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# **Our Overview**

01

Our Vision & Brand

**Pillars** 

2021 Overview Where are we now 02

Our Markets

Expanded to over 40 countries

03

**Our Acquisition** 

EasyDNA – Execution a multi brand strategy

04

Our Channels & Divisions

Pathways, Divisions and Category Segmentation

05

Our Portfolio & Innovation

Executing through cutting edge innovation and 'game changing' partnerships

06

**Our Capabilities** 

Aligning our internal capability aligned to execution

# 01: Unlocking personalised preventative health

Significant progress has been made in understanding the role of hereditary risk in chronic disease, however, many chronic conditions cannot be predicted by this risk alone.

We're transforming the conversation. Transitioning from a one-size-fits-all model to personalised, predictive health assessment – where each person has the information, they need to manage their health according to their own risk.

Backed by over 20 years of experience, our doctors, scientist and technicians are translating genetic information into multi-tests that uniquely combine genetic and clinical risk models to predict risk of chronic diseases before onset.

We're empowering physicians to improve health outcomes for people around the world. Tracking disease to its source. Enabling a new era of personalised medicine.





# 01: geneType's pillars reflect its commitment to personalised, preventative health



### **Unequalled experience**

Scientific team leveraging their extensive research track record in breast and colorectal to expand our medical-grade genetic test portfolio into further cancers and chronic conditions



### Leading integrated technology

The sophisticated integration of genomic and clinical risk factors deliver the most complete risk assessments for serious diseases in the world – the foundation of geneType



### **Relentless innovation**

Accelerating the world's transition to personalised, preventative health care by converting genetic data into actionable solutions for consumers and doctors



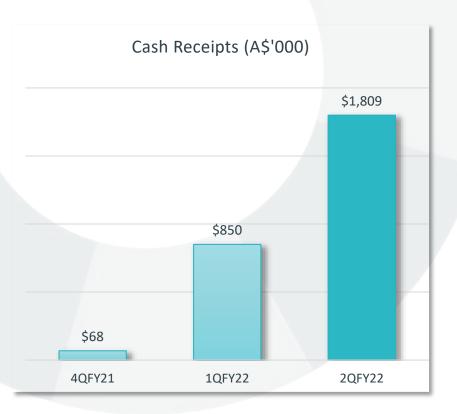
### Setting new standards

Setting clinical, safety and ethical standards to ensure the best health outcomes

genetype's Polygenic Risk Scores (PRS) platform is a proprietary risk stratification platform developed over the past decade integrating clinical and genetic risk delivering actionable outcomes from physicians and individuals



# 01: Results & Highlights Qtr. 2, 2021



- Cash receipts in 2QFY22 are +113% versus the prior quarter (1QFY22) to A\$1.8 million following the successful integration of EasyDNA in the quarter
- Multi-Test technical validation complete and submitted to NATA<sup>1</sup> and CMS<sup>2</sup> for final regulatory approval ahead of the commercial release
- US patent application for novel geneType COVID-19 Risk Test has been accepted and cross validation study completed in independent cohort confirming test performance and utility
- Enhanced patient distribution network with expanded partnership agreement with 1Health and IBX
- Study of 200,000 participants presented at 2021 San Antonio Breast Cancer Symposium validating the risk model with an expanded panel of 313 Single Nucleotide Polymorphisms (SNPs)
- Strong cash balance of A\$13.5 million, providing 22 months<sup>3</sup> of runway post the integration and revenue contribution from EasyDNA

<sup>1</sup> National Association of Testing Authorities, Australia

<sup>2</sup> Centers for Medicare & Medicaid Services 3 Based on projected cash flows



# 01: Our 2021 Snapshot

# Signed multi-year distribution agreement

License and distribution agreement for COVID-19 Risk Test with IBX

> Expanded Covid risk test distribution with 1Health and Vitagene

> > Launched tests on CIT in USA & AUS1

Acquired EasyDNA for US\$4m in cash and script

A global platform to launch new geneType products<sup>3</sup>

Acquired revenue generating platform

# Focused on R&D collaborations and Innovation

African American Breast Cancer Research Collaboration with Professor Colditz at Washington State University

2021 San Antonio Breast Cancer Symposium

American Academy of Anti-Aging Medicine (A4M)

Nurses Health Study (NHS)

A\$13.5million cash balance

22-month runway to drive execution <sup>2</sup>

Solid balance sheet

# New Multi-test pathway to launch

New Multi-test technical validation complete and submitted to NATA and CMS for final regulatory approval

Covering up to 70% of mortalities and morbidities

17 patents granted 9 patent families pending

Multiple peer-reviewed publications and

Collaborations with 4 prestigious academic and medical establishments

Robust patent portfolio & clinical credibility



<sup>&</sup>lt;sup>1.</sup> GeneType for Breast Cancer and Colorectal Cancer certified for sale via online sales platform.

