



# Bio Shares Summit

July 13, 2024

Session 7: Second Pass | Time for a Re-Assessment

ASX: GTG  
NASDAQ: GENE



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# Bio Shares Biotech Summit – Overview

- Evolution of the Genetic Technologies business model
  - Vision, Portfolio and Company Overview
- Market Opportunity – seeking a cornerstone investor to scale our business
- The Healthcare problems and how Genetype can help solve it
- Our Innovation
  - The Genetype Multi test, Comprehensive Breast and Ovarian test and our latest innovation plans
  - What data does the geneType for breast cancer test provide?
- geneType tests – pathways to market
  - Is the customer the patient or physician?
  - How many geneType tests have been launched and which is the most successful so far?
- Recent results and forward revenue trends
- Our industry collaborations
- Our competitors



## VISION

World leader in personalized predictive genomics.

Empowering individuals to take control of their health.

Turning cutting-edge science into personalized, predictive tests

Backed by over 20 years of experience, our scientific and clinical teams are translating genetics and clinical information into absolute risk tests that predict risk of chronic diseases before onset.

Empowering physicians to improve health outcomes for people around the world enabling a new era of personalised medicine.

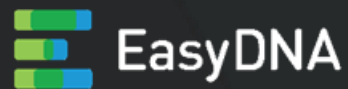


# World leading portfolio

Most comprehensive guideline driven portfolio for human and animal health.

- Comprehensive Breast and Ovarian Cancer
- Patented GeneType Multi Risk Test
- Non-Invasive Prenatal Testing (NIPT)
- Carrier screen testing
- Pharmacogenomics
- Oncogenetic & Monogenic diseases
- Animal care

Revenues anchored by our 3 brands to seize a multi Billion-dollar opportunity.



