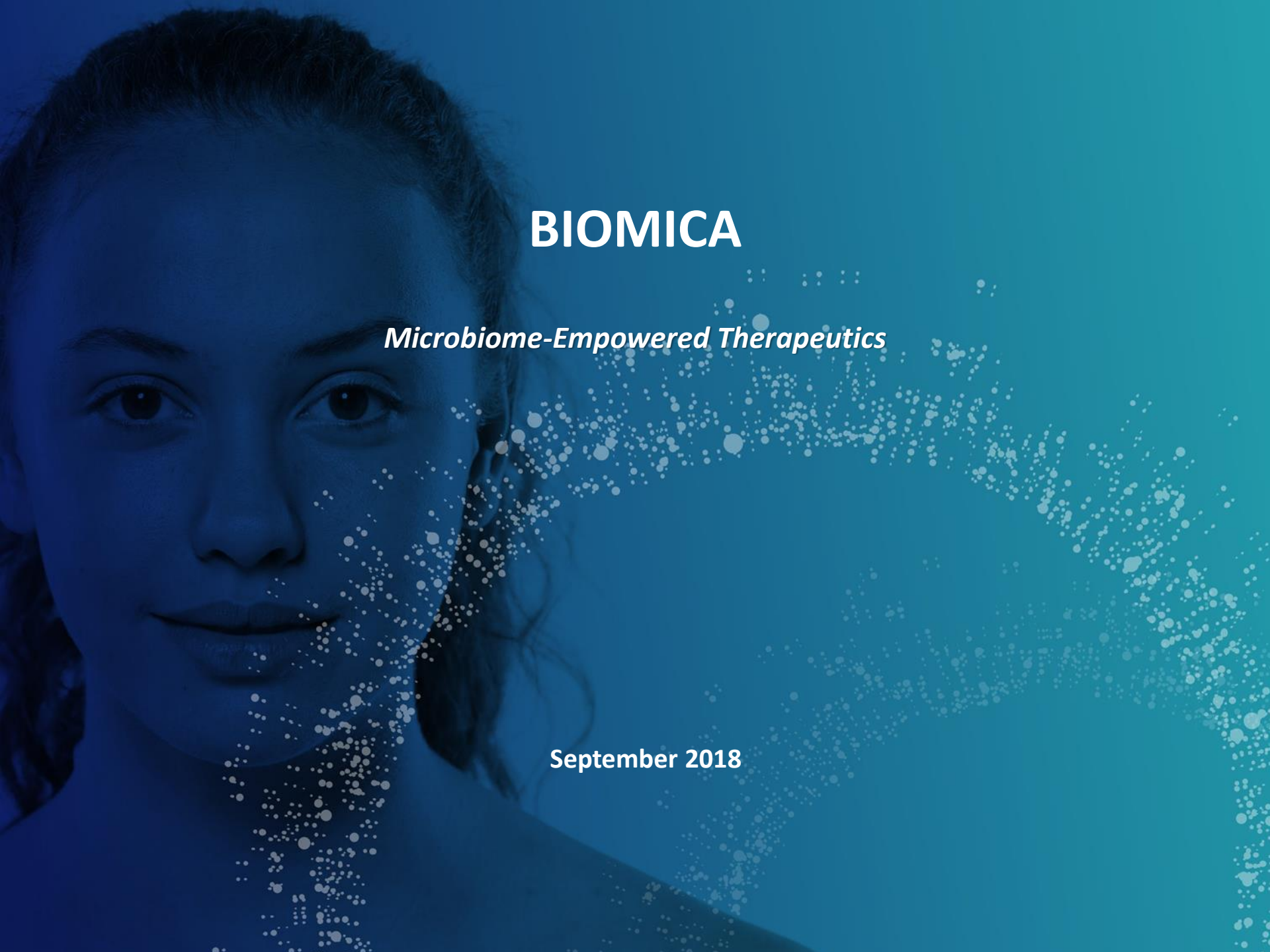




BIOMICA

Microbiome-Empowered Therapeutics

September 2018

Safe Harbor Statement

This presentation contains "forward-looking statements" relating to future events, and we 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 Evogene Ltd. or its subsidiaries, including Biomica Ltd. (collectively, "Evogene" or "we"), that are considered "forward-looking statements" as defined in the U.S. Private Securities Litigation Reform Act of 1995 (the "PSLRA"). 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. For these statements, Biomica claims the protection of the safe harbor for forward-looking statements contained in the PSLRA.

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 of Biomica and Evogene 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 Biomica's and Evogene's control, including, without limitation, those described in greater detail in Evogene's Periodical and Annual Reports, including Registration Statement on Form F-1, Annual Report on Form 20-F and in other information file and furnish with the Israel Securities Authority and the U.S. Securities and Exchange Commission, including under the heading "Risk Factors."

All written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the previous statements. Except for any obligations to disclose information as required by applicable securities laws, Biomica and Evogene 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 any other entity, 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.

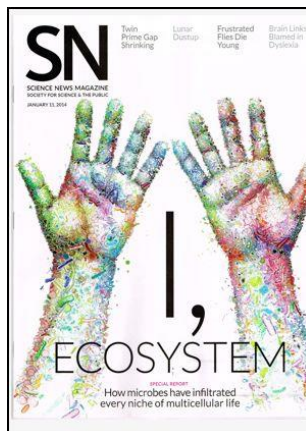
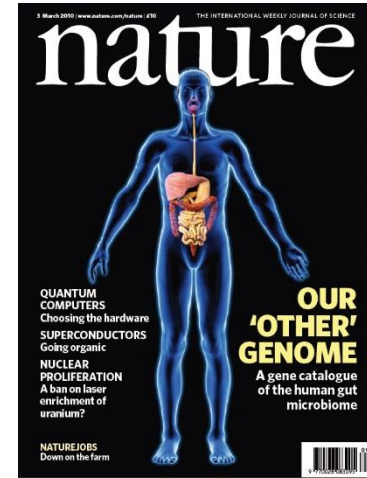
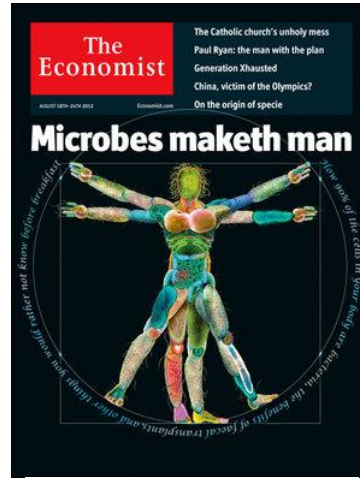
The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of the products or services of Evogene.