<sup>&</sup>lt;sup>2</sup>. Runway based on current cash projections and including the acquisition of EasyDNA

<sup>&</sup>lt;sup>3</sup> Subject to local regulatory requirement



# 02: Our Markets and Collaborators

Genetype and EasyDNA Brands now available in more that 40 countries



### United States

geneType® Polygenic Risk Score (PRS) tests for breast, colorectal cancer and COVID-19 Risk Test available through CLIA Certified "High Complexity" Laboratories.

Further products expected to be submitted in next 12 months

### **Europe & UK**

Commencing CE certification enabling EU launch of Novel genetic risk test in CY2022

EasyDNA available multiple EU countries and UK

### Asia

(Inc. SEA, China and India)

Commencing a scoping and Prioritising a market entry strategy into Asia

EasyDNA available in multiple countries across SEA

### Australia & New Zealand

certification by Australian regulators NATA, to sell into the Australian market

Two products<sup>1</sup> currently certified and further products expected to be submitted in next 12 months

















# 02: A strategy to own the personalised, preventative health testing market

### **Brand Recognition and Advocacy**



### Thought leadership

Demonstrating our leadership by informing the conversation on personalised, preventative health care



### Seeded content

Amplifying our impact by starting and informing conversations in key consumer and clinical channels



### **GeneType advocacy**

Building a group of clinicians and consumers willing to share with their colleagues and friends their experience with geneType

## **Commercialization and Branding**



### Sales & marketing

Core set of sales and marketing tactics and assets tailored by therapeutic area, and adapted by geography



### **Medical education**

Motivating trial and purchase with medical education for clinicians and consumers

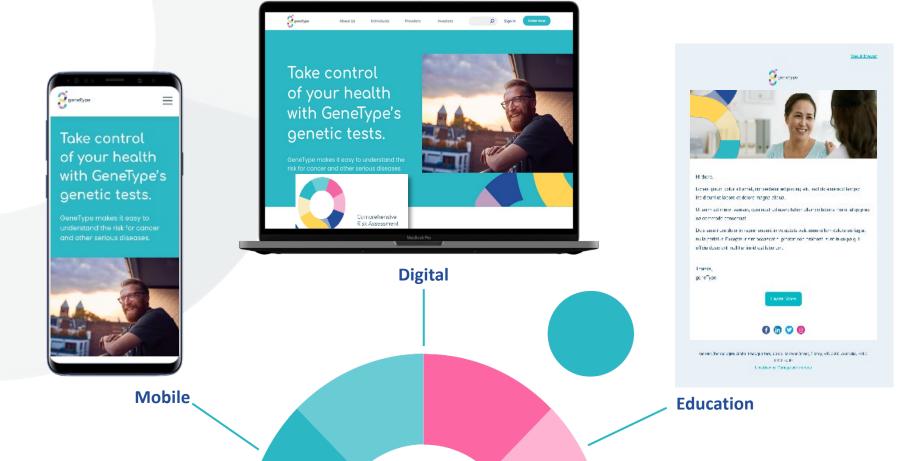


### **GeneType Hubs**

Empowering clinicians to use geneType. Their clinic becomes a geneType Hub that taps into a GP referral network and reinforcing their leadership in personalised, preventative health

