

Q4 FY23 Quarterly Investor Presentation

Microba Life Sciences Limited (ASX: MAP) ("Microba" or the "Company") is pleased to provide its Q4 FY23 Investor Presentation to be delivered at the Quarterly Investor Webinar held with CEO Dr Luke Reid and SVP, Therapeutics Prof Trent Munro at 10:30am AEST today.

Presenting: Microba CEO, Dr Luke Reid and SVP Therapeutics Prof. Trent Munro

Time: 10:30am AEST on Thursday 27 July 2023

To register for the Quarterly Investor Webinar please click the link below. Investors can submit questions prior to the webinar to simon@nwrcommunications.com.au or do so via the Zoom Q&A function during the webinar.

[Microba Q4 FY23 Investor Webinar Registration](#)

This announcement has been authorised for release by the Chairman and CEO.

For further information, please contact:

Dr Luke Reid

Chief Executive Officer

E: Luke.Reid@microba.com

Simon Hinsley

Investor / Media Relations

E: simon@nwrcommunications.com.au

T: +61 401 809 653

About Microba Life Sciences Limited

Microba Life Sciences is a precision microbiome company driven to improve human health. With world-leading technology for measuring the human gut microbiome, Microba is driving the discovery and development of novel therapeutics for major chronic diseases and delivering gut microbiome testing services globally to researchers, clinicians, and consumers. Through partnerships with leading organisations, Microba is powering the discovery of new relationships between the microbiome, health and disease for the development of new health solutions.

For more information visit: www.microba.com

Microba encourages all current investors to go paperless by registering their details with the designated registry service provider, Automic Group.

MICROBA™

Transforming health through the human microbiome

July 2023

Disclaimer

This presentation (**Presentation**) has been prepared by Microba Life Sciences Limited (**Microba**).

Summary information - This Presentation contains summary information about Microba and its activities which is current only as at the date of release of this Presentation. Microba may in its absolute discretion, but without being under any obligation to do so, update or supplement this Presentation. The information in this Presentation is of a general nature and does not purport to be complete nor does it contain all the information which a prospective investor may require in evaluating a possible investment in Microba or that would be required in a prospectus or other disclosure document prepared in accordance with the requirements of the *Corporations Act 2001* (Cth) (**Corporations Act**).

Industry and market data – In this Presentation, Microba refers to certain market, industry, and statistical data used in connection with this Presentation may have been obtained from research, surveys or studies conducted by third parties, including industry or general publications. Neither Microba nor its representatives have independently verified any such data and no representation or warranty, express or implied, is made as to its fairness, accuracy, correctness, completeness or adequacy. Some data is also based on the good faith estimates of Microba, which are derived its reviews of internal sources as well as the independent sources described above.

Not an offer - This Presentation is not a prospectus or other disclosure document under the Corporations Act and will not be lodged with the Australian Securities and Investments Commission. This Presentation is for information purposes only and is not an invitation or offer of securities for subscription, purchase or sale in any jurisdiction. The distribution of this Presentation (including electronically) outside Australia may be restricted by law. If you come into possession of this Presentation, you should observe such restrictions and should seek your own advice. Any non-compliance with these restrictions may contravene applicable securities laws.

Not investment or medical advice - The information contained in this Presentation is not investment, financial product advice, medical advice or any medical recommendation or recommendation to acquire Shares. This Presentation has been prepared without taking into account your investment objectives, financial situation, medical or any other particular needs. This Presentation does not and will not form any part of any contract for the acquisition of shares. Each recipient of this Presentation should make its own enquiries and investigations regarding all information in this Presentation. Before making an investment decision, you should consider whether it is a suitable investment for you in light of your own investment objectives, financial situation and particular needs and having regard to the merits or risks involved. Independent financial advice is recommended.