Highlights

Developing innovative microbiome-based therapeutics

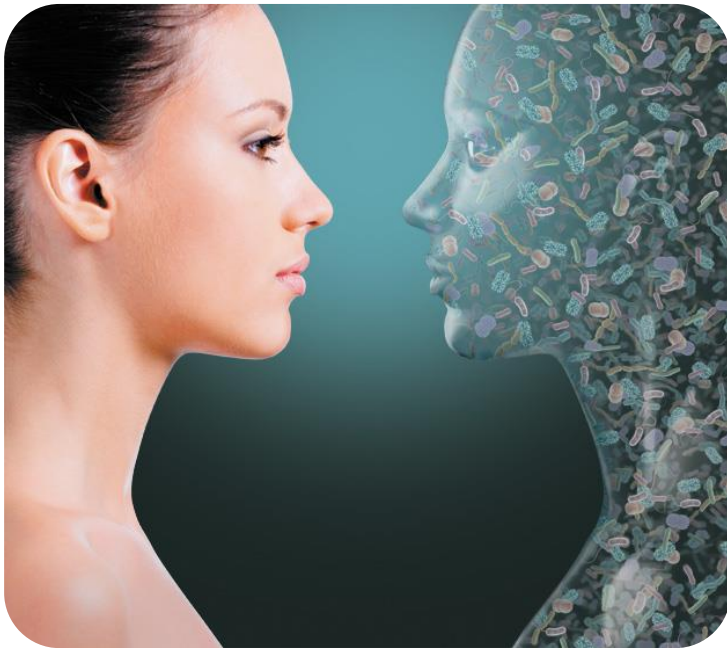
- Emerging biopharmaceutical company
- Founded in Israel, 2017
- Focused on treatment of immune-mediated and infectious diseases
 - Immuno-Oncology
 - GI related disorders
 - Antibiotic resistant therapy
- Pipeline is enabled by a unique computational predictive biology platform (combining 'Big-Data' & Artificial Intelligence technologies)
- Subsidiary of Evogene Ltd. (NASDAQ, TASE: EVGN)
 - A pioneer in the field of applied computational predictive biology
 - Holds Approx. 90%

Research Sparks Microbiome Drug Discovery



Background – The Microbiome and Its Functions

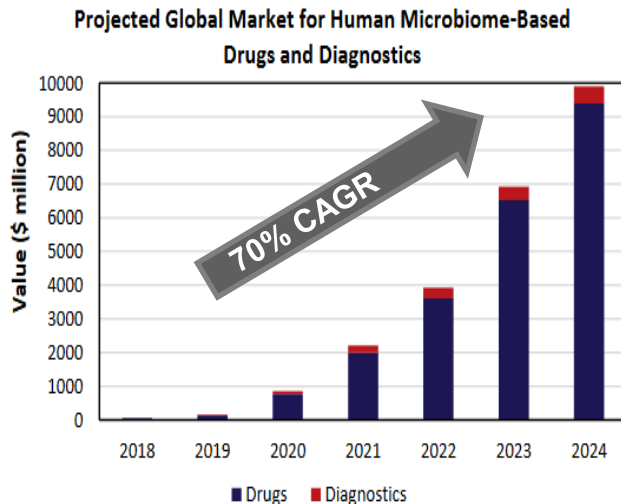
The human gastrointestinal tract comprises approximately 10^{14} microbes and amounts to a biomass of approximately 2kg!



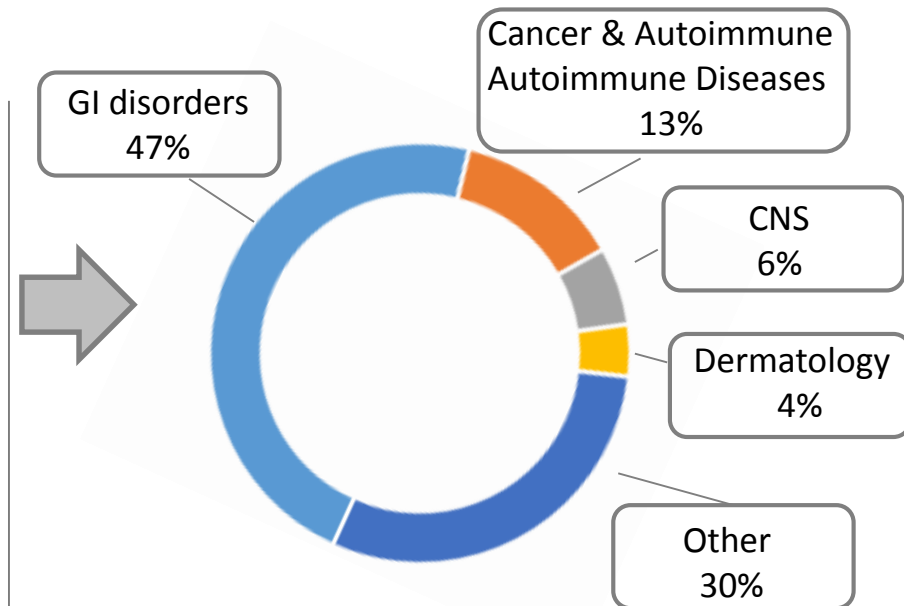
- Trillions of microbes living in & on our bodies, acting as a ***“Second Genome”***
 - For every human gene there are 100 microbial genes
- Microbes play a **critical role** in food digestion, protection from diseases and production of nutrients
- **Clinical evidence** is accumulating for microbiome’s 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

Innovation Potential



Current Areas of Focus for Microbiome Rx



Sources:
BCC Research (2017) – Human Microbiome-based Drugs and Diagnostics Market
SVB – Emerging Healthcare: Microbiome Investment Trends Aug 2017)

- Multi \$Bn market opportunity
- Most candidates still in the discovery & preclinical stages; few are entering Ph. II/III
- More than \$840M invested in microbiome companies since 2010
- Microbiome investment levels are set for a record 2017 and growing in 2018
- Big pharma and prominent VCs are involved, though landscape is fragmented

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

The challenge

How to cope with enormous amount of information?