# Company Overview



60  
Employees  
(FTE) globally

40  
Countries

25  
Patents Granted\*  
(9 Pending Worldwide\*)

14  
Test  
Categories

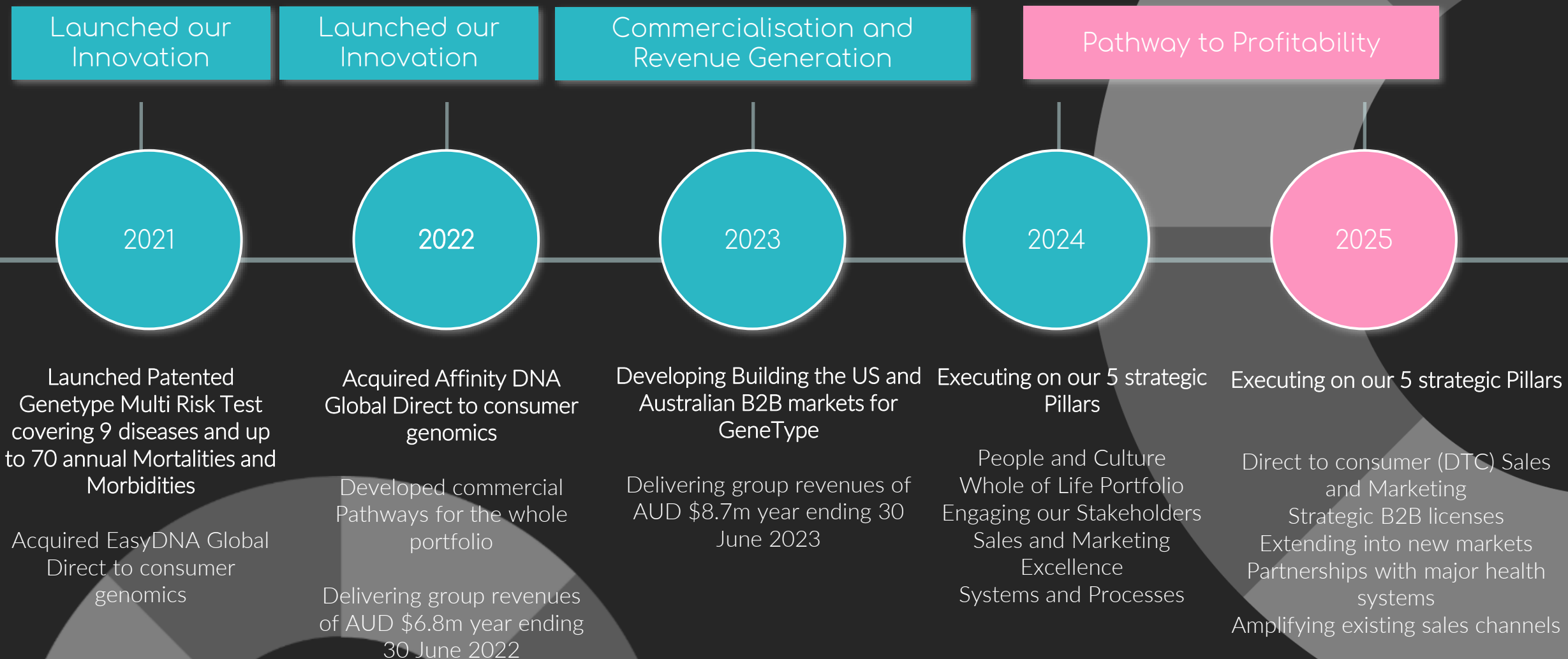
51  
Tests

12  
Partner  
Laboratories

\* Patents granted are specific to the GeneType portfolio of products

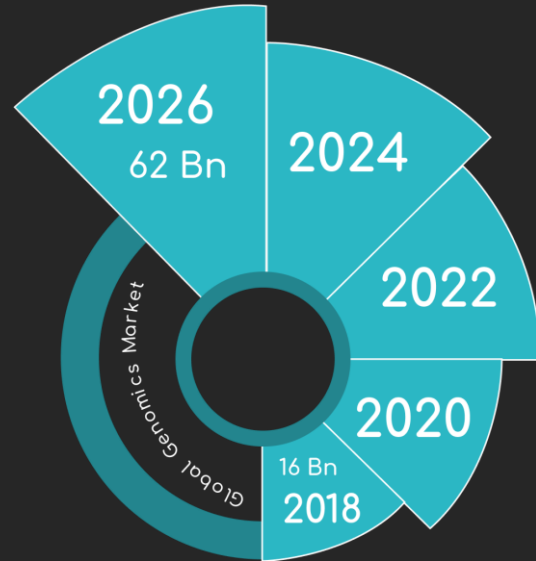


# How have we evolved



# Market size and trend genomics

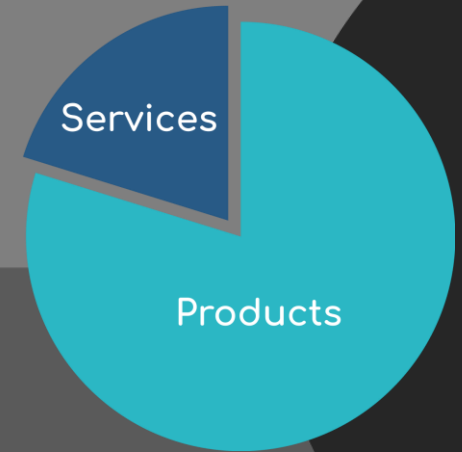
Global Genomics Market (US\$ Bn), 2018 to 2026



North America Genomics Market (US\$ Bn), 2018



Global Genomics Market Share, By Type, 2018







The global genomics market size was valued at USD 33.90 billion in 2023 and is poised to grow from USD 39.53 billion in 2024 to USD 157.47 billion by 2033.

This demand is driven by advancements in technology enabling rapid screening, increased recognition by healthcare professionals that genetic data can guide more precise, effective treatments and preventative measures, and consumer interest in tracking general health and health risk assessments.



# GeneType can solve the Healthcare Industry problem

-  Increased Chronic Disease Prevalence
-  Administrative Costs and Inefficiencies
-  Aging Population
-  Increased Pharmaceutical Costs



79.5%

of people who take our test have insights into their health which can lead to early detection saving lives and money

Growing healthcare costs is multifaceted, impacting individuals, employers, healthcare providers, insurance companies, and governments.

Addressing this problem requires comprehensive strategies that focus on promoting:

Personalized preventive care will improve the population health worldwide.

# Our Innovation – Multi-Risk Test

GeneType can identify patients 'at risk' before onset and aid in the early detection and treatment.

GeneType Risk assessment test for breast cancer has demonstrated improved early-stage detection by 18% and saving approx. US\$1.4B per annum<sup>4</sup> for the US payer

GeneType Multi-test covers >70% of mortality & morbidity

## Diseases Areas

<p><b>Oncology</b></p> <ul style="list-style-type: none"> <li>Breast Cancer</li> <li>Colorectal Cancer</li> <li>Prostate Cancer</li> <li>Melanoma</li> <li>Pancreatic Cancer</li> <li>Ovarian Cancer</li> </ul>	<p><b>Cardiovascular</b></p> <ul style="list-style-type: none"> <li>Atrial Fibrillation</li> <li>Coronary Artery Disease</li> </ul> <p><b>Metabolic</b></p> <ul style="list-style-type: none"> <li>Type 2 Diabetes</li> </ul>
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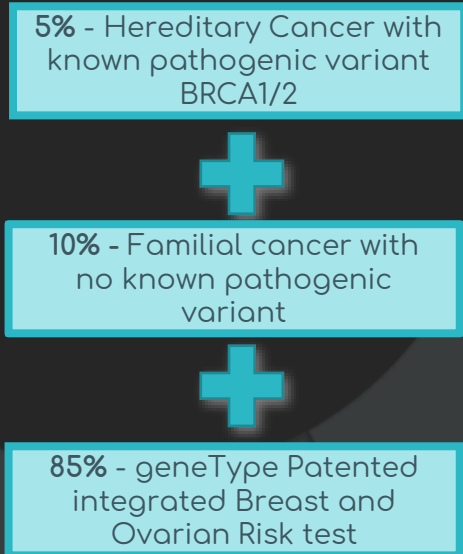


