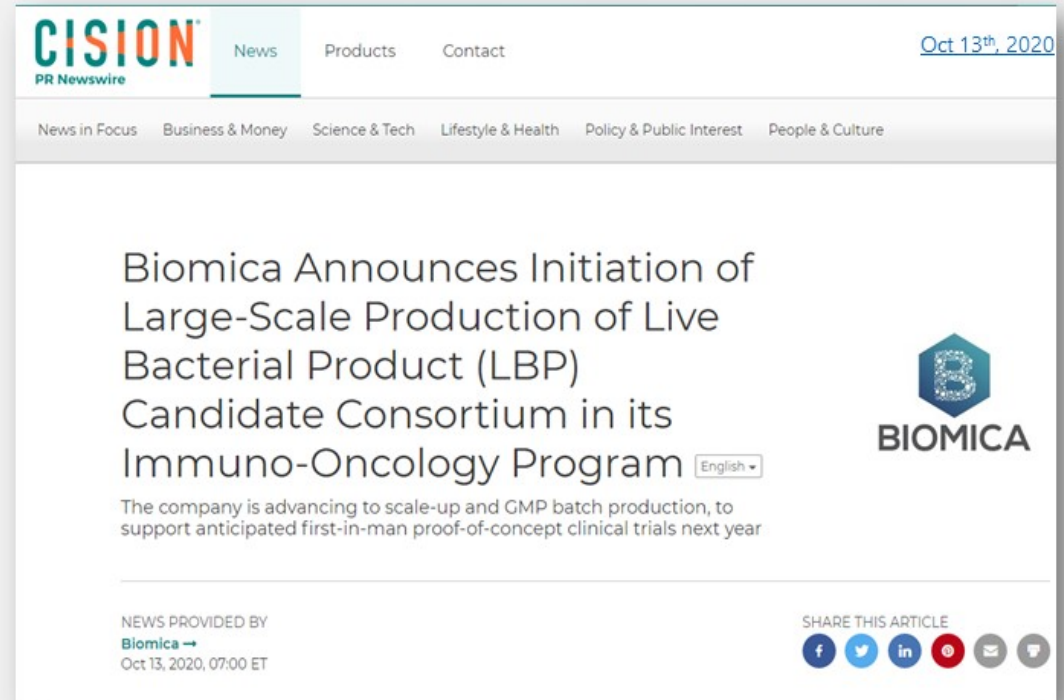
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These results demonstrate the potential applicability of BMC128 and its relevance to **treating multiple types of solid tumors**

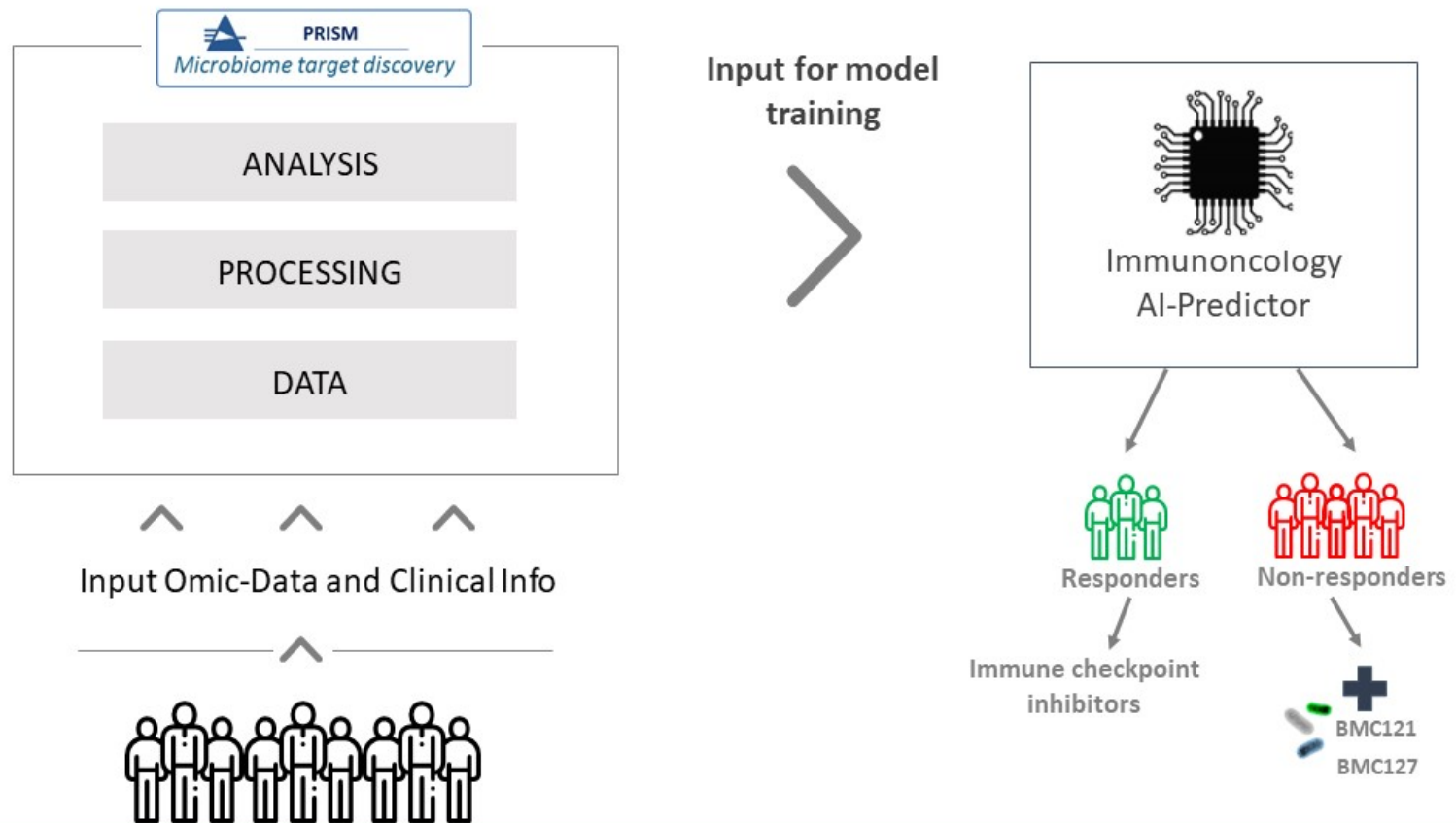
First-in-human, proof of concept study expected to initiate later this year

- BMC128 consists of **4 live bacterial strains**
- Results demonstrated a significant **reduction of tumor volume**, and **increased animal survival** compared to anti-PD1 therapy alone
- **MOA is immune mediated**- increased tumor inflammation & infiltration of T lymphocytes and NK cells
- Potential applicability in the treatment **various types of solid tumors**



Predictor of Patients' Response to ICI

Utilizing AI and PRISM-generated high-res microbiome profiles



2 | GI Related Disorders

IBS & IBD

Irritable Bowel Syndrome (IBS)*

A common intestinal functional disorder, group of symptoms:

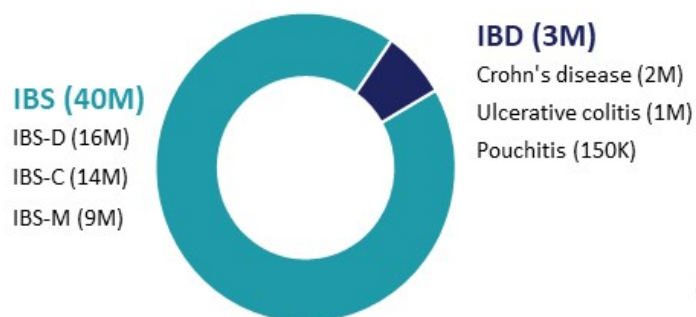
- Abdominal Pain
- Constipation or Diarrhea
- Bloating, Gas & Diarrhea

In collaboration with The University of North Carolina (UNC) at Chapel Hill

Inflammatory Bowel Disease (IBD)**

A group of inflammatory conditions of the colon and small intestine (Crohn's disease, Ulcerative colitis & Pouchitis)

Approximate number of patients: 43M



Approximate market size (USD)

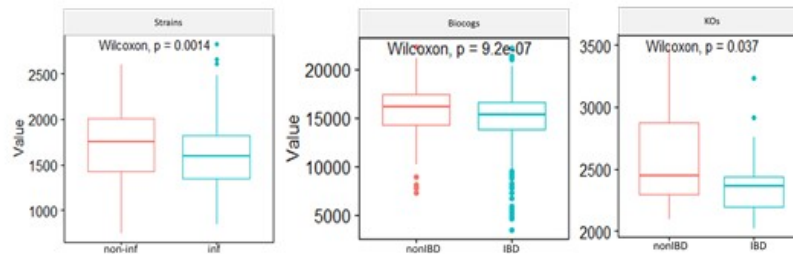


Both clearly related to the microbiome

Biomica pushes the barriers posed by existing therapies by addressing the underlying cause of the disorder, rather than the symptoms

Established Role for Microbiome in IBD Etiology

A state of inflammation is associated with reduced richness of microbial taxa and functions



Roles for Intestinal Bacteria, Viruses, and Fungi in Pathogenesis of Inflammatory Bowel Diseases and Therapeutic Approaches

R. Balfour Sartor^{1,*} and Gary D. Wu^{2,*}

¹Departments of Medicine, Microbiology & Immunology, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599

²Division of Gastroenterology, Perelman School of Medicine, the University of Pennsylvania, Philadelphia, PA 19104

Gastroenterology, 2017 February

Therapeutic Manipulation of the Microbiome in IBD: Current Results and Future Approaches

Jonathan J. Hansen, M.D., Ph.D.¹ and R. Balfour Sartor, M.D.²

Jonathan J. Hansen: jhansen@med.unc.edu; R. Balfour Sartor: rsb@med.unc.edu

Curr Treat Options Gastroenterol, 2015 March

BMC321 & BMC322

Rationally designed consortia aimed to reduce inflammation for the treatment of IBD

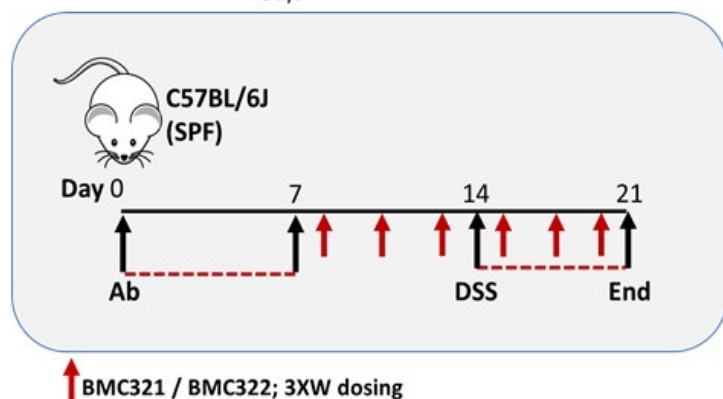
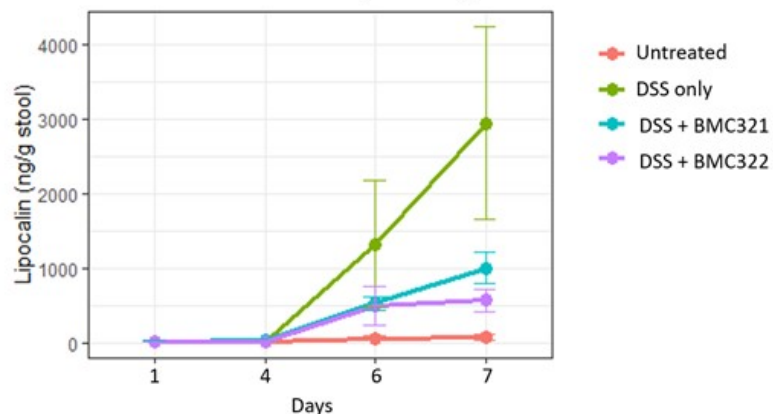
- Orally administered capsule, comprised of 4 bacterial strains each, detected through Biomica's proprietary computational functional genomic analysis platform
- Strains were selected based on their anti-inflammatory functions targeting both immunocytes and intestinal mucosal cells
- The combination of 4 different microbial strains in a consortium is aimed to effectively attenuate inflammation through several complementary mechanisms
- Support growth and metabolism of other consortium members and the growth of additional favorable gut resident bacteria

Consortium	Microorganism	Microbial component / function						Host response							Interactions with other microorganisms		
		SCFA	Function 61458	Function 314622	Function 314623	Function 32072	Function 2456	Tregs ↑	mechanism1	mechanism2	mechanism3	mechanism4	mechanism5	mechanism6	mechanism7	with other members in consortium	with other gut residents
BMC3 21	BMCS311																
	BMCS315																
	BMCS313																
	BMCS318																

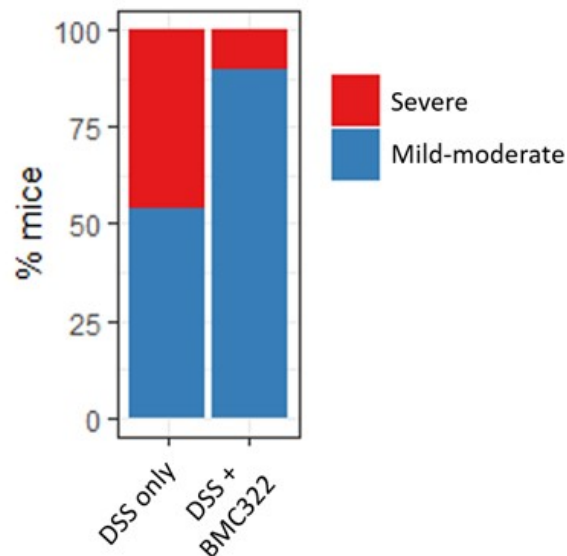
Currently undergoing pre-clinical studies