A Biological approach

A trial and error approach...

A needle in a haystack...

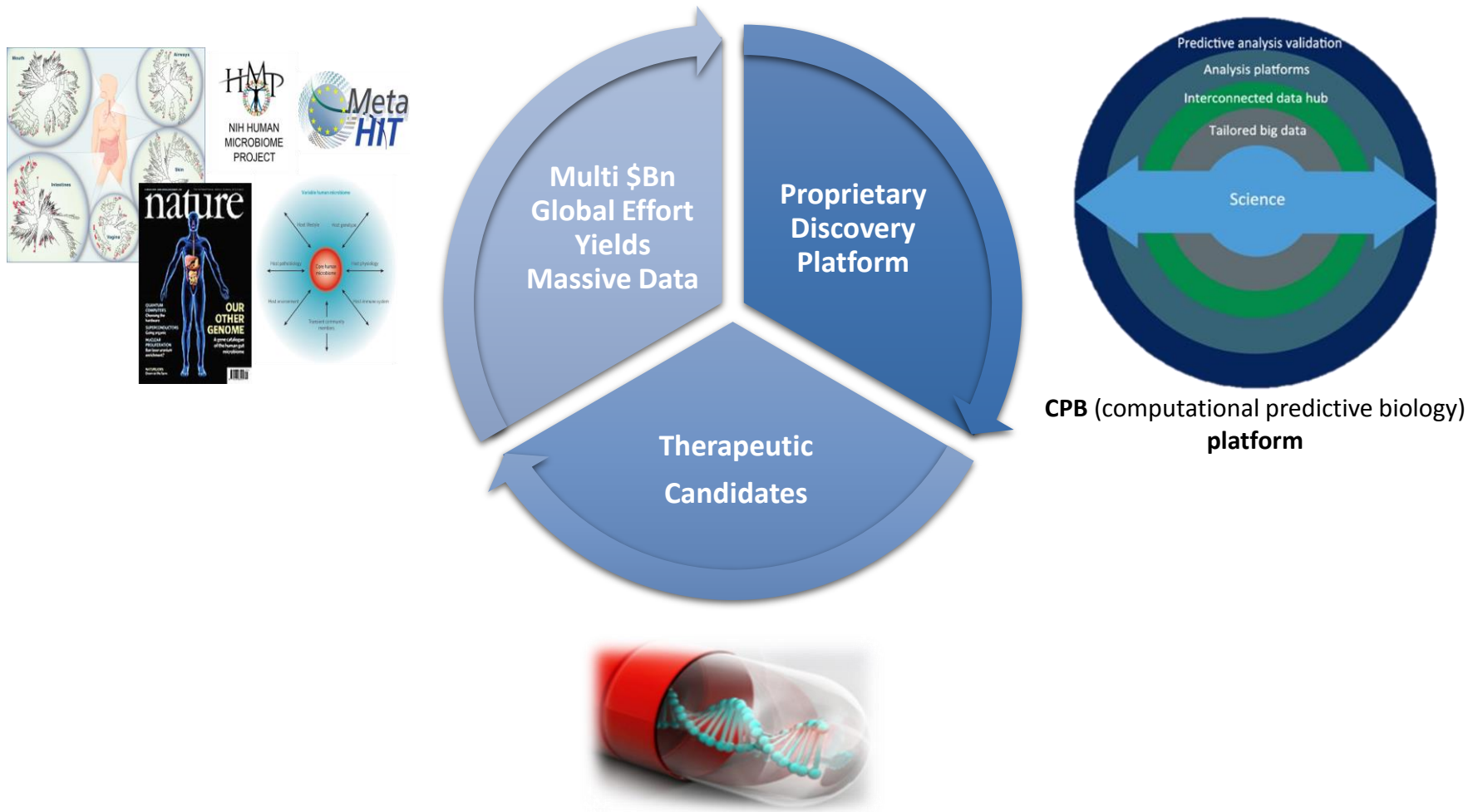


or

Guessing the
lottery numbers



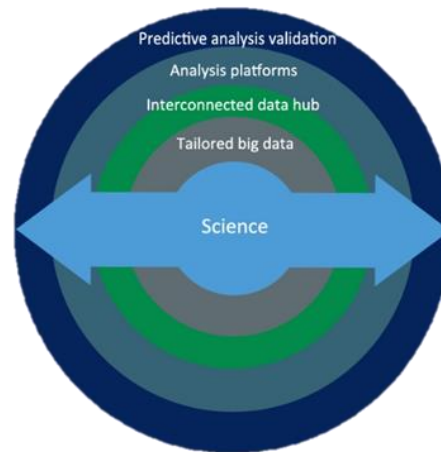
The Solution - Convergence of Data, Technology and Healthcare



The Competitive Edge

Key parameters for success

A robust analysis & predictive capabilities



Our computational technologies enable data integration, analysis & prediction

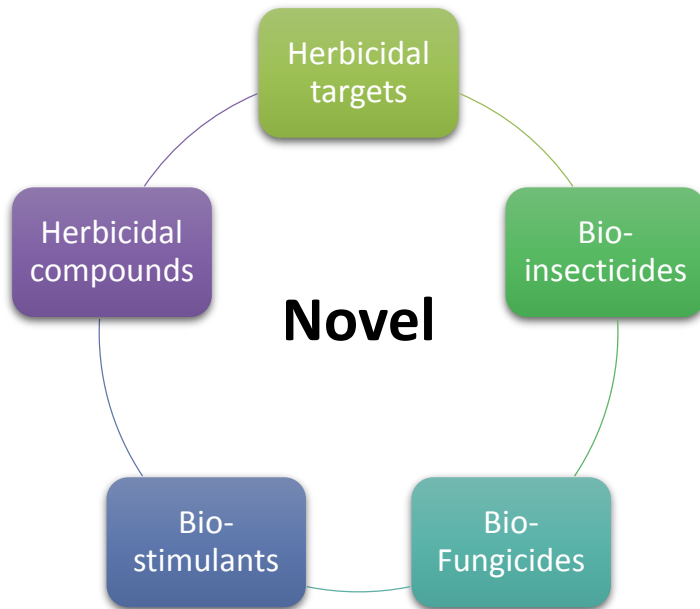
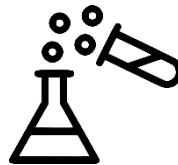
- Databases generated via data integration capabilities
- Proprietary Computational Predictive Biology (CPB) platform, utilized to mine data