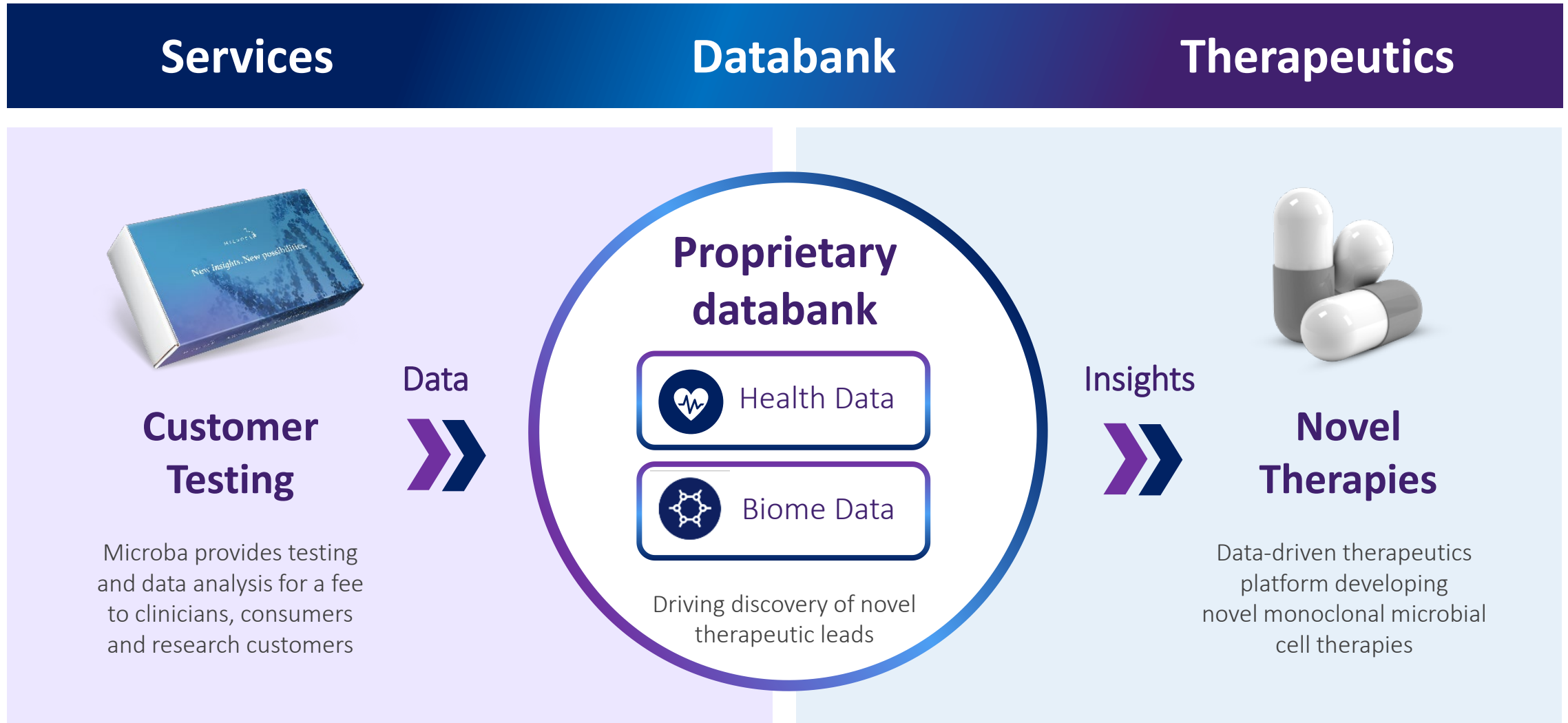
Future performance - This Presentation contains forward looking statements. Forward-looking statements generally relate to current expectations, hopes, beliefs, intentions, strategies or productions about future events or Microba's future financial or operating performance. For example, statements regarding anticipated growth in the industry in which Microba operates and anticipated growth in demand for Microba's products and services, projections of Microba's future financial results and other metrics are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "pro forma", "may", "should", "could", "might", "plan", "possible", "project", "strive", "budget", "forecast", "expect", "intend", "will", "estimate", "anticipate", "believe", "predict", "potential" or "continue", or the negatives of these terms or variations of them or similar terminology, but the absence of these words does not mean that a statement is not forward-looking. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These forward looking statements are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance and may involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Microba. You are cautioned not to place undue reliance on any forward looking statement. Forward looking statements in this Presentation are based on assumptions and contingencies which are subject to change without notice. Actual results, performance or achievements may vary materially from any forward looking statements and the assumptions on which statements are based. The forward looking statements in this Presentation are based on information available to Microba as at the date of this Presentation and nothing in this Presentation should be regarded as a representation by any person that the forward-looking statements set forth herein will be achieved or that any of the contemplated results of such forward-looking statements will be achieved. Except as required by law or regulation, Microba undertakes no obligation to provide any additional or updated information whether as a result of new information, future events or results or otherwise.

Financial data – All dollar values in Australian dollars (A\$ or \$) unless otherwise stated. Recipients should note that this Presentation contains historical and pro-forma financial information. Any financial information provided in this Presentation is for illustrative purposes only and is not represented as being indicative of Microba's views on its future financial condition and/or performance.

Trademarks – This Presentation may contain trademarks, trade names and copyrights of other companies, which are the property of their respective owners. Solely for convenience, some of the trademarks, trade names and copyrights referred to in this Presentation may be listed without the © or ® symbols, but Microba asserts, to the fullest extent under applicable law, the rights of the applicable owners, if any, to these trademarks, trade names and copyright.

Disclaimer - Except for any statutory liability which cannot be excluded, Microba, its related bodies corporate and their respective officers, employees and advisers expressly disclaim all liability (including negligence) for any direct or indirect loss or damage which may be suffered by any person in relation to, and take no responsibility for, any information in this Presentation or any error or omission therefrom, and make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of this Presentation.