BMC321 & BMC322 indicate to reduce inflammation in a DSS-treated mouse model*

Gut Inflammation level, During DSS treatment

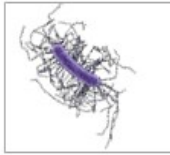


Inflammation status
Day 7 of DSS treatment



Severe inflammation (% of total number of mice):
Control - 43% VS. BMC322- 10%

3 | C. difficile Infection (CDI) - Landscape



Gram-positive, anaerobic, spore-forming, toxin-producing bacillus



Most common hospital-acquired infections (Over 600,000 a year)



Increasing cause of morbidity and mortality (older hospitalized patients)



Incidence & associated mortality progressively increasing in W. countries



15%–25% of all cases of antibiotic-associated diarrhea result from CDI

- **Pathogenicity of C. difficile is mainly mediated by two exotoxins**
- Infection manifestations:
 - Diarrhea
 - Abdominal cramping and pain
 - Fever
 - Nausea
- **The economic cost of CDI est. as \$5.4Bn mostly due to hospitalization**

BMC202

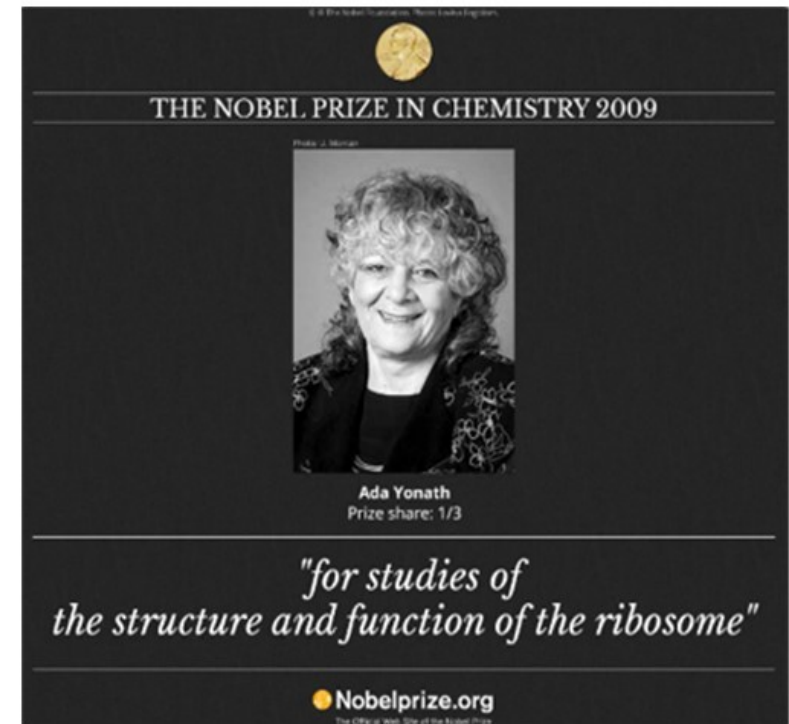
- Our approach is to utilize **BMC202** as a non-antibiotic inhibitor of C. difficile toxin, which is responsible for the symptoms associated with CDI, **while preserving healthy gut microbiome**
- BMC202 is a selective anti-bacterial agent designed to inhibit the glucosyl-transferase domain of the C. difficile toxin (TcdB)
- The drug candidate has been identified using Biomica's in silico chemical screening platform, which enables high throughput screening of a database of **~300M** molecules.

A collaboration between Biomica and the Weizmann Institute of Science

The company has in-licensed IP and knowhow generated by the Nobel Prize Laureate Prof. Ada Yonath, who supports Biomica's work on this program

Biomica develops a **selective** treatment against antibiotic resistant strains of *Staphylococcus aureus* (MRSA) infection, in a microbiome focused approach utilizing proprietary computational tools

- MRSA is a multi-drug resistant bacterium, responsible for several difficult-to-treat infections, leading to tens of thousands of annual cases of mortality in the US
- MRSA market in 2016 was approximately \$2.9Bn, projected to reach over \$3.9Bn by 2025*.



[*https://www.prnewswire.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](https://www.prnewswire.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)

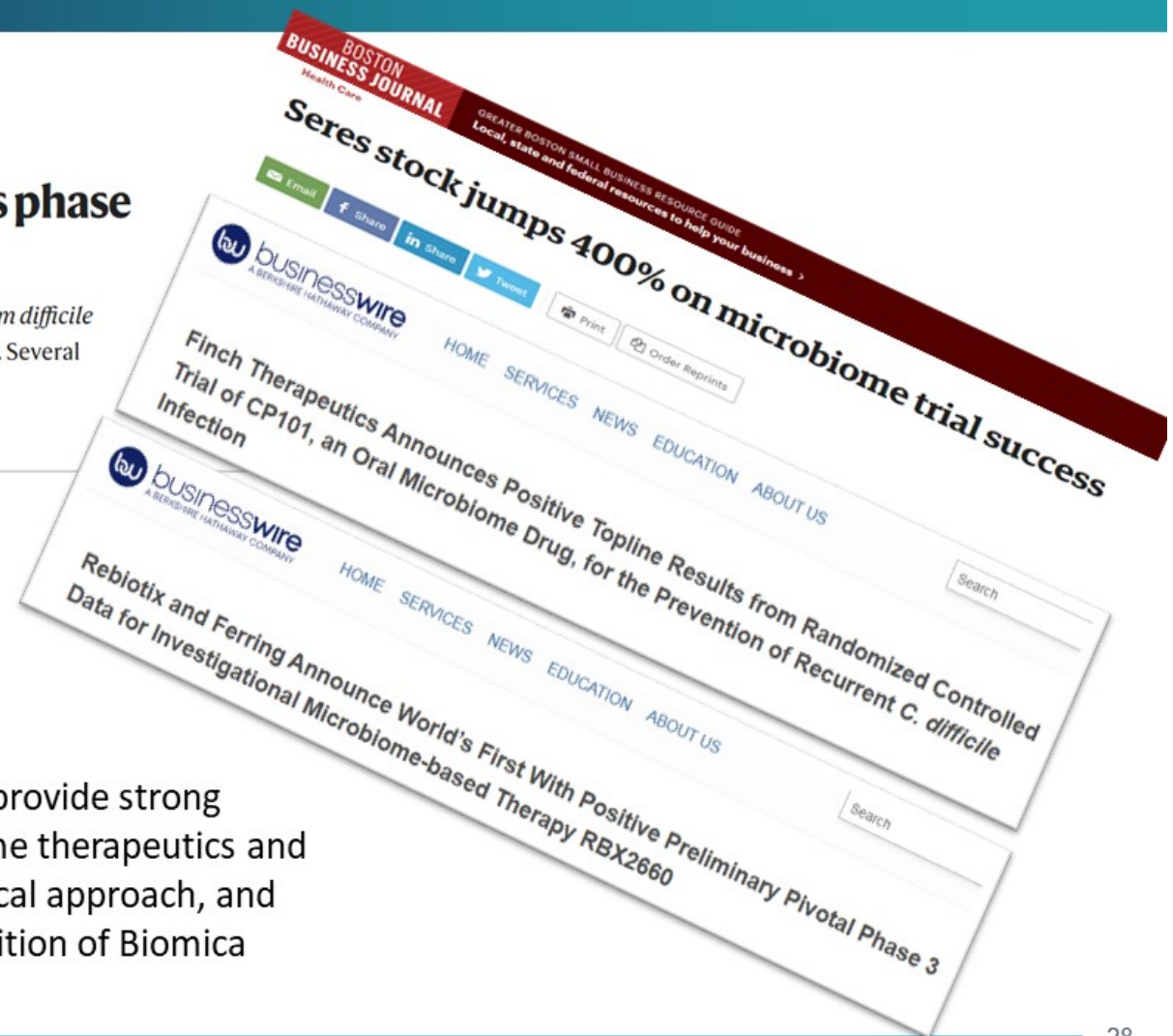
First microbiome-based drug clears phase III, in clinical trial turnaround