Proven success of the CPB platform's predictions



(Nasdaq: EVGN) CPB platform was built over the last decade at an investment of tens of millions of dollars

Proven *via* innovation

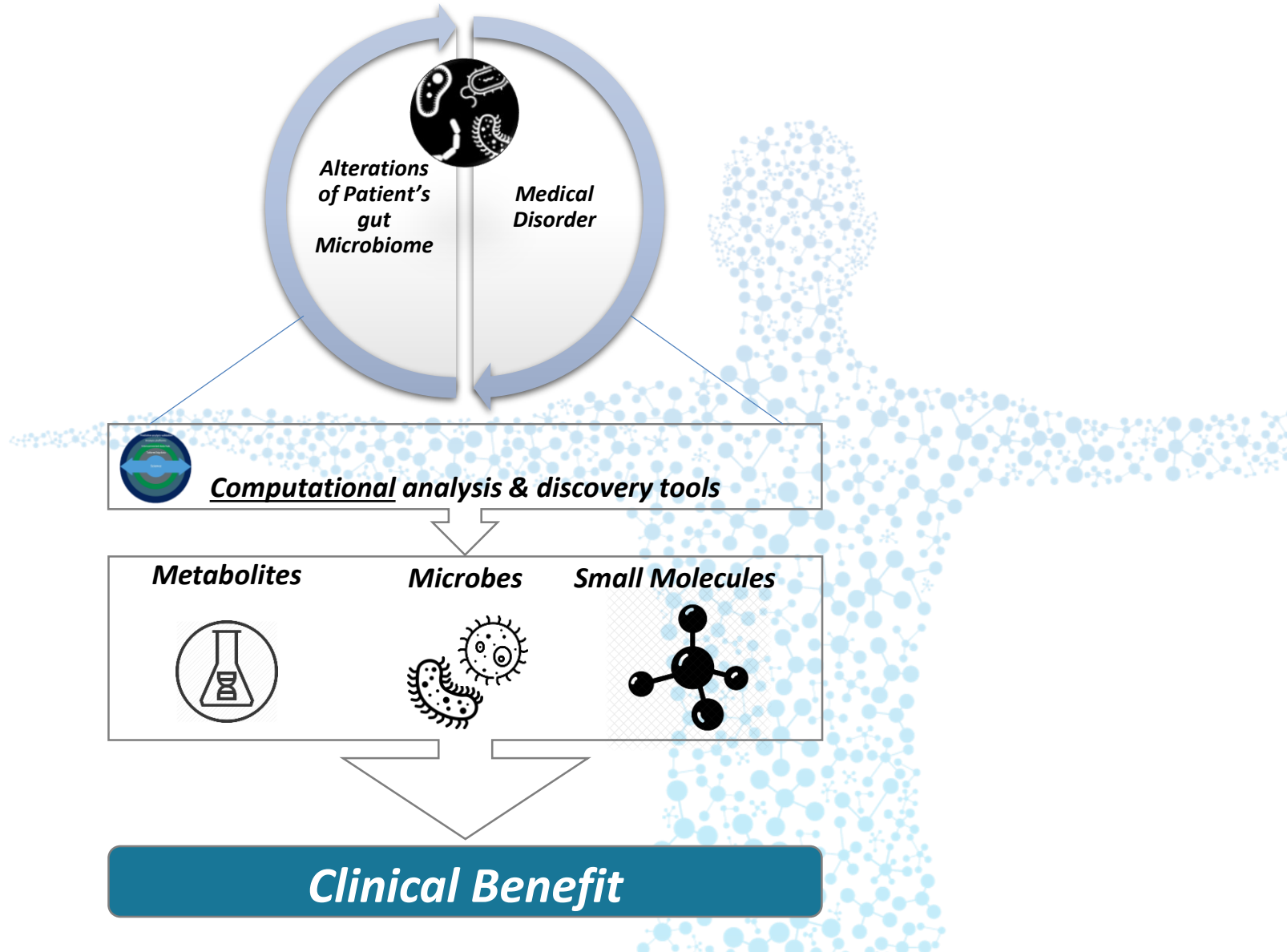


Proven *via* collaboration

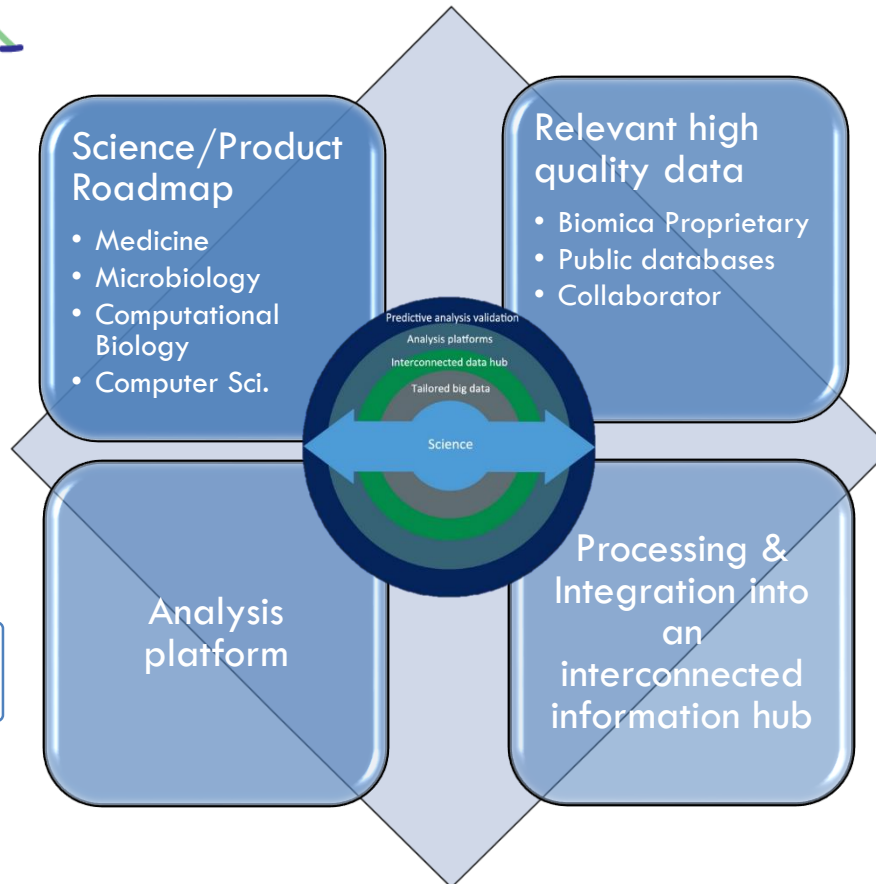
Strategic collaborations with world-leading companies over the years