Guideline driven, Actionable results

1. TGA, FDA and EU regulatory approval granted to the sponsor, DNA Genotek
2. Commercial availability
3. Commercial availability in the US and Australia
4. Budget Impact Model

# LAUNCHED Comprehensive Breast and Ovarian Cancer

Evaluates a woman's risk of developing Breast and/or Ovarian Cancer in women 30 years+



- The test evaluates a women's risk of developing Breast and/or Ovarian Cancer either from a hereditary gene mutation or from the far more common familial or sporadic cancer.
- GTG's unique approach "appends" the detection of the 13 major "actionable" Breast and Ovarian cancer susceptibility genes to the GeneType test platform.
- Advances the goal of providing population-based genetic screening where up to 85% of cancers diagnosed do not have hereditary or family history

<sup>1</sup> <https://www.breastcancer.org/facts-statistics>  
Announcement - [Globe Newswire](#)

# LAUNCHED - "Know your RISK" Women's Health Event

Co-Hosted by Krystal Barter & Dr Kristi Funk





# NEW - Developing the World's most comprehensive risk test

ANNOUNCEMENT



**GTG to Develop World's Most Advanced Comprehensive Risk Assessment**

[genotype.com](https://genotype.com)  GeneTypeglobal  @Gene\_type  Genetic Technologies

- GeneType's latest innovation will be a world first
- Including over 200 high penetrant genes to unlock the hereditary disease risk to its current multi-test for 9 diseases in oncology, cardiovascular and Type-2 Diabetes
- This cutting-edge test is a significant leap forward in personalized preventative healthcare, providing physicians and their patients with an unprecedented tool to tailor interventions and treatment plans.
- This ground-breaking innovation will enable doctors to identify nearly 100% of people at risk of disease
  - going beyond family history, responsible for 5-15%.
  - the test includes sporadic non-hereditary disease which is linked to the remaining 85%

# Pathways to Market

## Executing a multi-brand strategy

Medical & Payer  
Business to  
Business (B2B)



Oncology – GTG  
Cardiovascular  
Prenatal NIPT  
Carrier testing  
Clinical & Molecular  
Metabolic

Consumer initiated  
testing (CIT)

with medical supervision



Expanded Carrier testing & NIPT  
Oncology – Multi-test  
Cardiovascular – Multi-test  
Metabolic – Multi-test  
Pharmacogenomics

Direct to Consumer  
Testing (DTC)

with no medical supervision



Ancestry  
Paternity  
Health & Wellbeing  
Pharmacogenetics



Animal  
Drug testing  
Relationship  
DNA Storage

# Scaling - Driving Sales and Insight

Sales

+500%

increase in tests sold via digital transformation strategy and pilot influencer campaign

Sales

+204%

YTD increase in tests sales versus last year via B2B Sales channel

Insight

79.5%

of people who take our test have insights into their health which can lead to early detection