Two core business segments driven by a proprietary databank



Company Snapshot



Continuous YoY revenue growth over 5 years of operations



Partnerships with market leaders incl. **Sonic Healthcare** (ASX: SHL), **Ginkgo Bioworks** (NYSE: DNA), **SYNLAB** (GR:SYAB) + more



Large, unique, proprietary microbiome databank



3 key therapeutic programs with lead IBD drug candidate **in Phase I trial**



World-leading technology in the emerging and rapidly growing **US\$4.89 billion** microbiome sector¹



Globally **leading microbiome expertise** complemented by drug discovery experts including Prof. Ian Frazer

Recent Milestones



FIRST DISTRIBUTION AGREEMENT

First agreement executed to deliver Microba's advanced infectious disease test MetaPanelU into Australia



EXPANSION INTO 7 NEW COUNTRIES

Signed agreements for Poland, Hungary, Romania, Croatia, Türkiye, Czech Republic and Brazil



NEXT GEN HEALTHCARE TESTING LAUNCHED

New MetaXploreU test range launched to healthcare professionals with strong uptake



PHASE 1 CLINICAL TRIAL COMMENCED FOR IBD PROGRAM

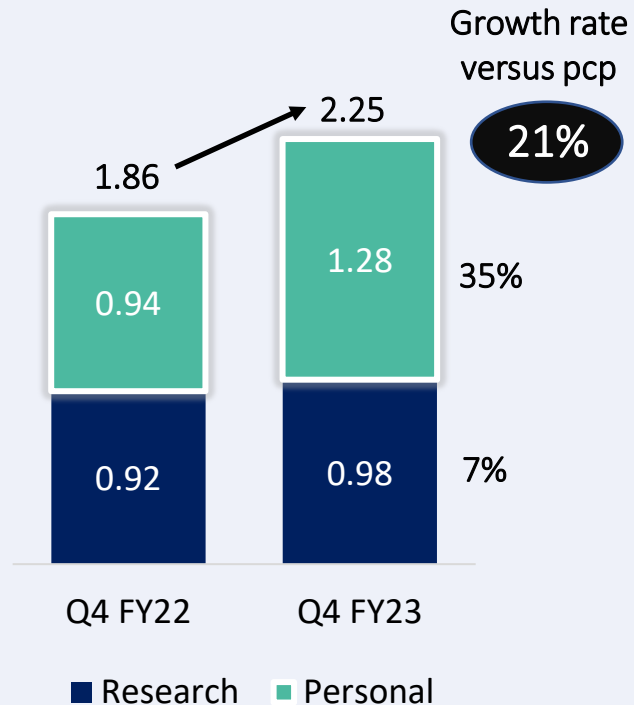
First participants have successfully dosed in the Phase I Clinical Trial of MAP 315, Microba's lead Therapeutic Program in Inflammatory Bowel Disease (IBD)