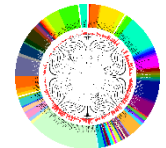
The New Paradigm



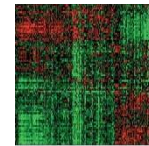
The CPB platform - from vision to reality



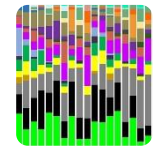
Clinical data



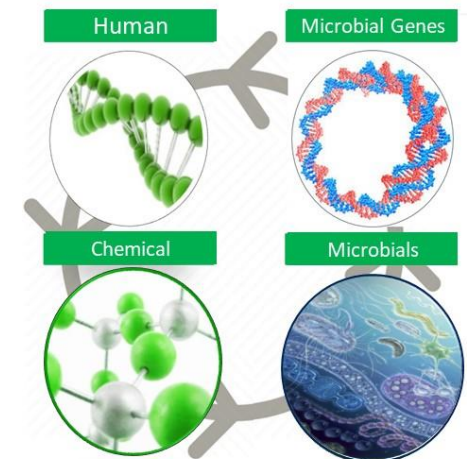
Metagenomes



Expression data

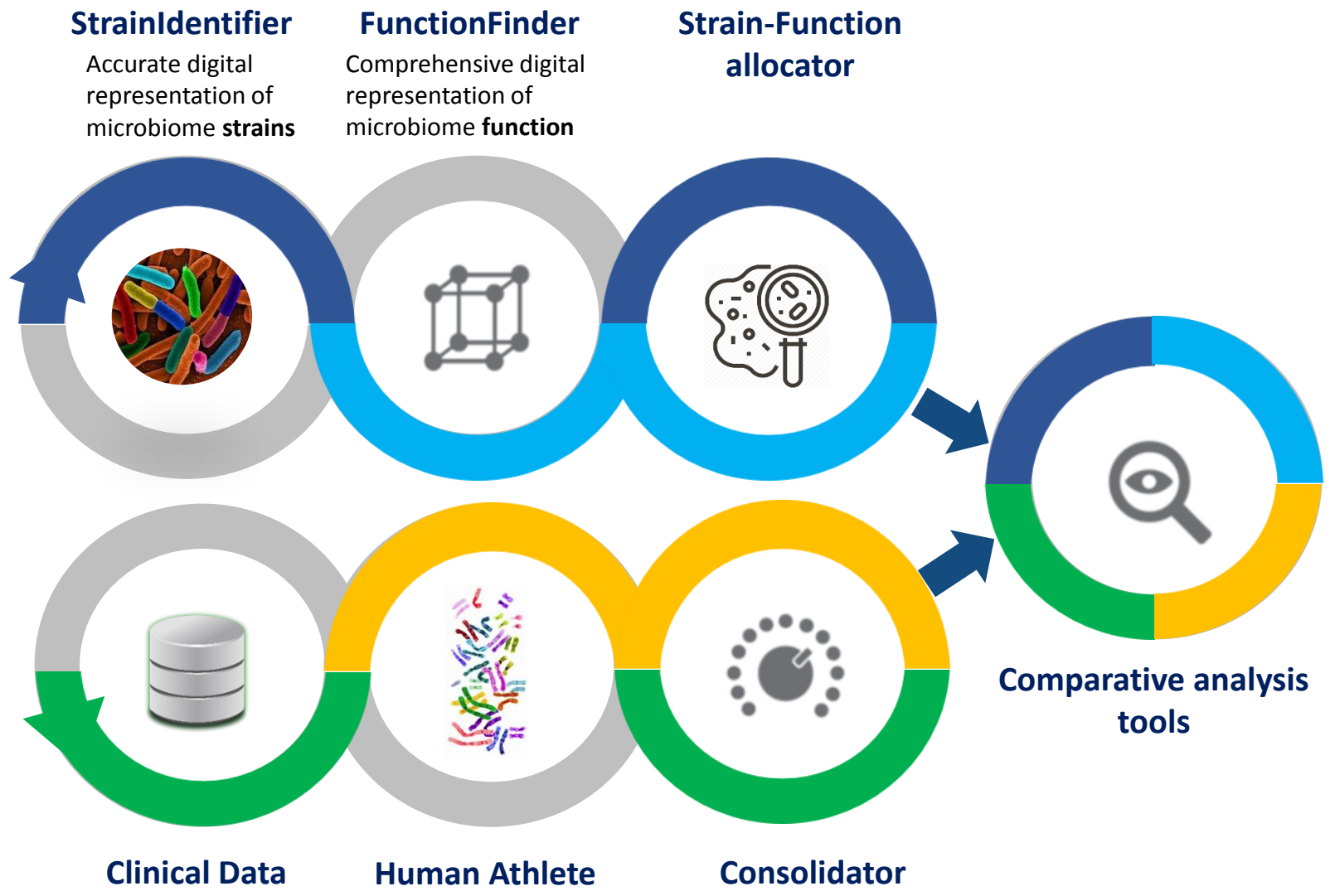


Abundance Profiles



Data converted to information
(accessible for mining algorithms)