Seres Therapeutics' stool-derived treatment for recurrent *Clostridium difficile* infection could become the first FDA-approved microbiome therapy. Several other live biotherapeutic microbial products are close behind.

Ken Garber



The recent positive Phase 3 clinical data provide strong validation for the utilization of microbiome therapeutics and helps validate Biomica's science and clinical approach, and demonstrates the potential value proposition of Biomica



Management



Dr. Elran Haber, CEO

- Previously served as the CEO of Therapix Biosciences (Nasdaq, TASE: TRPX), leading the company to a successful IPO on Nasdaq, and advancing the company's programs to clinical stage
- Spent more than 10 years as Chairman and board member of several privately held, and publicly traded, companies
- Served in senior executive roles in various life science companies and a private investment firm
- Holds a PhD in Pharmaceutical Science and an MBA in Finance & Financial Engineering, both from The Hebrew University of Jerusalem, Israel



Prof. Yehuda Ringel, CSO

- Chief Division of Gastroenterology and Hepatology at Meir Medical Center, Israel
- Professor of Medicine at Chapel Hill, North Carolina and is affiliated with University of North Carolina Hospitals
- Has more than 30 years of diverse experiences, especially in Gastroenterology and translational research, and an expert on IBS and functional motility disorders
- Recipient of several prestigious awards
- MD from Technion Institute of Technology, Israel



Dr. Shiri Meshner, VP of R&D

- Previously served as the head & principal investigator of the Dead Sea microbiology lab in the Dead Sea-Arava Science Center
- Spent over 5 years working in the pharma industry both in the US and in Israel (OSI pharmaceuticals and Teva pharmaceuticals)
- Holds a PhD in systems microbiology from the Department of Physics of Complex Systems at The Weizmann Institute

Board of Directors



Mr. Ofer Haviv, Chairman

- Serves as Evogene's (Nasdaq: EVGN), President and CEO as of late 2004. Prior to that he held the positions of Evogene's COO and CFO and was involved in the spin-off from Compugen
- Served as a Director of Finance and Treasurer at Compugen (NASDAQ: CGEN), includes two private placements and an IPO on NASDAQ



Mr. Doron Ben Ami, Director

- A seasoned executive with more than 20 years of management experience in the multinational biotech industry
- Served as Head of the Eastern Europe and Israel region at Merck (MSD), Managing Director of MSD Israel and previously as the General Manager of Lundbeck in Israel



Dr. Kinneret Savitsky, Director

- A seasoned Biopharma executive
- Serves as the CEO of FutuRx Ltd., the Israeli Biotechnology accelerator established by OrbiMed, Johnson & Johnson Innovation, JJDC and Takeda Pharmaceutical
- Currently serves as a Chairperson and Board member at number of privately held healthcare/pharma companies
- Served as the CEO of BioLineRx Ltd. (Nasdaq: BLRX)

Prof. Yehuda Ringel, Director

Scientific Advisory Board & Advisors

Prof. Yehuda Ringel



Chief Division of Gastroenterology and Hepatology at Meir Medical Center, Israel. Professor of Medicine at Chapel Hill, North Carolina and is affiliated with University of North Carolina Hospitals.

Prof. Willem M De Vos



Professor and Chair of Microbiology at Wageningen University, the Netherlands and Professor of Human Microbiomics at the University of Helsinki, Finland.

Prof. R. Balfour Sartor



Serves as the Midget Distinguished Professor of Medicine, Microbiology and Immunology and Director of the Multidisciplinary IBD Center at the University of North Carolina, Chapel Hill.

Prof. James Versalovic



Pathologist-In-Chief at Texas Children's Hospital and Director of Texas Children's Microbiome Center, Professor and Vice Chair of Pathology & Immunology at Baylor College of Medicine.

Prof. David Rubin



Section chief of gastroenterology, hepatology, and nutrition at University of Chicago Medicine. Chair-elect of the National Scientific Advisory Committee of the Crohn's and Colitis Foundation.

Dr. Ravid Straussman



Principle investigator of the Tumor microenvironment, tumor microbiome and resistance to anti-cancer therapy lab at the Weizmann Institute of Science, Israel.



SUMMARY

- Human Microbiome based therapeutics is a rapidly growing space, represents a multi \$Bn market opportunity
- Biomica develops innovative microbiome-based therapeutics utilizing a dedicated computational predictive biology tools
- Biomica's computational tools have been specifically developed to allow the processing of large amounts of data to obtain high-resolution mapping of microbial profiles to deliver optimized drug candidates
- Focus on high-value clinical programs for the development of therapies for antibiotic resistant bacteria, Immuno-Oncology and microbiome-related gastrointestinal (GI) disorders.
- Experienced Management Team, Board of Directors and world class Scientific Advisory Board



BIOMICA

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Company Presentation
April 2021

A subsidiary of **evogene**
DECODING BIOLOGY

Forward Looking Statement

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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, 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".

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A close-up photograph of cannabis buds. The buds are green and covered in a dense layer of white trichomes. Numerous yellow, hair-like structures (pistils) are visible, extending from the buds. The background is dark and out of focus.