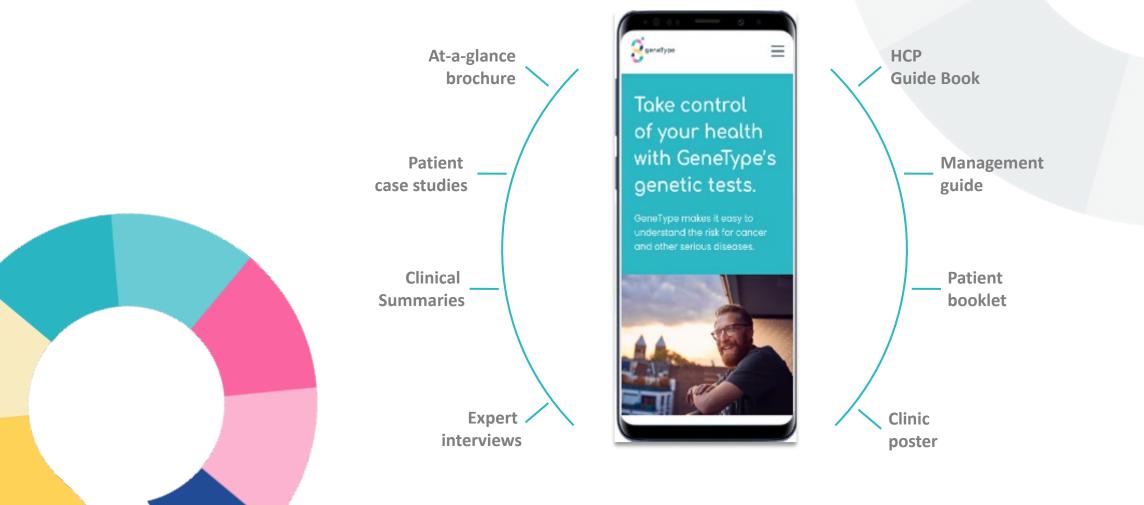


# 02: A cutting-edge geneType brand relaunched





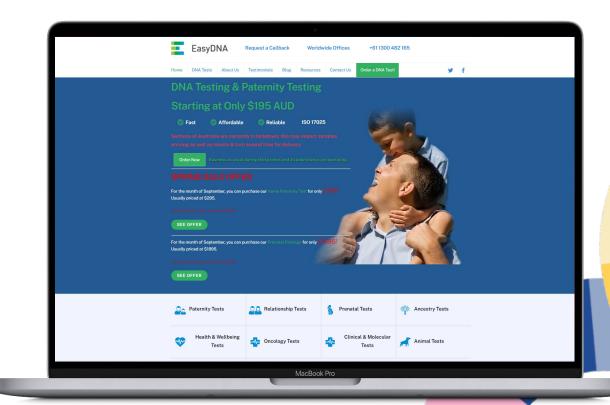
# 02: Core set of sales material to empower clinicians and consumers

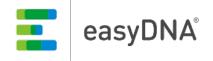




# 03: EasyDNA – Establishing our Lifestyle Division

- Acquired EasyDNA in August 2021 for US\$4 million
- Current revenues of US\$4.63 million through retail sales of its athome DNA tests
- Agreements with 12 laboratories in North America, AsiaPac and Europe
- Showing good baseline growth
- A platform to launch the geneType Multi Test and portfolio of serious disease tests across 40 countries\*
- EasyDNA currently sells paternity, oncology and health and wellbeing genomics-based tests
- This acquisition provides Genetic Technologies the foundation to grow in 40 countries
- 2022 will see us expand our portfolio of tests with availability in more channels and more markets







# 04: Our Pathways

Direct to consumer testing (DTC) with no medical supervision

Recent Acquisition announced for EasyDNA



### easyDNA"

Leverage for paternity, ancestry, gut microbiome testing and non-medical related genomic tests

www.easydna.com



Provides Genetic Technologies the foundation to grow in **40** countries

Agreements with 12 laboratories in North America, AsiaPac and Europe



# Consumer initiated testing (CIT) with medical supervision

Launched US and Australia CIT platforms in 2020 with medical supervision with:

InTeleLabs in the US

Phenix Health in



Current products include:

geneType for Breast Cancer

geneType for Colorectal Cancer

AUD\$349 / US\$249 per test



### Medical – Business to Business (B2B)

A execution plan curated for

Payers / Insurers\*

Primary Care Physicians

Specialists

Surgeons

Allied Health

modeling being completed by ALVA10\*

Health Economic

Certifying reimbursable testing platform

BRCA test

LYNCH Syndrome test

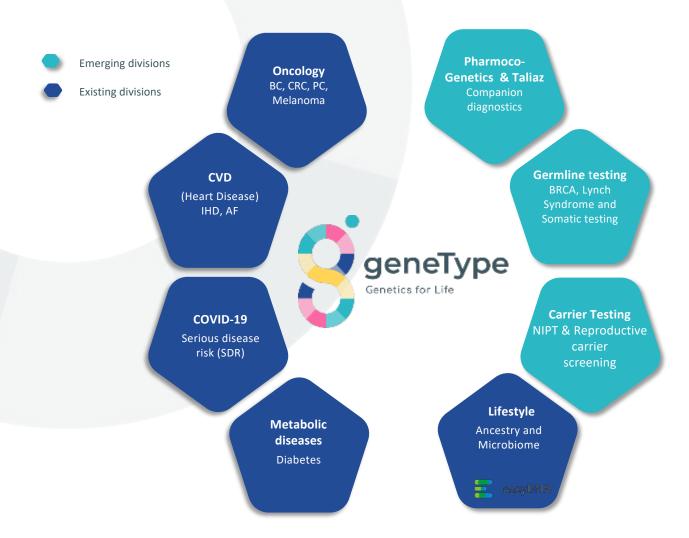




<sup>13</sup> 



# 04: Our Divisions



NEW – Universal collection test kit to support Multi Test Launch



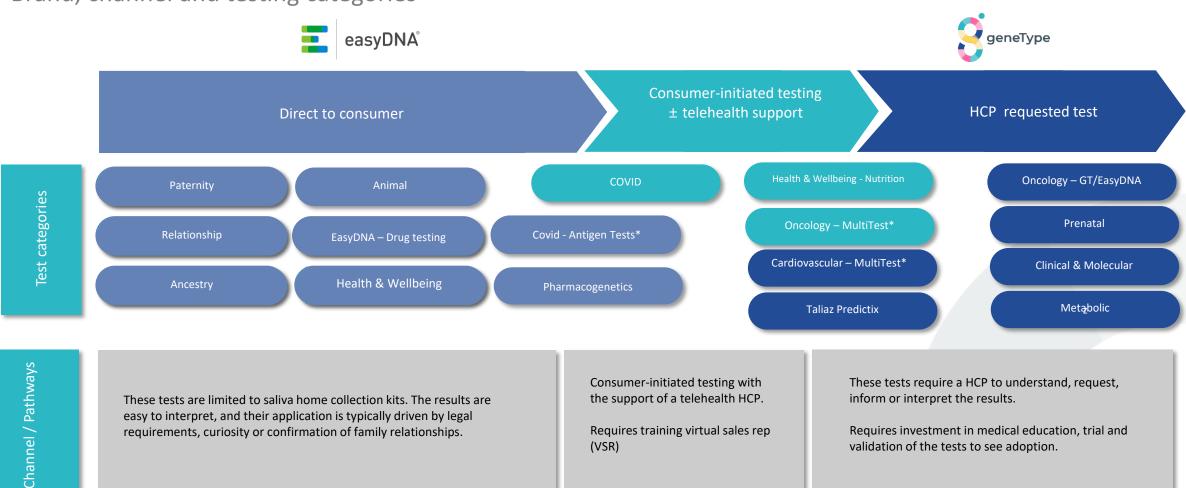
NEW Universal sample collection kit with TGA, FDA and EU regulatory approval<sup>1</sup>





# 04: Segmentation framework

Brand, channel and testing categories



<sup>\*</sup>Available upon regulatory approval



# 05: Our Portfolio – Driving Growth







Moderate Revenue CY 2021

IBX COVID Risk Test released for sale May 31, 2021







Relaunched with Vitagene December 2021

100% Germline + PRS test for Breast Cancer and CRC to launch in AU & USA



Panel

LYNCH Syndrome Lynch

Syndrome

Expanding into reimbursable space

Commercially<sup>1</sup> Available **Upon regulatory** Approval

Multi Test to provide risk assessment for >70% of all morbidities to launch



### Market Release to include up to 70% of morbidity:

- Breast Cancer
- · Colorectal Cancer
- · Cardiovascular Disease
- Type 2 Diabetes
- Ovarian Cancer