PRISM - Platform capabilities



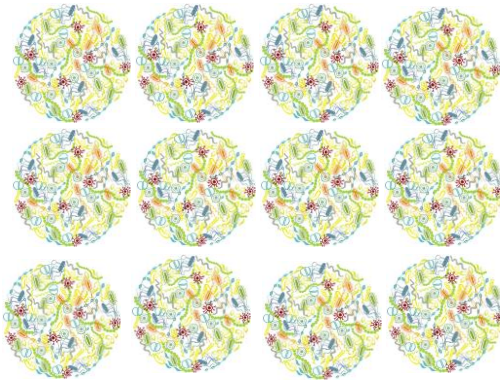
Example 1

Superior digital representation of metagenomics functions

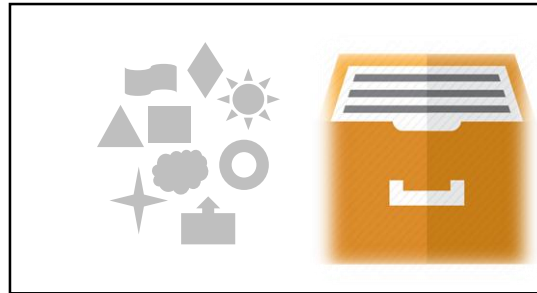
92 IBD and non-IBD individuals



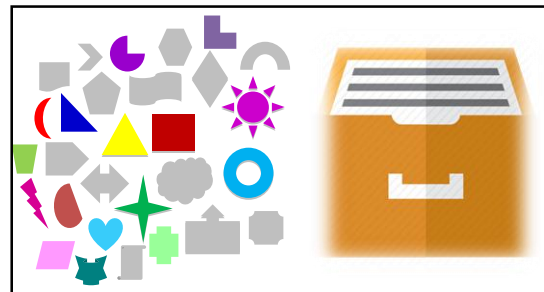
206 stool samples



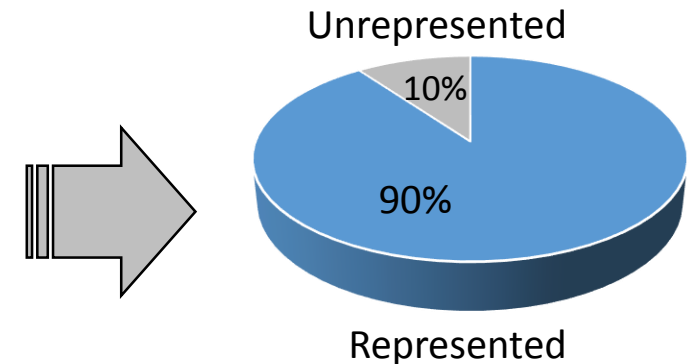
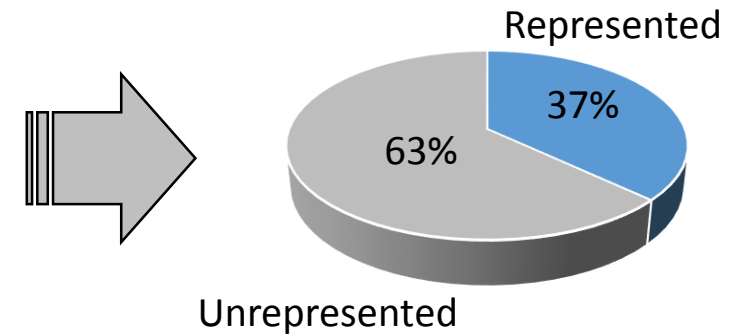
Public functions catalog



Proprietary functions catalog



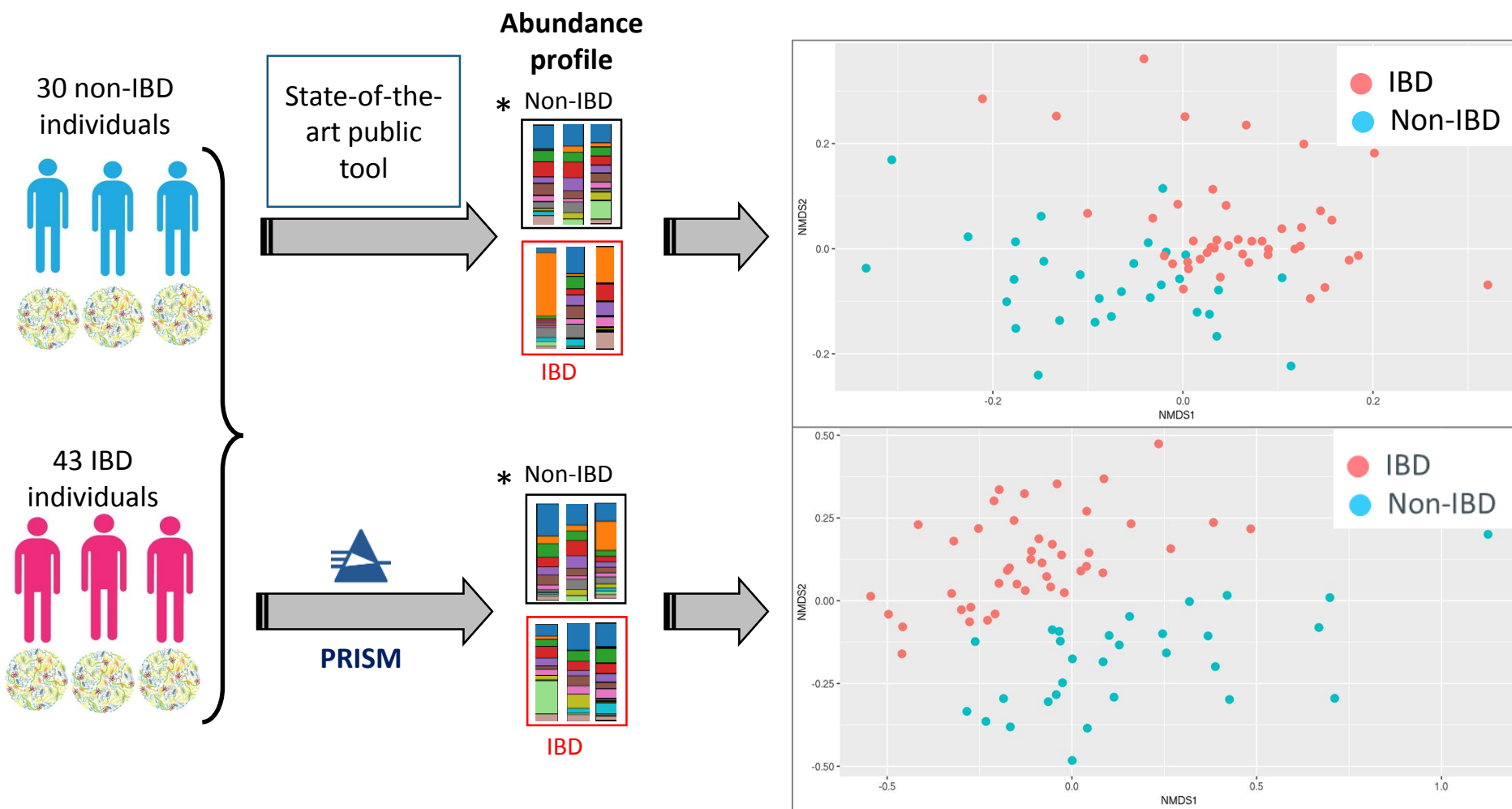
% of sample functions represented



Biomica proprietary function catalog enables comprehensive representation of human gut microbiome (3X more than state of the art public tools)