INTRODUCTION

Company Overview

- Canonic was established in early 2019 as a **spin-off from Evogene** (NASDAQ, TASE: EVGN) focusing on medical cannabis
- Canonic has an **exclusive license** to develop cannabis varieties using Evogene's state-of-the-art **computational genomics technology**
- **Distinct advantage to tackle market challenges** by mapping, decoding and stabilizing the cannabis genetics
- **Breeding infrastructure** among the biggest in Israel and unique proprietary knowhow
- First generation varieties expected to produce **premium quality products** to connect the company with the patients and market
- **Product launch expected at early 2022**- the company is evaluating its first-generation varieties with licensed growers and in preparation for commercial cultivation
- Company products expected to be launched under the "**Canonic**" **brand** in Israel followed by the EU and NA with local partners
- Next generation products expected to focus on 2 major medical indications, **pain and inflammation** that are >60% of the medical market*

*Company estimate, based on data published by Israeli Health Ministry regarding number of medical cannabis users in Israel

OUR VISION

Commercialize effective, precise and stable medical cannabis products, based on novel cannabis varieties, for optimized therapeutic impact

We are here because genetics can make cannabis much more effective



Team



Dr. Arnon Heyman
CEO



Dr. Inbal Dangoor
VP R&D



Guy Adler
Product manager & business
development



Ido Zinger
Propagation



Elad Bonjak
Technician



Yoanatan Wegman
Agronomist



Dr. Michi Brog
Plant breeder

Directors and Advisory Board

Board of directors



Ofer Haviv
Chairman of the board
Evogene President & CEO



Raanan Cohen
Business strategy
Former CEO Koor industries



Dorit Kreiner
Finance
Evogene CFO

Advisors



Dr. Yossi Tam
Cannabinoid clinical research
Director, Multidisciplinary Center for
Cannabinoid Research of the Hebrew university



Dr. Yariv Brotman
Plant metabolic pathways
Ben Gurion University & Max Planck
institute of Molecular Plant Physiology



Shai Leviatov
Plant breeding
Commercial varieties breeding for
more than 30 years in top leading
multinational seeds companies



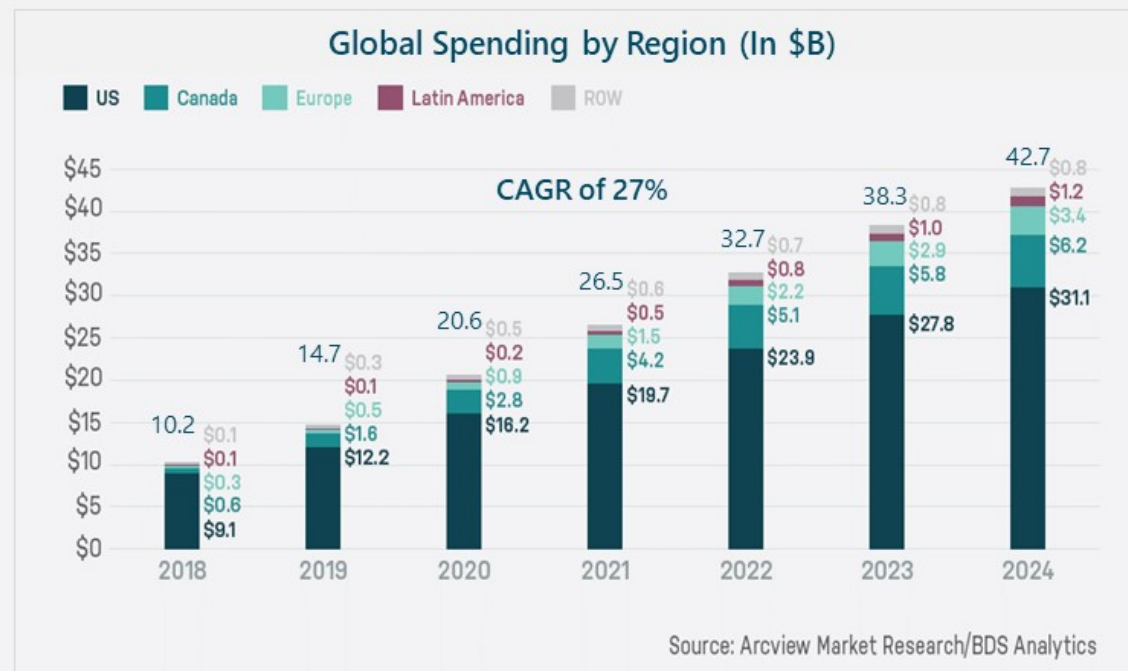
Adv. Itay Rosenfeld
Business strategy
Cannabis entrepreneur and
former BOD member of
Intelicanna (TLV: INTL)



Nirit Elyovich
Marketing strategy
Senior marketing specialist with
over 20 years of B2C experience in
various markets

Global Cannabis Market

Medical cannabis is >60% of the global market



Market Challenges & The Opportunity

THE CHALLENGES



STABILITY

Substantial variations within varieties produce inconsistent products and therefore inconsistent results



YIELD

More active compounds and income per sq foot



SPECIFICITY

Significant knowledge gap prevents matching active compounds to medical indications

THE OPPORTUNITY- With state-of-the-art plant genomic expertise Canonic can solve major market challenges

From Plant Genetics – To Medical Cannabis Products

Plant genetic knowhow is the basis for development of **premium Cannabis varieties**



Premium varieties lead to **novel medical Cannabis products** addressing market challenges