Microbiome Services

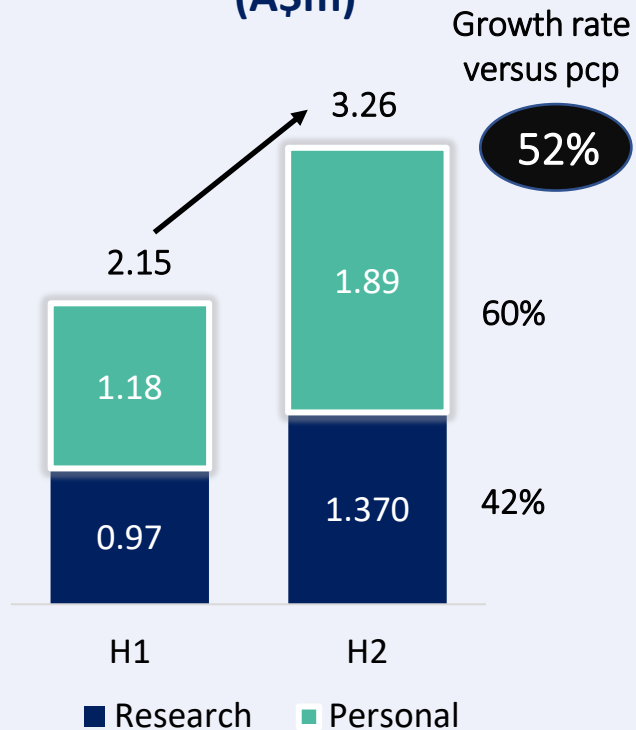
Driving global revenues
and data growth

Q4 Financial Highlights – Strong growth in Personal Testing revenue

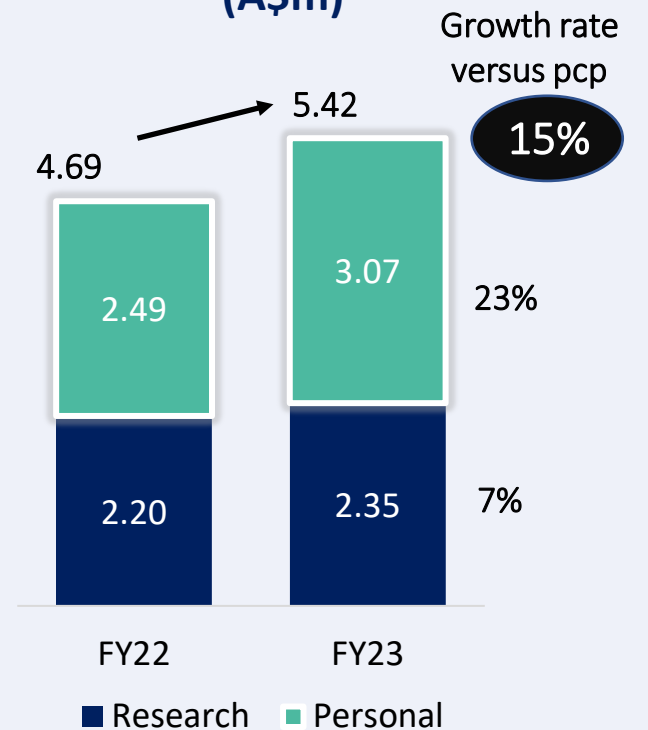
Q4 FY23 Revenue versus pcp*
(A\$m)



H2 FY23 Revenue versus H1 *
(A\$m)



FY23 Revenue versus FY22 *
(A\$m)



Advanced microbiome testing addressing large markets in healthcare

Addressable Healthcare Markets

Gastrointestinal disorders

MetaXplore™

Is the microbiome contributing to the patients DGBI and how can they manage?

150M est. addressable patients worldwide¹

Well established out of pocket private pay market

Gastrointestinal infection

MetaPanel™

Does the patient have a pathogen and how can I selectively treat it?

16M est. addressable patients worldwide²

Well established hospital direct-bill and path to reimbursement

¹Estimated based on the prevalence of specific Disorders of the Gut-Brain Interaction across 26 countries (Av prevalence of 32.8% DOI: [10.1111/nmo.14594](https://doi.org/10.1111/nmo.14594)), and the proportion regularly seeking medical support with one or more doctor visit per month (Average 15.4% - DOI: [10.1053/j.gastro.2020.04.014](https://doi.org/10.1053/j.gastro.2020.04.014))

² Estimated based on the global number of immuno-compromised patients and other patients at high risk for gastrointestinal infection (>8.1m chemotherapy treated solid tumor cancer patients and >1.1m haematological cancer patients DOI: [https://doi.org/10.1016/S1470-2045\(19\)30163-9](https://doi.org/10.1016/S1470-2045(19)30163-9)), (>3m dialysis patients DOI: 10.1038/s41581-022-00542-7), (>140k Organ Transplant patients per year <https://www.transplant-observatory.org/>), (>3.5m long stay ICU patients – estimate based on data from <https://ourworldindata.org/grapher/intensive-care-beds-per-100000>)

MetaXplore™ Advanced, comprehensive, GI testing for improved management of chronic GI disorders

- Large addressable patient population est. >150m ppl
- Comprehensive GI and microbiome assessment
 - Diagnostic and investigative gastrointestinal health markers (7 markers)
 - Diagnostic pathogen and parasite detection (12 markers)
 - Complete microbiome profiling (Over 28,000+ microbial species)
 - Microbiome production and consumption of metabolites (13 markers)
 - Scientifically graded clinical insights using NHMRC guidelines
- Strong uptake in Australia following launch in Q3 FY23
- Following the launch in Australia, expected to be rolled out through Microba's growing international distribution partner network.



Unlocking the power of metagenomics for comprehensive assessment of enteric infections

- High risk and immunocompromised initial patient population >16m
- Most comprehensive GI infectious disease test available spanning a comprehensive set of targets:
 - multi-domain pathogen species
 - virulence factors
 - AMR gene families
 - AMR gene variants
- Distribution agreement signed for first commercial launch with Sonic Healthcare
- Large potential commercial opportunity via hospital direct bill and path to reimbursement