Example 2

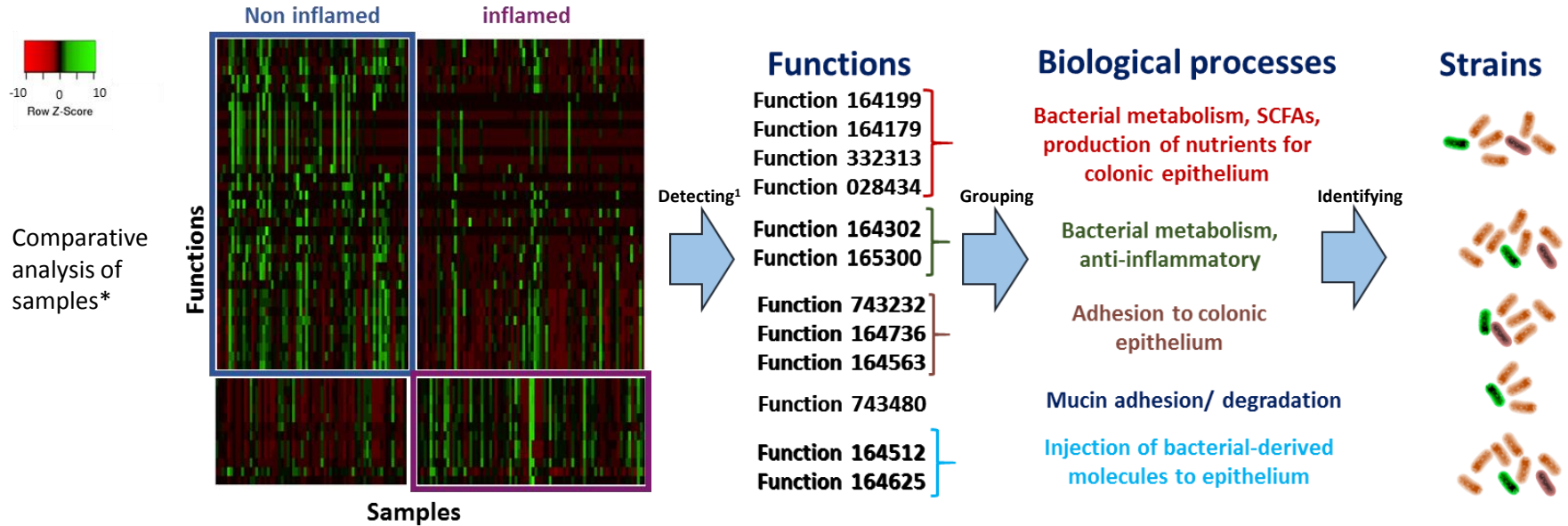
Higher resolution - Using Proprietary representation to separate samples based on clinical aspects



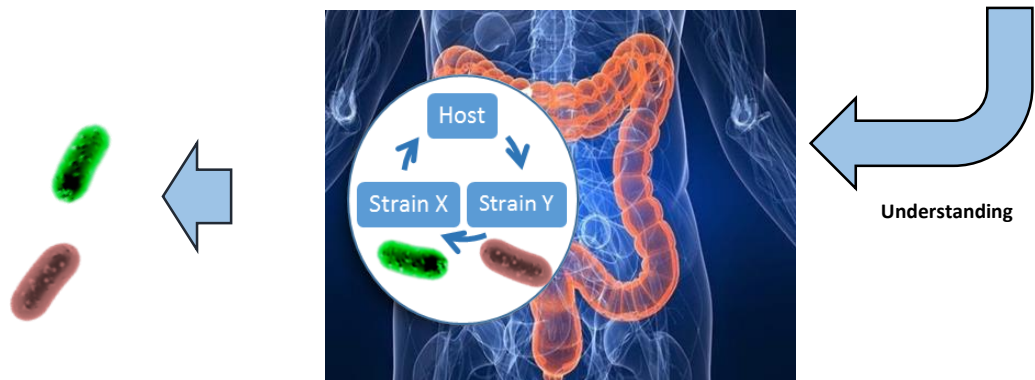
* illustration figure

Improved resolution and yields better separation of samples based on clinical aspects

BMC005: Novel anti-inflammatory bacterial drug candidate Found through proprietary functional analysis



Two specific strains were identified to carry out the relevant **anti-inflammatory** functions, and the combination of the two (BMC005) could be a potential drug candidate for the treatment of Crohn's Disease



*Analysis of more than 400 samples from Crohn's Disease patients

¹7 out of the 12 functions and 40% of the biological processes & relevant bacterial strains could not be detected using state of the art publicly available tools

Biomica's Discovery Pipeline

Program		Microbiome therapeutics pipeline		
Immuno-oncology (with ICI)		Combination Therapy		
MDRO (Multi Drug Resistant Organisms)		C. difficile toxin-B		
GI related disorders		IBS		
		IBD		



Small-molecule approach



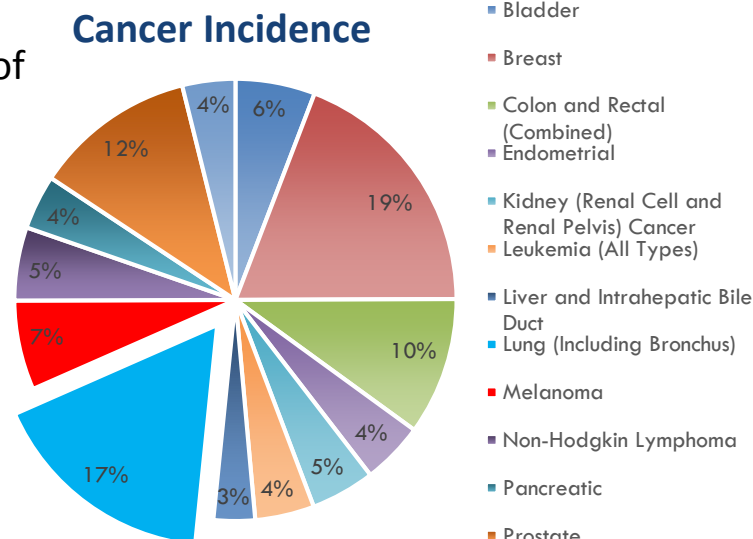
Biological approach

1. Cancer Immunotherapy - Combination Therapy

Initial Focus on Lung Cancer (NSCLC)