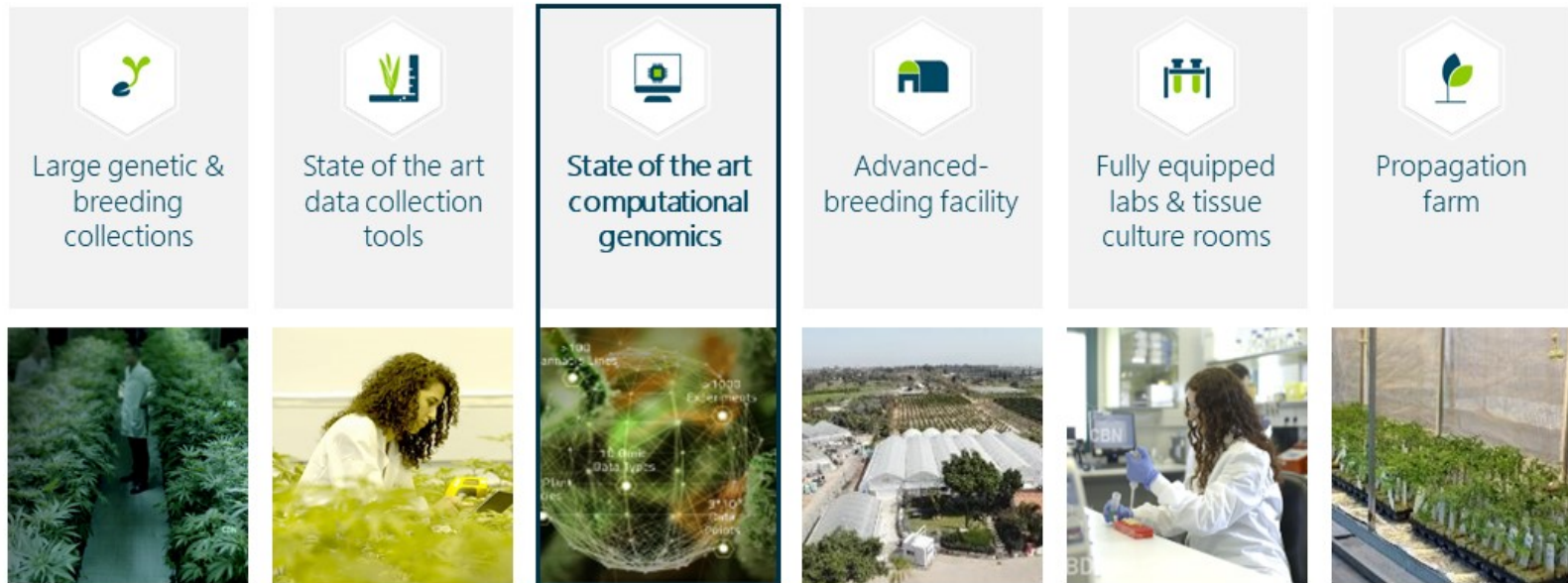


Technology



Proven Capabilities Along The Development Value Chain

The only company in Israel holding computational genomics capabilities and the full plant infrastructure to execute



The Genomic Power – Trait Improvement

The potential – improving plant traits through genomic elements

Example- wild corn went through numerous genomic changes before it became a commercial crop. Today corn is the food market basis for the entire world.

The challenge:

How can we connect genes to traits?

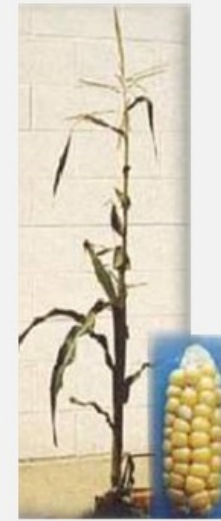
How can we shorten the development time?



Wild Maze



Cultured Maze



When Genomics Meets Computational Biology



Computational Genomics

Combining deep scientific knowhow with Big Data and AI technology to tailor the plant genetic for improvement of plant traits and development of unique cannabis products



Big Data & AI transforming Data to Knowhow



Plant genomics database with $>10^9$ data points on >200 plants



Proprietary Cannabis genomic & chemical data on >800 lines from 50 sources



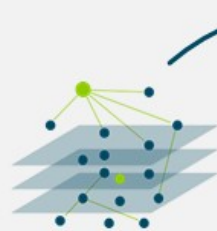
Pre-clinical data



BIG DATA



AI



Cannabis tailored unique database

Gene Rator^{AI}

Computational genomics tools



MetaYield⁺
Precise⁺



Canonic Holds Unique Knowhow in Plant Genetics

Controlling genetics ➤ controlling plant traits ➤ improving cannabis type & quality

Plant traits under
development at
Canonic

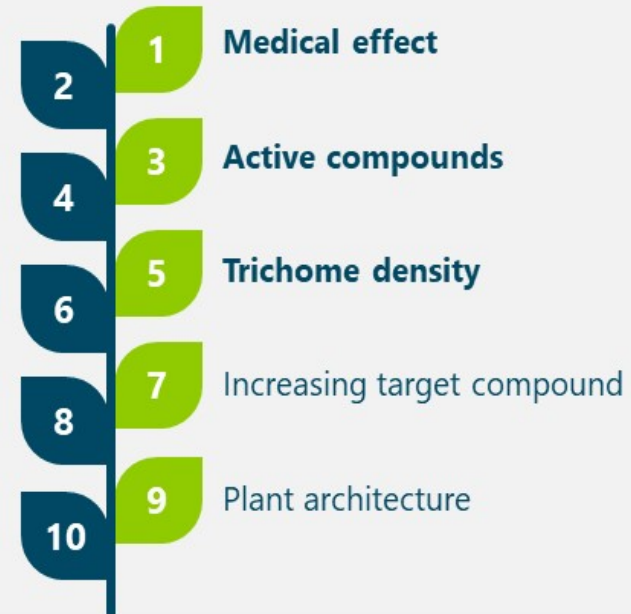
Inflorescence size

Inflorescence density

Reducing target compound

Disease resistance

Time to flower



PRODUCTS

Variety Families Under Development

MetaYield⁺

Stable enhancement of **total plant** compounds.
Focus on **agronomic** and **consumer** traits.



Increased compounds per plant
[e.g. Increased trichomes prevalence]



Increased compounds per area
[e.g. Dwarf & early flowering]

First product launch expected in 2022

Precise⁺

Stable enhancement of **specific active** compounds
Focus on **therapeutic** traits



Medical indication focus
[e.g. Pain & Inflammation]



Compound profile focus
[e.g. CBG, CBC]

First product launch expected in 2023

MetaYield⁺ : First Commercial Varieties

Canonic expects to commercialize its first varieties during 2022



Variety name- NOA series

High THC

High yield

Big inflorescence

Dense trichomes



Status:
pre-commercial



Relevant
market segment:
T20/C4**



Expected
launch in Israel:
early 2022



Target markets:
Israel (\$250M*)
EU (\$500M*)

*Company estimate, based on current market sale prices and data published by Israeli Health Ministry regarding number of medical cannabis users in Israel and by Prohibition Partners in The European Cannabis Report Feb 2020.

** THC 20%, CBD 4%

Precise⁺ : Next Generation Varieties

Product 1



- Indication: Inflammation
- Pre-clinical study: Hadassah medical center
- Status: product development
- Expected launch in Israel: 2023
- Target market size:* Israel \$115M, EU \$300M



Product 2



- Indication: Pain
- Pre-clinical study: Migal research center
- Status: product development
- Expected launch in Israel: 2023
- Target market size:* Israel \$280 M, EU \$750M



*Company estimate, based on current market sale prices and data published by Israeli Health Ministry regarding number of medical cannabis users in Israel and by Prohibition Partners in The European Cannabis Report Feb 2020.

Collaboration With Tikun Olam-Cannbit as Part of Precise+ Product Development

Precise+

Stable enhancement of **specific active** compounds

Focus on **therapeutic** traits



Medical indication focus



Compound profile focus



Cannbit, subsidiary of Tikun Olam-Cannbit, and Canonic of Evogene group announce collaboration for the development of novel medical cannabis products

Collaboration to combine the cannabis expertise of both parties, including extensive clinical and related data of Cannbit and leading computational predictive biology capabilities and genomic data of Canonic

Tel-Aviv and Rehovot, Israel – February 24th, 2021 – Cannbit Ltd., a subsidiary of Tikun Olam-Cannbit Ltd. (TASE: TKUN), a leading medical cannabis company, and Canonic Ltd., a subsidiary of Evogene Ltd. (NASDAQ: EVGN) (TASE: EVGN), focused on the development of medical cannabis products, today announced that they have entered into a collaboration agreement for the development of novel medical cannabis products.