Prostate Cancer

Commercially<sup>1</sup> Available **Upon regulatory** Approval

December 2020

July 2021

H2 2021

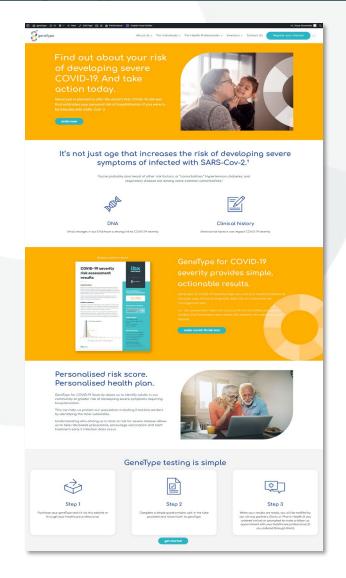
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2022



# **NEW:** Covid Risk Test (US)

https://genetype.com/for-individuals/covid-19





The link goes directly to Vitagene landing page:

https://vitagene.com/products/covi d-19-risk-test/





# 05: Our Innovation - Multi Test

A companion diagnostic PRS to help identify risk of serious disease for up to 70% of Mortalities and Morbidities Committed to continually invest in developing multi population testing solutions



Phase 2 Launch <sup>3</sup>

## Oncology **Breast Cancer**

**Colorectal Cancer Prostate Cancer** Melanoma Pancreatic Cancer **Ovarian Cancer** 

### Cardiovascular

Atrial Fibrillation Coronary Artery Disease

Type 2 Diabetes

### **Mental Health**

Taliaz

### Metabolic



## **GeneType Multi-test to include** >70% of mortality & morbidity



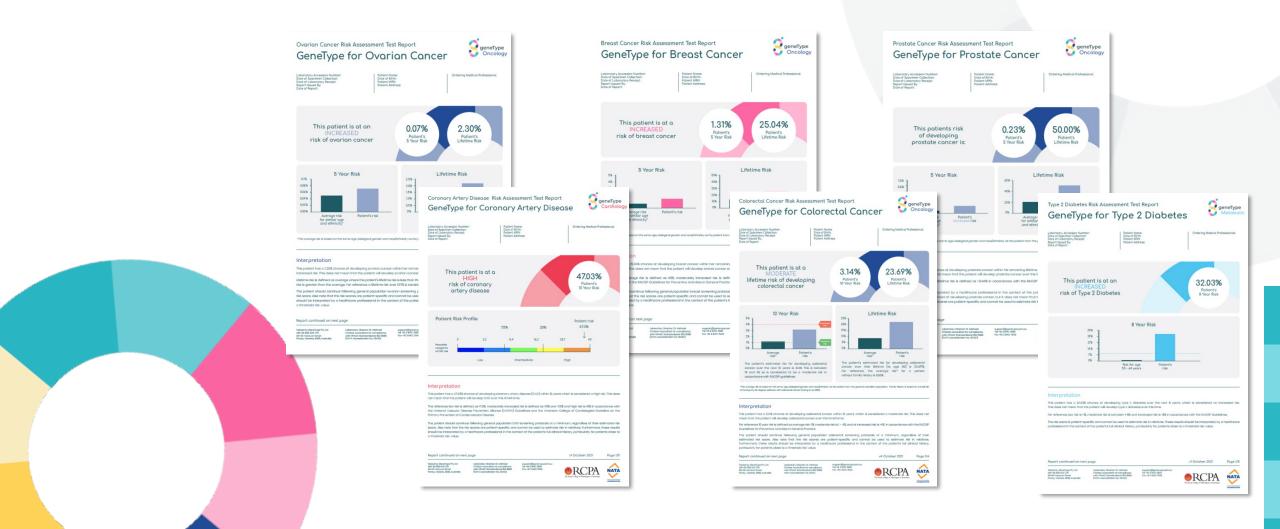
NEW Universal sample collection kit with TGA, FDA and EU regulatory approval<sup>1</sup>