Leading indicators of success selling CIT

Impressions

4.1m +216%

Reach

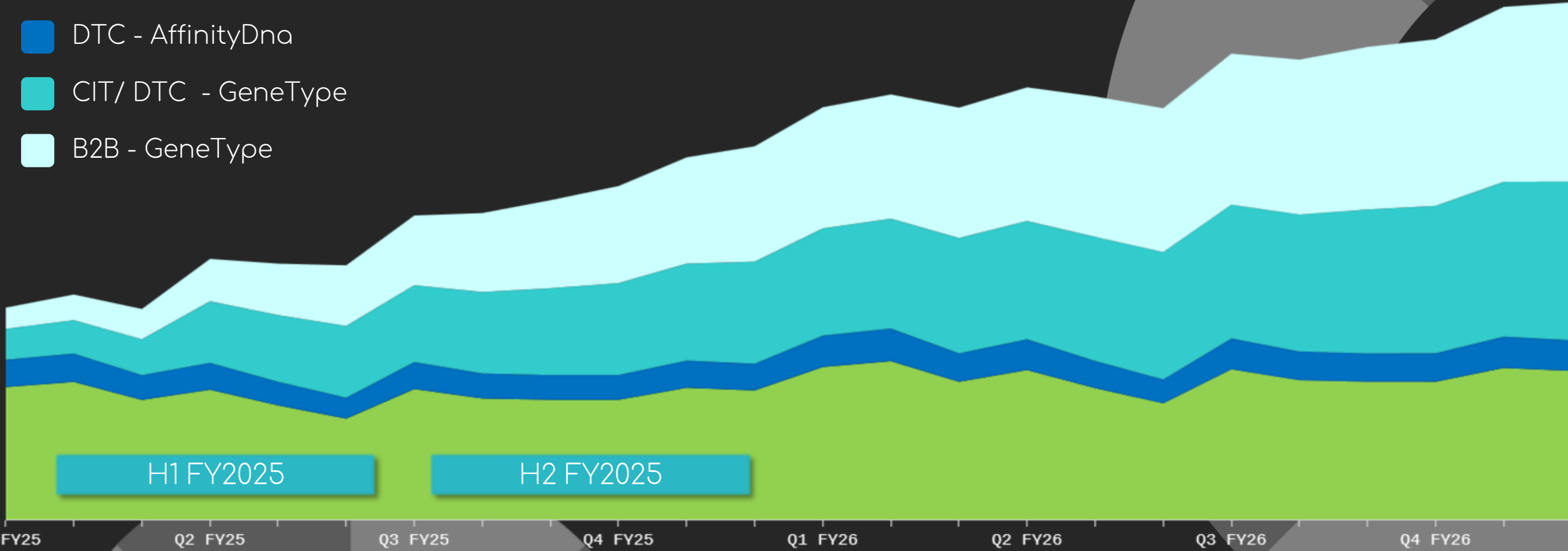
1.4m +60%

Followers

19.4k

# Revenue trends by channel – next 24 months

- DTC - EasyDNA
- DTC - AffinityDna
- CIT/ DTC - GeneType
- B2B - GeneType

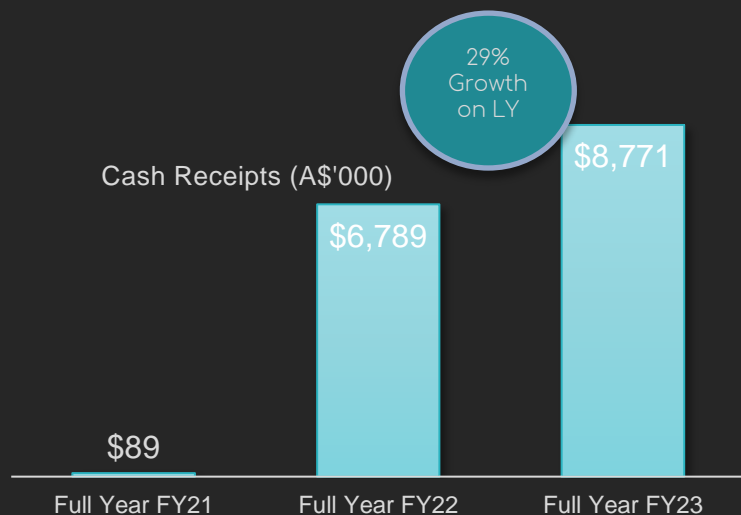


This excludes ANY NEW Markets e.g. Canada, EU or SEA

\*Cash Flow positive will rely on the execution of a long-term digital activation and large payer group in the US within the next 12 months



# Highlights – Quarter ending March 2024



CASH RECEIPTS  
YTD A\$5.7m

CASH BALANCE  
A\$1.8m

GROSS MARGIN  
A\$3.0m

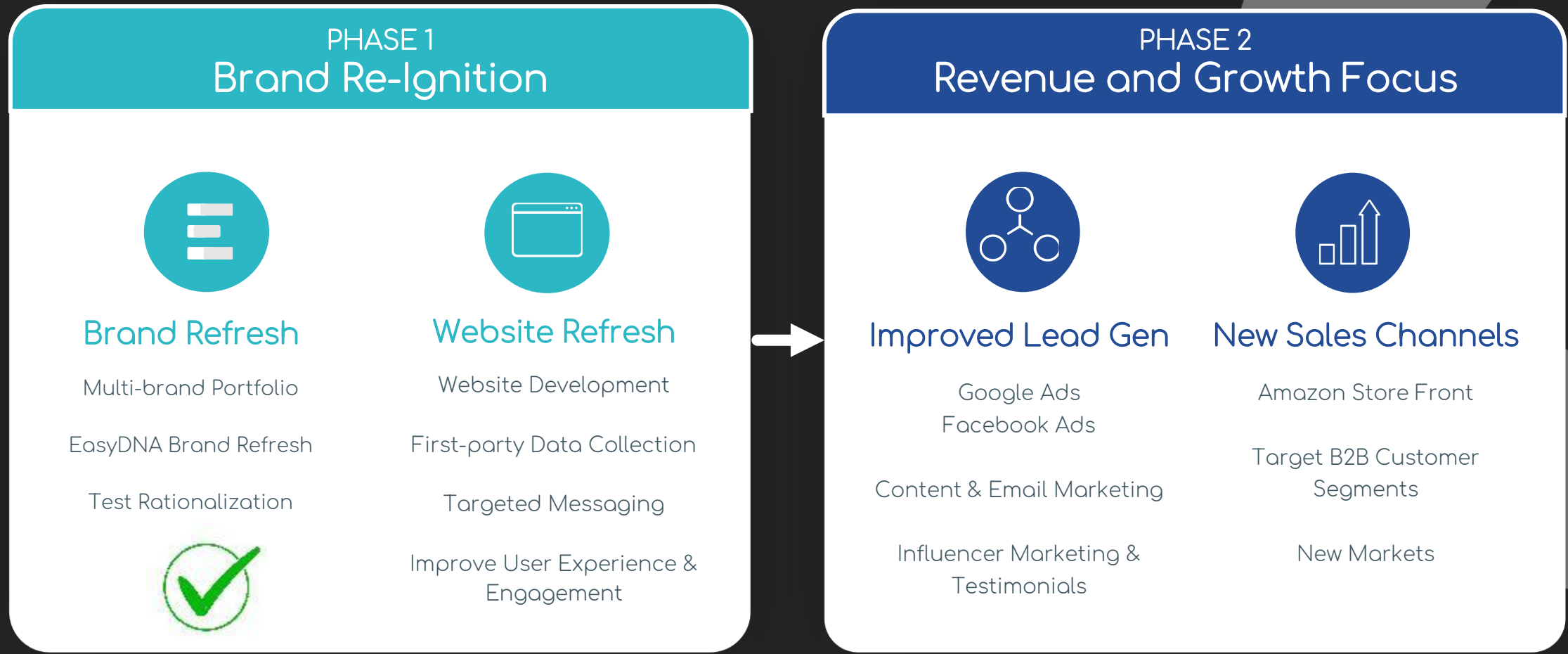
GROSS MARGIN  
52% (+5ppt)