Microba's leading international bench of healthcare partners



\$9.3bn Revenue

**Partnership: UK, Germany,
Belgium, Australia, US,
NZ & Switzerland**



\$5.8bn Revenue

**Partnership: Europe
& LATAM**



Leading GI Diagnostics in US

Partnership: US



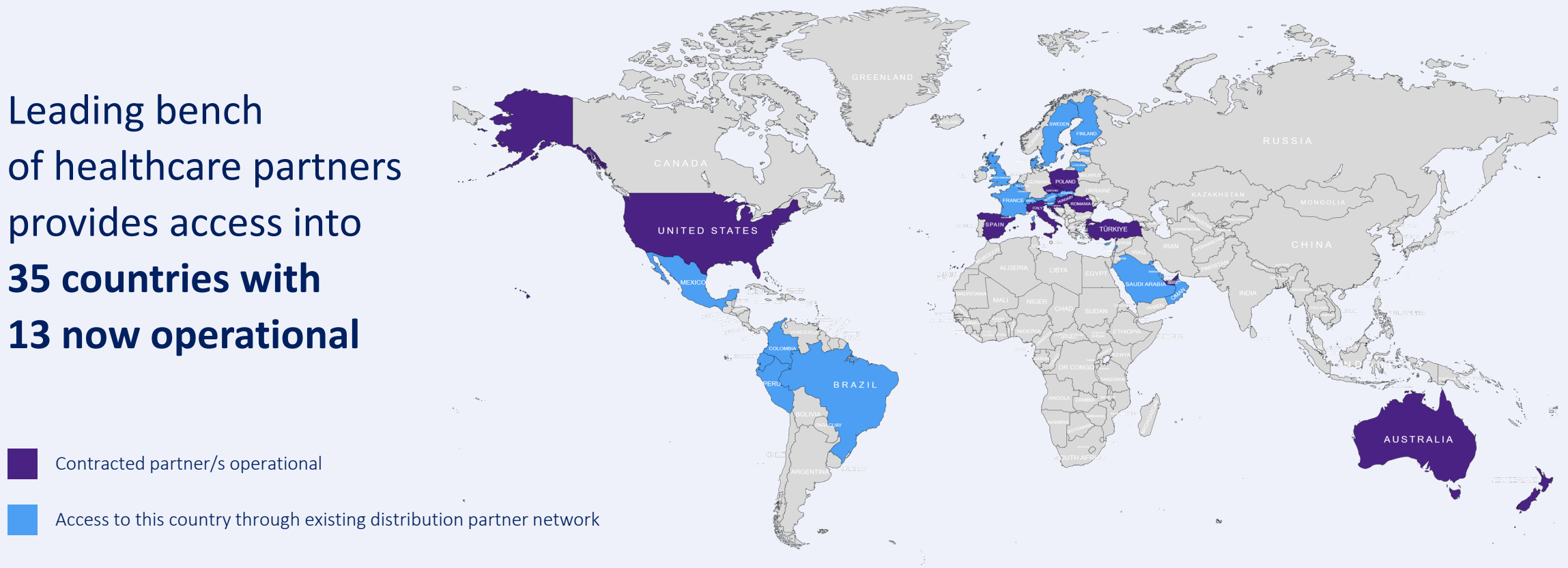
Raised USD \$800m

Partnership: GCC Region

Microba's **Healthcare & Pathology Partners**

Significant international distribution expansion for Microba's testing services

Leading bench
of healthcare partners
provides access into
**35 countries with
13 now operational**



Global growth driven through Microba's distribution partner network

Executing to progressively move partners through Microba's partner success program to provide Microba-powered testing to their customers.

Partner Success Program Stages



Stage	Details
1 - Planning & Contracting	20 countries (Including Sonic Healthcare companies)
2 - Operationalisation	United States (LUM), Brazil (SYAB) , Australia (SHL)
3 - Sales & Marketing Activation	Australia (MH), United Arab Emirates (G42), Portugal (SYAB), Czech Republic (SYAB), Türkiye (SYAB), Poland (SYAB), Colombia (SYB), Croatia (SYAB), Hungary (SYAB), United States (GEN)
4 - Execution & Growth	Australia (MAP), Australia (MG), New Zealand (MG), Spain (SYAB), Italy (SYAB) , Romania (SYAB)

Microbiome Therapeutics

Developing novel monoclonal microbial cell therapies

A therapeutic revolution.

Novel, precision microbiome therapeutics

Precision Microbiome Therapeutics

- **Precision microbiome analysis platform** delivering unparalleled accuracy, coverage & depth.
- Data driven discovery platform utilising one of the worlds **most advanced & highly curated microbiome datasets**.
- Next generation approach to microbiome drug development **identifying single keystone species and their biology to develop Live Biotherapeutics**.