# 05: Our Innovation - Multi Test

Phase 1 Launch Test reports – NATA Validation pack submitted

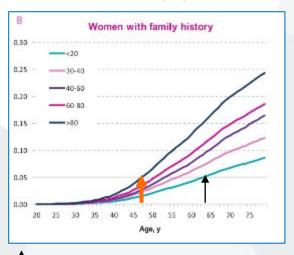




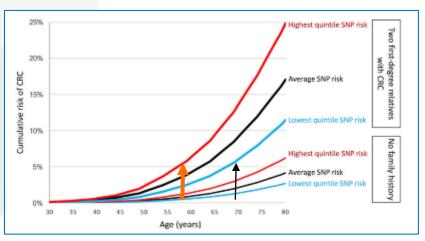
# 05: Our Innovation – Integrated Polygenic risk

geneType integrates genetic risk and clinical risk to better stratify individual risk. Patients with potentially high risk may exceed actionable clinical guidelines 10 - 15 years earlier than those with low risk  $^{1,2,3}$ 

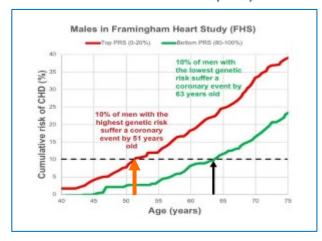
### Breast Cancer (BC)<sup>1</sup>







### Chronic Heart Disease (CHD)<sup>3</sup>



Low polygenic risk score

High polygenic risk score

geneType detects patients at an actionable risk of serious disease 10-15 years earlier than currently possiblePotentially significantly improving patient outcomes and health economics

<sup>&</sup>lt;sup>1</sup> Mayaddat et al. (2015) JNCI.

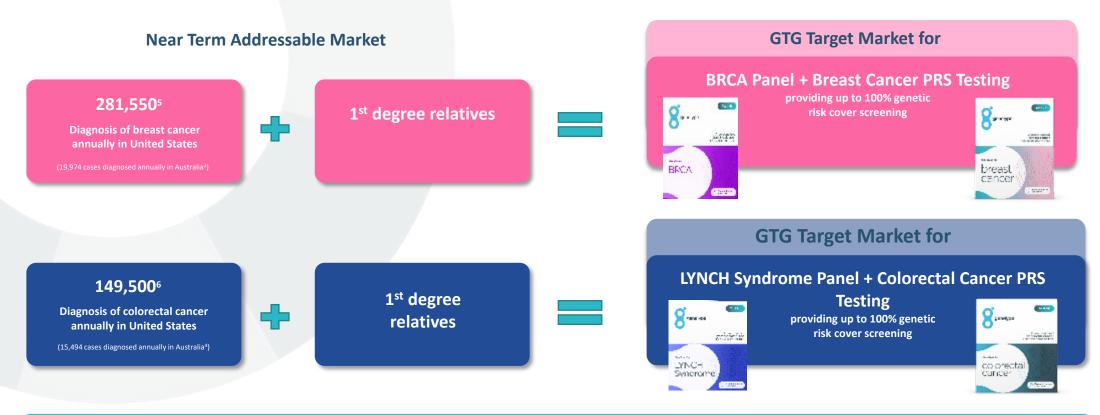
<sup>&</sup>lt;sup>2</sup> Jenkins et al. (2019) Familial Cancer.

<sup>&</sup>lt;sup>3</sup> Abraham et al. (2016) Eur Heart J.



# 05: Significant market opportunity

To provide predictive, pre-symptomatic testing to inform lifestyle choices and healthcare discussions Guideline driven, reimbursable for inherited and non inherited disease



## Global Predictive Genetic Testing Market anticipated to exceed \$28bn by 2026<sup>1</sup>

Genetic Testing Market Size By Test Type (Predictive Testing, Carrier Testing, Prenatal and New-born Testing, Piagnostic Testing, Pharmacogenomic Testing, Nutrigenomic Testing), By Application (Cancer, Genetic Disease, Cardiovascular Disease), Industry Analysis Report, Regional Outlook, Application Potential, Competitive Market Share & Forecast, 2020 – 2026; Published Date: Feb 2020; Authors: Sumant Ugalmugle, Rupali Swain

<sup>3.</sup> https://www.canceraustralia.gov.au/affected-cancer/cancer-types/breast-cancer/breast-cancer-australia-statistics