Business model



Cannabis Value Chain

FROM GENOMICS TO PRODUCT



Canonic in the Cannabis Value Chain

Quickly and cost effectively reach the end user, by leveraging proprietary genomic expertise and outsourcing downstream elements of the value chain



Value Creation – Short Term Milestones

2021- pre commercial



- **MetaYield** –

- ❖ reach 1st commercial variety;



- ❖ sign production and distribution agreements in anticipation for commercialization in 2022

- **Precise** - identify specific lines that exhibit distinct effect in model systems for reducing pain or inflammation

2022- commercial



- **MetaYield** - commercial launch and initial sales of 1st product in Israel

- **Precise** - reach 1st commercial variety for reducing pain or inflammation as preparation for commercial launch in 2023

Anticipated Commercial Milestones (5y)



Summary



Cutting-Edge Technology Addressing Market Challenges



Stability



Specificity



Yield



Reduced genetic variation



Diverse extracts for pre-clinical assays



Increased trichome density



Summary

Canonic aims to develop novel varieties through a unique genomic approach and **commercialize medical grade Cannabis**

Product launch expected in 2022

Exclusive access to computational genomics technology

Infrastructure in place – from seed to sale

Commercial partners in place for cultivation, production and distribution (IL)

Leading **academic partnerships** for unique variety development



CANONIC
Cultivated by Science

THANK YOU

Lavie Bio

Introduction

April 2021



Forward looking statement

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The fork influences the farm

Consumer preferences
drive change and impact
how food is grown



Healthier
food



Sustainable
environment



Productive
agriculture



Better
value



Farmers around the world invest*

\$200B+

annually in ag inputs to protect
and nurture their crops

\$135B

Chemical
Fertilizers

\$55B

Crop protection
chemicals

\$8B

Ag-Biological



* Company estimations

The Ag-Biologicals opportunity

Driving healthier produce, sustainability and productive agriculture

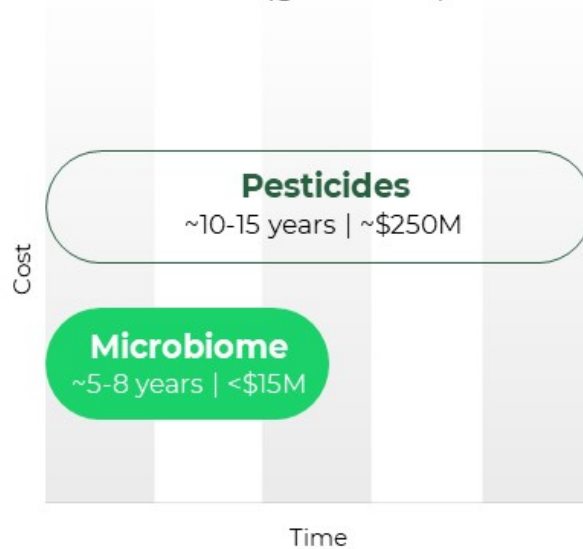


Driving crop productivity

- ✓ New modes of action
- ✓ Protect from resistance evolution
- ✓ Safe



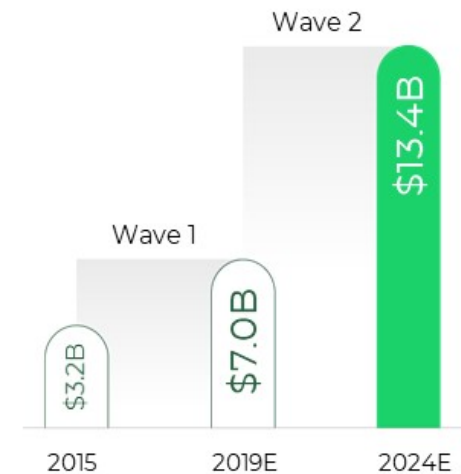
Faster GTF
(go to field)



Company estimations



Fastest growing ag. inputs segment



*Source: MarketsandMarkets, industry publications

The Ag-Biologicals untapped potential

Crop Protection & Fertilizers

Ag-Biologicals

Today

Sustainability	+	+++
Efficacy	+++	++
Consistency	+++	+
Commercial viability	+++	+



* Company estimates

Our Mission

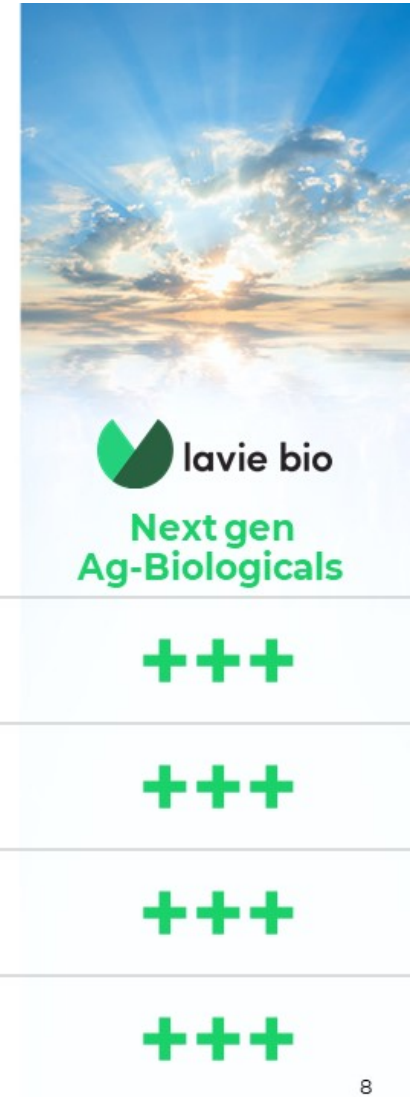


lavie bio

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



The Ag-Biologicals Opportunity

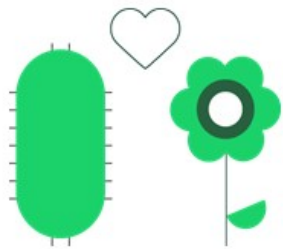


	Crop Protection & Fertilizers	Ag-Biologicals Today	
Sustainability	+	+++	+++
Efficacy	+++	++	+++
Consistency	+++	+	+++
Commercial viability	+++	+	+++

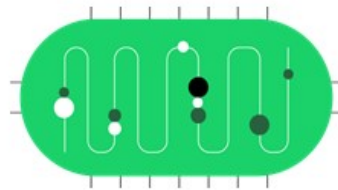
* Company estimates

The Microbiome:

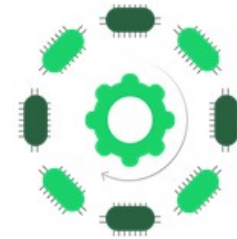
Billions of microbes matter!