- Cash Receipts from customers A\$1.86m for the quarter ending March 2024
- +204% versus last year - record number of geneType tests processed, via B2B Sales
- Launched Comprehensive Breast & Ovarian Cancer Risk Assessment Test at the “Know Your Risk” Event in Pasadena CA.
- Launched a digital transformation strategy early 2024
- +500% increase in tests sold week over week via digital transformation and pilot influencer campaign
- 79.5% of people who take our test have insights into their health they have never had before and can act.

# Portfolio & Business Unit Profitability

Brand			
Top Performing Categories & Margin	<ul style="list-style-type: none"> <li>• Multi -Risk Test</li> <li>• NEW - Comprehensive Breast &amp; Ovarian Test</li> </ul> <p><b>60% Gross Margin</b> Multi test at Full Price</p> <p><i>(*37% YTD due research projects)</i></p>	<ul style="list-style-type: none"> <li>• Paternity</li> <li>• Animal</li> <li>• Wellness</li> <li>• Relationship</li> </ul> <p><b>55.6% Gross Margin</b></p>	<ul style="list-style-type: none"> <li>• Paternity</li> <li>• Animal Allergy &amp; Intolerance</li> <li>• Animal Breed</li> </ul> <p><b>59.7% Gross Margin</b></p>
Business Unit	<p><b>No</b> – On target for 12months</p> <p>Growth in B2B and CIT</p>	<p><b>Yes</b> – Profitable</p> <p>Managing cost and New Markets</p>	<p><b>Yes</b> – Profitable</p> <p>Managing cost and New Markets</p>

# DTC - Growth strategy for EasyDNA



# Collaborations

Professor Bernard Rosner

Professor Graham Colditz

Professor John Hopper

Professor Jon Emery

Memorial Sloane Kettering Cancer

Ohio State University



Brigham & Women's Hospital and Harvard Medical School, Boston, Massachusetts, USA – Principal Investigator of the Nurses' Health Study (International expert in Biostatistics and breast cancer epidemiology).

Collaborating on a project to improve the GeneType Breast Cancer Test and to Cross-validate the Ovarian cancer test in the Nurses Health Study

Deputy Director, Institute for Public Health. Washington University School of Medicine, St. Louis, Missouri (International expert in Biostatistics and breast cancer epidemiology).

Collaborating on a project to validate the GeneType for Breast Cancer Test in African American patients

Professorial Fellow at the Centre for Epidemiology and Biostatistics in the School of Population Global Health, Melbourne University

Collaborating on a project to improve the Genetype for Breast Cancer Test and on a joint project with Prof Emery to develop clinical utility evidence for the GeneType tests

Professor of Primary Care Cancer Research at the University of Melbourne, and the Victorian Comprehensive Cancer Centre

Collaborating on a joint project with Prof Hopper to develop clinical utility evidence for the GeneType tests

Collaborating on a project to investigate modification of risk in BRCA-positive patients by polygenic risk scores

Collaborating on a project to investigate modification of risk in BRCA-positive patients by polygenic risk scores



# Major Milestones

## Sole Industry Partner in \$2.4m Multi Cancer Risk Clinical trial

Medical Research Future Fund (MRFF) Genomics Health Futures Mission Grant has been awarded.

The grant will provide funding for a randomized controlled trial of the clinical utility and cost-effectiveness of a multi-cancer polygenic risk score in general practice.

GENE is the sole industry partner for trial which is to be led by Professor Jon Emery.