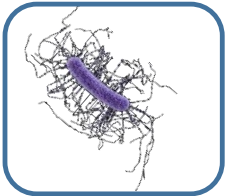


- Non–small cell lung cancer (NSCLC) is the leading cause of cancer-related mortality worldwide
- Currently 3 US FDA PD-1/PD-L1 inhibitors drug approved
 - Nivolumab - **Opdivo™** 
 - Pembrolizumab - **Keytruda®** 
 - Atezolizumab - **Tecentriq™** 
- Although Immune Checkpoint Inhibitors (ICI) has revolutionized the care of NSCLC, only an average of 17-20% overall response rate was observed.



Biomica aims to improve the efficacy of PD-1/PD-L1 inhibitors through immunomodulating combination therapy;
Improving clinical response to ICI by co-administration of microbiome-based products with checkpoint inhibitor drugs

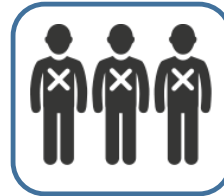
2. *C. difficile* Infection (CDI) - Landscape



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



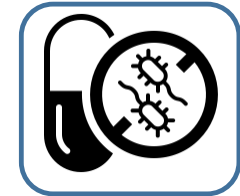
Most common
hospital-acquired
infections (Over
600,000 a year)



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 \$5.4 billion mostly due to hospitalization

Our approach is to utilize a non-antibiotic inhibitor of *C. difficile* toxin, which is responsible for the symptoms associated with CDI, **while preserving healthy gut microbiome**

4-5. GI Related Disorders – key indications

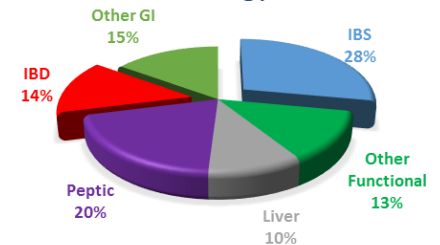
- Inflammatory bowel disease (IBD), a group of inflammatory conditions of the colon and small intestine
 - Crohn's disease - CD
 - Ulcerative colitis - UC

- Irritable bowel syndrome (IBS), a common intestinal functional disorder (group of symptoms)
 - Most common gastrointestinal disorder
 - Sensation: Abdominal Pain
 - Motility: Constipation or Diarrhea
 - Fermentation: Bloating, Gas & Diarrhea

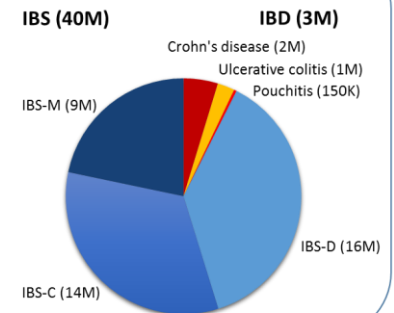
- Both clearly related to the microbiome

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

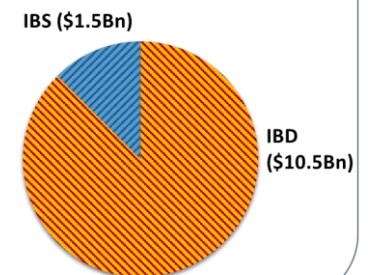
Gastroenterology Practice



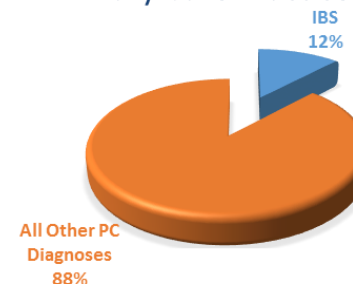
Approximate number of patients



Approximate market size (USD)



Primary Care Practice



Management

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
- Holds a BA in Economics & Accounting from the Tel Aviv University
- Certified Public Accountant in Israel

Prof. Yehuda Ringel, CSO

- Chief Division of Gastroenterology and Hepatology at Meir Medical Center, Israel
- Professor of Medicine in 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. 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

Dr. Shiri Meshner, Head 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

Prof. Yehuda Ringel, Director

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
- Founder and Managing Director at Triticum
- CEO at ShizimXL MedTech Accelerator, part of the Shizim Group
- Senior consultant at "The Harel Group", a business development advisory firm supporting international transactions in the global pharmaceutical industry.
- Served as Chief Strategy Officer at Therapix Biosciences (Nasdaq: TRPX).
- Holds a Master of Health Systems Administration (MHA) from Tel Aviv University

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 on the Board of Evogene (Nasdaq: EVGN)
- Served as the CEO of BioLineRx Ltd. (Nasdaq: BLRX), and on its board of directors, priorly as its VP of Research and Development
- Served as the General Manager of BioLine Innovations Jerusalem Ltd.
- Previously served as VP of Biology at Compugen Ltd. (Nasdaq: CGEN)
- Holds a PhD in Molecular Biology from Tel Aviv University

Adv. Nadav Shichor, Director

- A seasoned corporate and transactional lawyer with extensive experience in structuring, negotiating and documenting complex collaboration and co-development transactions, IP licensing and technology transfer transactions
- VP Corporate Development of MEDX Ventures
- Previously served as a partner at Yigal Arnon & Co. law firm
- Served as a Director of Technology Transactions at Harvard University's Office of Technology Development
- Served as VP and General Counsel of Ramot TTO at Tel Aviv University
- Served as VP and General Counsel of Compugen Ltd. (Nasdaq: CGEN)
- Holds a JD and a BA from the University of California, Berkeley

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 at various levels, and correlate them with relevant clinical information to deliver 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

Thank You

Biomica Ltd.

13 Gad Feinsein st., Park Rehovot
P.O.B 2100 Rehovot 76121, Israel

Tel +972-8-9311900/1

Fax +972-8-9466724

www.biomicamed.com

info@biomicamed.com