**Integral to
plant ecosystems**



**Nature's largest
'function bank'**



**'Live Engine'
producing in the field**





Biology Driven Design platform

The microbiome OS



Enabled by MicroBoost AI
and Taxon platforms



Discovery

Billions > Promising few



Optimization

Promising few > products



Application

Products > Yield protection



Decoding the natural diversity of genetic functionality



Limitless possibilities, designs and functions:
Go as far as imagination takes you



Nature's functional
diversity



Proprietary
Function Hub



Function
based design



Biology Driven Design platform



Holistic AI driven
platform harnessing the
power of genomics

**Unlocking the complex
microbiome interactions:**

Amplify
the positive

Eliminate the
negative

Retrieve
the lost



Diversity



**System
Modelling**



**Genomic
Prism**



**Function
Hub**



Design



Path to market



Lavie Bio Product

Direct model

- Non – consolidated segments
- Commercialization through channels
- Revenues from sales



Lavie Bio product & tech inside

Indirect model

- Consolidated segments
- Commercialization through partner's channels
- Revenues from R&D / Milestones and royalties






















Lavie Bio tech inside

Indirect model

- Precision Optimization of 3rd party's products
- Short time to market
- Revenues from sales or R&D / Milestones and royalties



Product pipeline

Product Program	Product focus	Target market*	Potential expansion*	Discovery	Pre-Development	Development Stage 1	Development Stage 2	Pre-Commercialization	Product *
 Bio-Stimulants									
LAV 211, 212 Bio-stimulants 1	Seed treatment, Spring Wheat North America 	25M ACRES wheat North America	500M ACRES						2022
LAV 213, 218 Bio-stimulants 2	Seed treatment Corn North America Europe 	120M ACRES corn US, EU	180M ACRES						>2025
 Bio-Pesticides									
LAV 311, 312 Fruit rots	Foliar F&V Europe North America  	>\$200M grapes chemicals usage	+\$150M Additional F&V						2024
LAV 321, 322 Downey mildew	Foliar F&V Europe North America  	>\$350M grapes chemicals usage	+\$150M Additional F&V						2025
LAV 431, 432 Seedling disease (Pythium)	Seed Treatment, Corn, soy, F&V North America Europe  	>\$500M	<\$200M						>2025
LAV 441, 442 Bio-Insecticides 	Seed Treatment, Corn, foliar soy North America Europe  	>\$1.5B existing traits and chemicals market	<\$500M						>2025

* Company estimations

LAV 211

Bio-stimulants driving yield advantage

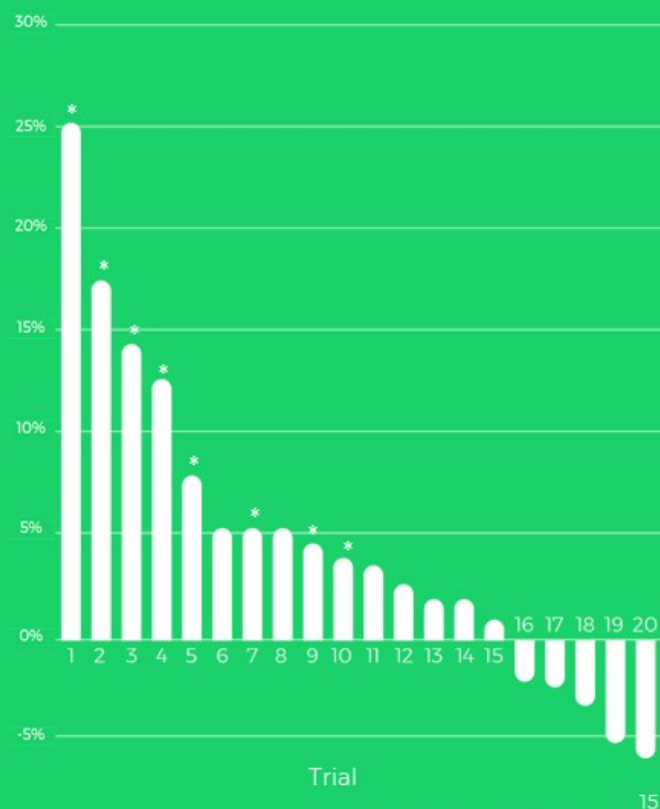
1st focus market – Spring Wheat, 25M acres (ND, MT, West Canada)

Expected 1st sales in 2022



- Up to **25% yield** gain
- **>\$20** add value per acre
- **Better** than ag-biologicals benchmarks tested

Yield improvement



*p values < 0.05

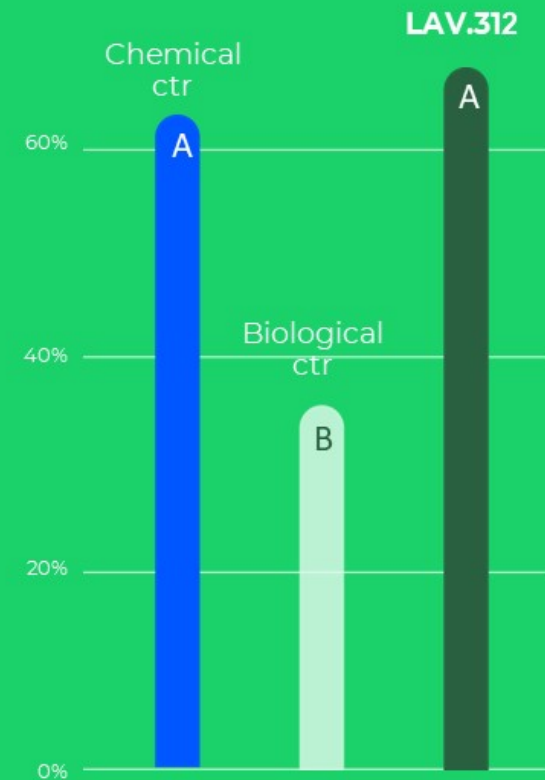
LAV 312

Bio-fungicides against Botrytis & fruit rots

High value markets, expected 1st sales in 2024



**Better than ag-biologicals and
comparable to chemicals
benchmarks tested**



Different letters indicate significant
differences between groups (p values < 0.05)



Established
'End to End'
capabilities



Strategic shareholders



28%



72%

lavie bio





We've got
the right
team to
nurture it



Management Team



Ido Dor | CEO

Leadership experience of 20+ years in business development, sales and channel management



Dorit Kriener | CFO

20+ years of experience in corporate finance, public and private fundraising, strategy and accounting management



James Presnail
| COO

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



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 commercials products

Board of directors



Ofer Haviv

Chairman of the board Evogene CEO



Frederic C. Beudot

Global Portfolio Leader for Biologicals at Corteva Agriscience™



Kristian Bjorneboe

Seasoned business development leader



Trevor Thissen

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





Milestone Roadmap



2021

- LAV211 product pre commercialization phase
- Commercial team and GTM
- Advance LAV 311 / 312 product development



2022

- First product launch for LAV211 (\$sales)
- Product advancement in regulation process for LAV311 / LAV312
- Strategic and GTM collaborations



2023-2024

- Product portfolio expansion – product launches (\$sales)
- Precision Optimization product – Pre-Launch
- Established market channels

Market opportunity

Lavie Bio is uniquely positioned to improve how food is grown, protected & consumed



Farm

Post harvest



Consumer





Thank you!