Successful outcomes from the trial could lead to the implementation of geneType into routine use in General Practice in Australia.

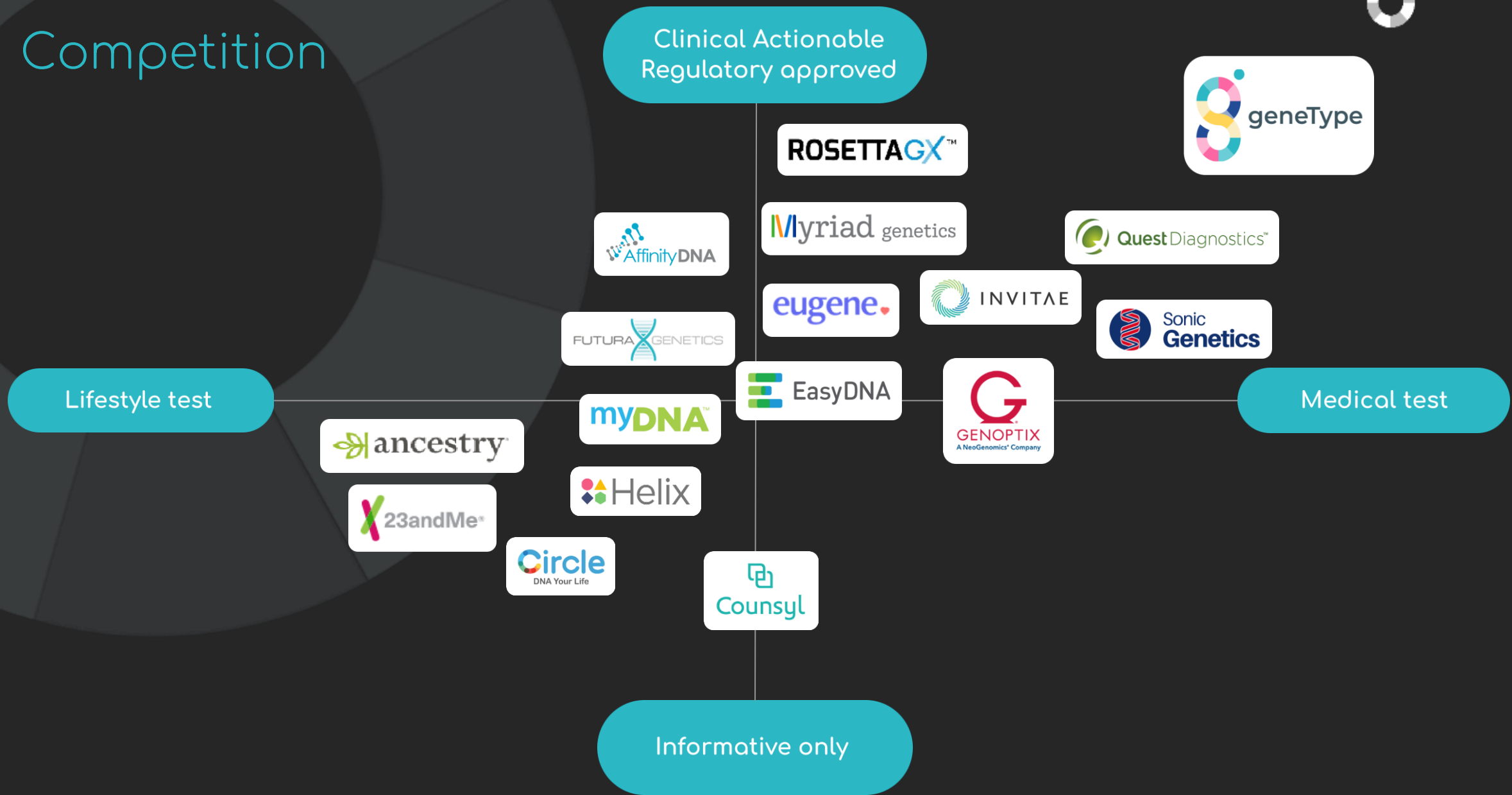


ANNOUNCEMENT

Medical Research Future Fund Grant names GTG as Sole Industry Partner  
Trial to Assess Multi-Cancer Genetic Risk Assessment in General Practice

genetype.com   GeneTypeglobal   @Gene\_type   Genetic Technologies

# Competition



Clinical Actionable  
Regulatory approved

ROSETTAGX™

Myriad genetics

QuestDiagnostics™

AffinityDNA

eugene.