Innovative Pipeline

- ✓ Excellent safety profile
- ✓ Scalable GMP manufacturing for high dose oral delivery
- ✓ Potent and novel biology mediated by Live Biotherapeutic strategy

Strong Corporate Profile

- ✓ US Pharmaceutical Executive leadership
- ✓ Technically robust multi-disciplinary team
- ✓ Global partners

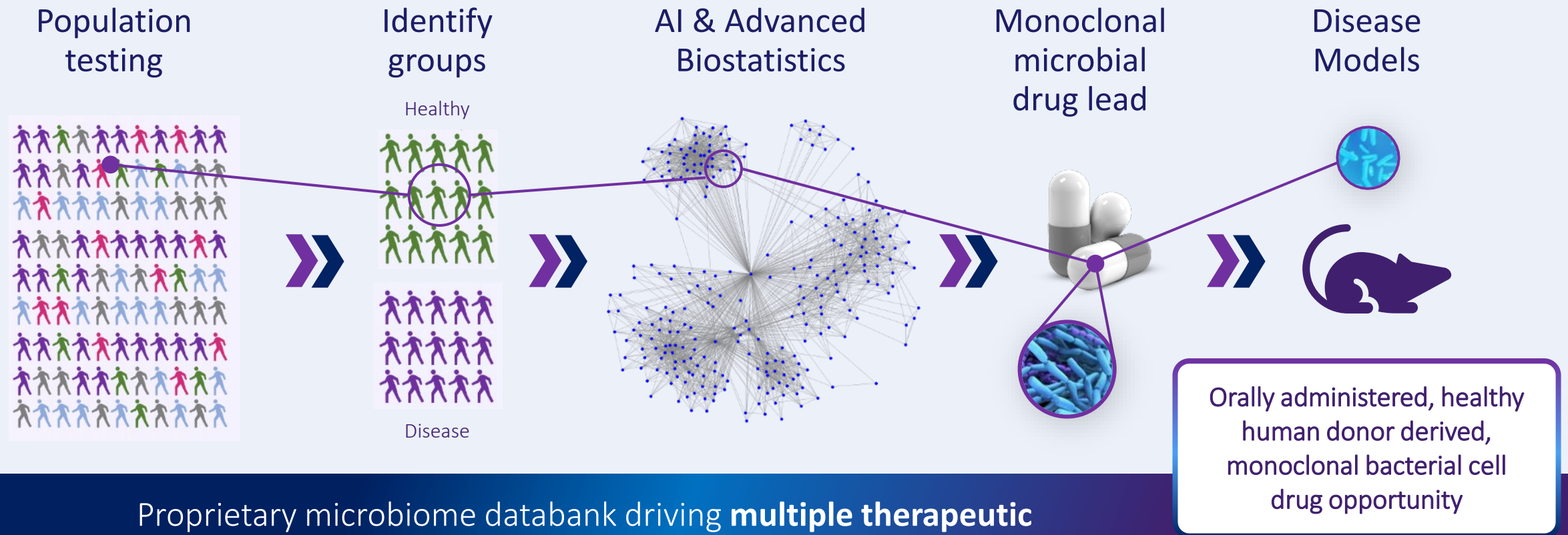
Microba Partners



Team Experience



Repeatable, scalable, data-driven platform **discovering novel monoclonal microbial cell therapies**



Proprietary microbiome databank driving **multiple therapeutic opportunities through a capital light platform**

Rapid progress tapping the therapeutic potential of the human microbiome for major chronic diseases

Inflammatory Bowel Disease



PHASE I IN PROCESS

Recently Completed

- ✓ Phase I HREC approval
- ✓ cGMP manufacturing complete
- ✓ Phase I trial commenced

Upcoming milestones

- Phase I participant dosing complete
- Phase I complete



UNIVERSITY
OF MIAMI



Cancer Immunotherapy



PRECLINICAL

Recently Completed

- ✓ Leads discovered
- ✓ Leads isolated
- ✓ First animal model results

Upcoming milestones

- Immunological pre-clinical results
- Lead candidate selection



Autoimmune Diseases



SCREENING

Recently Completed

- ✓ Program commenced
- ✓ Strains provided to Ginkgo
- ✓ First in vitro screening results

Upcoming milestones

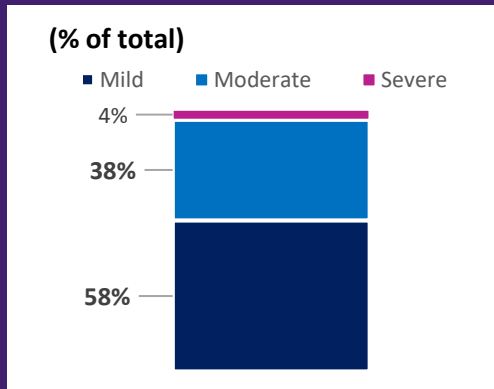
- Stage 1 activity screening complete
- Stage 2 activity screening complete



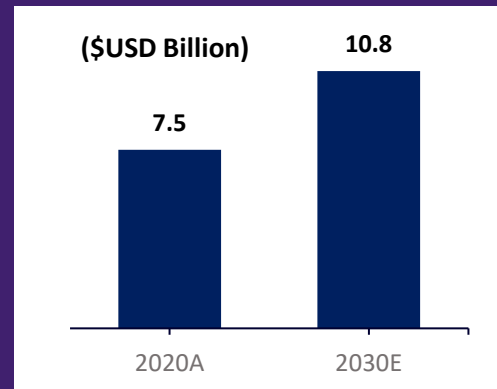
Inflammatory Bowel Disease program – MAP 315