INVITAE

FUTURA GENETICS

Sonic Genetics

EasyDNA

GENOPTIX  
A NeoGenomics Company

Medical test

Lifestyle test

ancestry™

23andMe®

myDNA™

Helix

Circle  
DNA Your Life

Informative only

Counsyl

# Achievements

## Snapshot and Achievements last 12 months

### GeneType & Commercialization

- ✓ FY23 Group Receipts A\$8.8 million, up 29%
- ✓ GeneType risk test: +250% in commercial samples received in June quarter
- ✓ 9 geneType Multi-Risk tests NOW commercially available in the US and Australian markets
- ✓ >100 medical practices on-boarded launching the foundation of geneType Hubs
- ✓ Launched U.S TV campaign

### Partnerships and Conferences

- ✓ Partnerships with Australian Breast Care Centre and Dr Nicole Yap
- ✓ Screening for breast cancer risk with Prof Bruce Mann at Royal Women's Hospital in Melbourne
- ✓ The American Society of Clinic Oncologists (ASCO) in Chicago
- ✓ Biotechnology Innovation Organisation (BIO) conference in Boston
- ✓ International Congress of Genomics (ICG)

### EasyDNA & Affinity DNA

- ✓ Integrated 2 Acquisitions
- ✓ NEW EasyDNA Website
- ✓ NEW eCommerce Platform
- ✓ Launch Carrier Testing and Non-Invasive Prenatal Tests (NIPT) into Europe
- ✓ Launch DNA storage solution in GTG NATA approved facility

### Clinical Validity and IP Strategy

- ✓ 9 Peer reviewed publication in 12 months
- ✓ Submitted geneType risk test to NCCN Guidelines
- ✓ Publications:
  - ✓ PLOS ONE
  - ✓ Journal of Precision Medicine
  - ✓ European Journal of Cancer prevention
  - ✓ Journal Breast Cancer Research and Treatment
- ✓ 25 Patents granted or pending

### Reimbursement activation

- ✓ Independently developed Budget Impact Model (BIM) identifies US\$1.4 billion dollars in annual savings in the treatment of breast cancer
- ✓ Active payer and distribution conversations
- ✓ Progress on US Payer meetings to enable coverage across millions of lives

### Laboratory Capability

- ✓ Gained NATA and CMS-CLIA accreditation and certification for 6 polygenic risk score tests
- ✓ Successful ARTG notification to TGA for company IVDs for all tests on the multi-risk test

## Summary

- Developed a clear Vision and Strategy to be leader in personalized predictive genomics
- Identified the Drivers of Revenue and pathway to profitability
- Strong momentum in commercial operations
  - +500% increase in tests sold week over week via digital and pilot influencer campaign
  - +204% YTD versus last year via B2B Sales
- We have a global operation, a comprehensive human and animal health portfolio
  - Launched – “Know your Risk” women's health event Co-Hosted by Krystal Barter & Dr Kristi Funk
  - Launched - the most comprehensive Breast and Ovarian Cancer risk test
  - Signed - Distribution agreement with Stay Healthy
  - Signed - Partnership agreement with WellWorks for You
  - Expanded - US testing operations with laboratory partners Gene by Gene in Houston
- Engaged with leading global collaborations
- Have a well-defined strategic plan to execute on a multi brand strategy in key regions

# Thank you & Questions

More information  
Simon Morriss  
Chief Executive Officer



[www.linkedin.com/company/genetype-limited](http://www.linkedin.com/company/genetype-limited)

[www.genetype.com](http://www.genetype.com)



# Appendices



# Board and Management: Sales and Scientific expertise leading GTG



Mr. Peter Rubinstein  
BEC, LLB  
Chairman  
Non – Executive Director



Dr. Lindsay Wakefield  
MBBS  
Non – Executive Director



Dr Anabela Correia  
BBIomed Sc, Ph.D  
Board Advisor



Simon Morriss  
GAICD  
Chief Executive Officer



Dr. Jerzy “George”  
Muchnicki  
MBBS  
Non-Executive Director



Erika Spaeth  
PhD  
Director of Clinical &  
Scientific Affairs



Dr Malcolm Bohm  
BSc, MMedSci, MD  
Board Advisor



Kathryn Andrews  
B. Com, CPA, FGIA, MAICD  
CFO & Company Secretary



Carl Stubbings  
Chief Commercial  
Officer

# Strong Scientific Leadership: Advisory Board



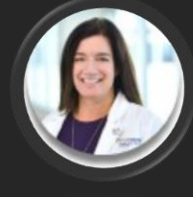
**Professor Jon Emery**

MBBCh MA DPhil FRACGP MRCGP  
Research & Education Lead,  
Primary Care Integration,  
Victorian Comprehensive Cancer  
Centre Herman Chair of Primary  
Care Cancer Research, University  
of Melbourne



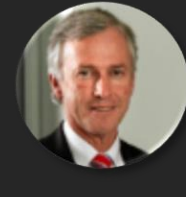
**Professor Finlay Macrae AO**

MBBS, MD, FRACP, FRCP, AGAF  
MWGO is Principal Fellow and  
Professor, Department of  
Medicine, University of  
Melbourne, and Head of  
Colorectal Medicine and  
Genetics, The Royal Melbourne  
Hospital



**Ora K. Gordon, M.D.**

MD, MS, FACMG  
Regional Medical Director, Center  
for Clinical Genetics & Genomics.  
Clinical Director, PSJH Population  
Health Genomics Program. Chair,  
Integrated Network Cancer  
Program, Professor of Genetics,  
St John Cancer Institute



**A.Prof Ron Dick**

MBBS, FRACP, FCSANZ,  
Chairman of Cardiovascular  
Institute at Epworth Healthcare,  
an Honorary Cardiologist at the  
Alfred Hospital and Bendigo  
Healthcare Group.

Completed his MBBS in 1979 and  
became a Fellow of the  
Australian College of Physicians  
in 1986. His interventional  
cardiology fellowship was from  
the University of Michigan  
Medical Centre USA.

# Our Intellectual Property

## 4 Patents granted in the US

- Patent No: US 11,257,569, Methods of assessing risk of developing a severe response to Coronavirus infection
- Patent No: US 11,072,830, Methods for breast cancer risk assessment
- Patent No: US 10,683,549, Methods for assessing risk of developing breast cancer
- Patent No: US 10,920,279, Methods for assessing risk of developing breast cancer

## 2 Patents granted in PRC (China & HK)

- Patent No. 201080033130.5 Methods for Breast Cancer Risk Assessment
- Patent No. 201580063966.2 Methods for assessing risk of developing breast cancer

## 9 Patent families pending

- Breast cancer risk assessment
- Methods for assessing risk of developing prostate cancer
- Methods for assessing risk of developing ovarian cancer
- Methods of assessing risk of developing a severe response to Coronavirus infection
- Methods of assessing risk of developing a disease
- Methods for assessing risk of developing breast cancer
- Improved methods for assessing risk of developing breast cancer
- Methods of assessing risk of developing breast cancer
- Methods for assessing risk of developing colorectal cancer

# Defined Terms

**Common Complex Diseases (CCP)** – A complex disease is caused by the interaction of multiple genes and environmental factors. Complex diseases are also called multifactorial. Examples of common complex diseases include cancer and heart disease.

**Polygenic risk score** - a number associated with one's disease risk based on the aggregated effects of individual risk variants through a multiplicative algorithm.

**Variant** - Single Nucleotide Polymorphism (SNP), an alteration in DNA that may be a common or rare event.

**Genomic** - pertaining to function of genetics from structure to relationship between genetic events.

**Genetic** - pertaining to a gene.

**GWAS** - genome-wide association studies are large population level studies which enable scientists to identify genes and genetic markers involved in human disease. This method searches the genome for SNPs that occur more frequently in people with a particular disease than in people without the disease. Each study can look at hundreds or many thousands of SNPs at the same time. Researchers use data from this type of study to pinpoint genetic variations that may contribute to a person's risk of developing a certain disease.

**SNP** - Single Nucleotide Polymorphisms, frequently called SNPs (pronounced "snips"), are the most common type of genetic variation among people. Each SNP represents a difference in a single DNA building block, called a nucleotide. For example, a SNP may replace the nucleotide cytosine (C) with the nucleotide thymine (T) in a certain stretch of DNA.

**Serious Disease Risk (SDR)** - Risk associated with acquiring COVID-19 and requiring hospitalization with its associated morbidities and mortalities.

**Germline Testing** – Germline testing is done on cells that do not have cancer. It is done to see if a person has a gene mutation that is known to increase the risk of developing cancers and other health problems. This test uses cells (such as blood or skin cells) that do not have any cancer cells. Germline mutations can sometimes be passed down from parents.

**Clinical Laboratory Improvement Amendments (CLIA)** - Regulates laboratory testing and require clinical laboratories to be certified by the Center for Medicare and Medicaid Services (CMS) before they can accept human samples for diagnostic testing.

**National Association of Testing Authorities (NATA)** - the authority responsible for the accreditation of laboratories, inspection bodies, calibration services, producers of certified reference materials and proficiency testing scheme providers throughout Australia. It is also Australia's compliance monitoring authority for the OECD Principles of GLP. NATA provides independent assurance of technical competence through a proven network of best practice industry experts for customers who require confidence in the delivery of their products and services.

**Next Generation Sequencing (NGS)** – Next-generation sequencing (NGS), also known as high-throughput sequencing, is the catch-all term used to describe a number of different modern sequencing technologies. These technologies allow for sequencing of DNA and RNA much more quickly and cheaply than the previously used Sanger sequencing, and as such revolutionised the study of genomics and molecular biology.

**Laboratory Developed Tests (LDT)** – A type of in-vitro diagnostic test that is designed, manufactured and used within a single laboratory.

**Consumer Initiated Tests (CIT)** - laboratory testing that is initiated by the consumer without a physician order but reviewed and communicated back to the consumer via a physician.

**Direct to Consumer (DTC)** – laboratory testing that is initiated by the consumer without a physician order. The results are reported back directly to the consumer.

**Health Care Professionals (HCP)** – physician, GP, or specialist authorized to receive the patient results.