Addressing a key gap in existing therapy for UC sufferers

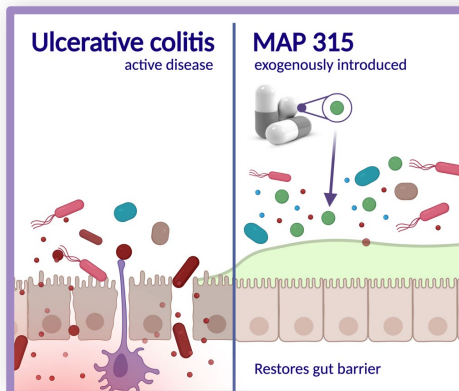
Ulcerative Colitis Addressable Patient Population¹



Ulcerative Colitis Therapeutic Global Market Size²



MAP 315 has the potential to provide **novel, potent therapeutic benefit** to UC patients through addressing a **key gap** in existing care – **epithelial and mucosal healing**



Candidate selection

Non-clinical package

Phase I Regulatory

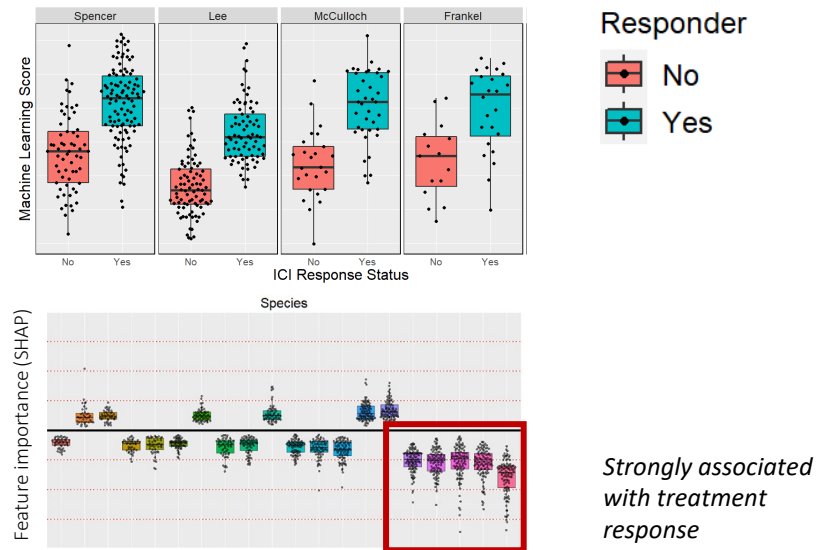
Phase I CMC

Phase I Clinical



Immuno-oncology program – Positive first animal data

1 Human clinical data driven lead candidate discovery

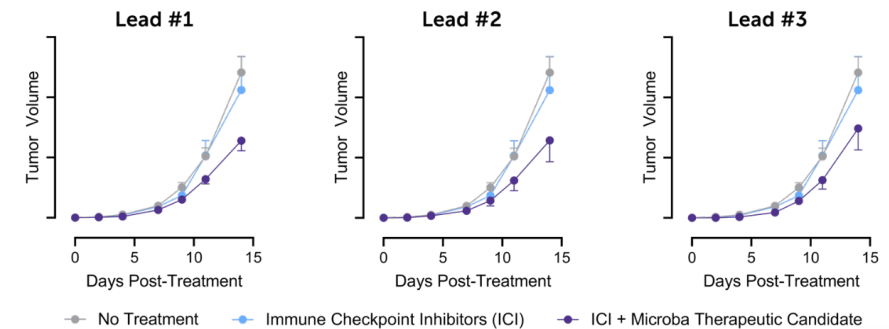


Meta-analysis of multiple datasets using Microba's high-resolution technology identifies multiple species not previously found to be associated with treatment response.

2 Proof of concept achieved in immune checkpoint inhibitor (ICI) refractive mouse model

Positive animal efficacy data has been generated for Microba's immuno-oncology therapeutic leads.

A significant reduction in tumour size was observed in combination with immune checkpoint inhibitor (ICI) treatment in a mouse model of melanoma.



The global ICI market is valued at over US\$30B¹ – a novel therapeutic that increases response to these drugs represents a substantial commercial opportunity



The Microbiome has been identified as a critical element across the spectrum of Cancer Biology

Autoimmune disease program - Positive first *in vitro* results

Building towards biobank of valuable therapeutic assets

- ✓ Novel high-throughput anaerobic cultivation and screening platform has been established in partnership
- ✓ First results have been delivered identifying leads with:
 - anti-inflammatory activity;
 - effects on gene transcription associated with immune modulation; and
 - other biological mechanisms of relevance to autoimmune and other chronic diseases
- ✓ Program tracking positively to deliver a deeply characterised biobank containing therapeutic leads for multiple autoimmune diseases

Program Overview

- 2 year discovery program which commenced in May 2022
- Leveraging Ginkgo synthetic biology capabilities and Microba's data driven drug discovery pipeline for the purpose of identifying drug candidates for Psoriatic Arthritis, Autoimmune Liver Disease and Lupus
- Both parties are contributing investment and intellectual property to the program.



NYSE: DNA | Market cap \$4.7B* | Boston HQ



Cargill

CORTEVA
agriscience

Aj
AJINOMOTO

KERRY

Roche

genomatica

JOYN
BIO

BAYER

motif
FOODWORKS

synlogic

moderna

#

The start of a therapeutic revolution

1 First Generation



Fecal Doner Derived



FDA approval Nov 30 2022
Fecal doner derived enema drug product



FDA approval April 27 2023
Fecal doner derived oral capsule drug product

2 Second Generation



Bacterial Consortia



Vedanta Biosciences
Vedanta Biosciences Raises \$106.5M in Funding



SER-155
Phase 1b showing engraftment reduction in pathogens

3 Next Generation



Single Strain & Small Molecule



MAP 315
Phase 1 Half 1 FY2024

Some recent IBD and microbiome deals

Licensee / Acquiror	Licensor / Target	Date	Type	Deal size	Indication / clinical stage
 MERCK	 Prometheus Biosciences	Apr 2023	Acquisition	Total deal size: US\$10.8b	Ulcerative Colitis (phase 2) Crohn's disease (phase 2A) Autoimmune diseases (phase I or pre clinical)
 Nestlé HealthScience®	 Enterome	July 2022	R&D collaboration and license agreement	Total deal size: Undisclosed Upfront: €40m Sales / regulatory milestones: Undisclosed	Food allergies and IBD (pre clinical)
 Pfizer	 ARENA PHARMACEUTICALS	Mar 2022	Acquisition	Total deal size: US\$6.7b	Ulcerative Colitis (phase 3), Crohn's disease (phase 2/3), Atopic dermatitis (phase 2 complete)
 Roche Genentech <small>A Member of the Roche Group</small>	 NOVOME BIOTECHNOLOGIES	Nov 2021	R&D collaboration and license agreement	Total deal size: US\$605m Upfront: US\$15m Additional payments: US\$590m	IBD (Discovery)
 Nestlé HealthScience®	 SERES THERAPEUTICS	Jul 2021	Licensing agreement in US/Canada	Total deal size: US\$525m Upfront: US\$175m Sales / regulatory milestones: Up to US\$225m	Recurrent Clostridioides difficile infection (Phase 3)

<https://www.merck.com/news/merck-strengthens-immunology-pipeline-with-acquisition-of-prometheus-biosciences-inc/>

<https://www.enterome.com/news-events/enterome-signs-major-strategic-rd-collaboration-with-nestle-health-science-to-develop-and-commercialize-new-allermimics-and-endomimics-immunotherapies-for-food-allergies-and-inflamm/>

<https://www.pfizer.com/news/press-release/press-release-detail/pfizer-completes-acquisition-arena-pharmaceuticals>

<http://novomebio.com/wp-content/uploads/2021/11/Novome-and-Genentech-Enter-into-Strategic-Collaboration.pdf>

<https://ir.serestherapeutics.com/news-releases/news-release-details/seres-therapeutics-nestle-health-science-announce-ser-109-co>

Outlook



Upcoming Milestones for 2023

2023 JAN – MAR	2023 APR - JUN	2023 JUL - DEC
Services New healthcare product full launch ✓	Services New international distribution deals ✓	Services New country expansion
Services New international distribution deals ✓	Therapeutics - IBD MAP 315 program HREC Approval for Phase I trial ✓	Services First Sonic partners operational
Therapeutics - IBD MAP 315 program Phase I HREC Submission ✓	Therapeutics - IBD MAP 315 program GMP manufacture complete Phase I ✓	Therapeutics - IBD MAP 315 program Phase I participant dosing complete
Therapeutics - IBD MAP 315 program FDA Pre-IND meeting outcome ✓	Therapeutics - IBD MAP 315 program Phase I trial commencement ✓	Therapeutics - IBD MAP 315 program Phase I complete
Therapeutics - IO Program Pre-clinical results ✓		Therapeutics – IO Program Immunological pre-clinical results
Therapeutics – Autoimmune Program First <i>in vitro</i> screening results ✓		Therapeutics - Autoimmune Program Stage 1 activity screening complete



Dr Luke Reid

Chief Executive Officer
luke.reid@microba.com



Pasquale Rombola

Chairman
pasquale.rombola@microba.com

Head Office

Level 10, 324 Queen Street
Brisbane QLD Australia

Laboratory

Princess Alexandra Hospital
Woolloongabba QLD Australia