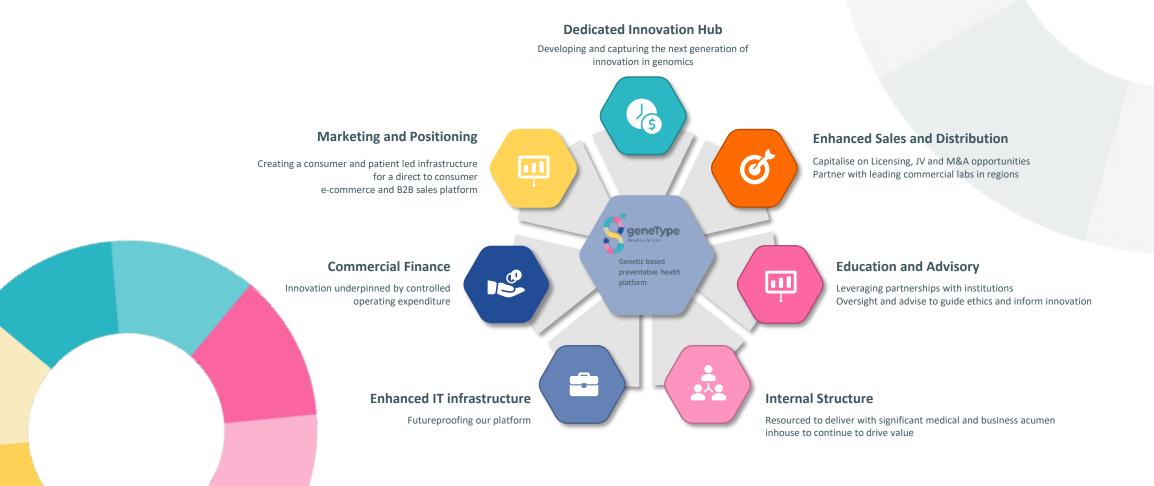
<sup>4.</sup> https://www.canceraustralia.gov.au/affected-cancer/cancer-types/bowel-cancer/bowel-cancer-colorectal-cancer-australia-statistics

https://www.cancer.org/cancer/breast-cancer/about/how-common-is-breast-cancer.html

<sup>6.</sup> https://www.cancer.net/cancer-types/colorectal-cancer/statistics



# 06: Our Capability





01	02	03	04	05	06
Our Vision & Brand Pillars	Our Markets	Our Acquisition	Our Channels & Divisions	Our Portfolio & Innovation	Our Capabilities
	Targeted and deliberate	Positioned for growth	Focused and distinct	Cutting edge innovation	Aligned to execute





# Thank you

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# Our Intellectual Property

### 7 Patents granted in the US

- Patent 11,031,098, Computer systems and methods for genomic analysis
- Patent 10,683,549, Methods for assessing risk of developing breast cancer
- Patent Nos. 9,051,617; 9,068,229 and 9,702,011 covering three of the core genetic markers included in the BREVAGenplus® risk assessment test
- Patent No. 7,127,355 offering broad protection re: methods of genetic analysis (the concept of combining clinical risk assessment with genetic risk factors to improve predictability over clinical risk assessment alone)
- Patent No. 6,969,589 covering the identification of informative SNPs

### **5 Patents granted in China**

- Patent Nos. 200680051710.0; 201310524782.4; 201310524916.2 and 201310524765.0
   "Markers for Breast Cancer"
- Patent No. 201080033130.5 Methods for Breast Cancer Risk Assessment

### 5 Patents granted in Hong Kong

- Patent Nos. 09101235.4; 12112875.1; 12112368.5 and 12112874.2 "Markers for Breast Cancer"
- Patent No. 12109000.5 Methods for Breast Cancer Risk Assessment

### 9 Patent families pending

- Methods for breast cancer risk assessment
- Methods for assessing risk of developing breast cancer
- Improved methods for assessing risk of developing breast cancer
- Markers for breast cancer
- Methods for genetic analysis
- Methods for genomic analysis
- Methods for assessing risk of developing colorectal cancer
- Methods of assessing risk developing a disease
- Methods for assessing risk of developing a severe response to coronavirus infection



# 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



Mr Nick Burrows
B.Com, FAICD, FCA,
FGIA, FTIA, F Fin
Non – Executive Director



Simon Morriss
GAICD
Chief Executive Officer



Dr. Jerzy "George" Muchnicki
MBBS
Executive Director & Chief
Medical Officer



**Erika Spaeth**PhD
Director of Clinical Affairs &
Medical Education



**Richard Allman**BSc, PhD
Chief Scientific Officer



Mike Tonroe
BSc, FCA, MAICD
Chief Financial Officer



**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



# **Financial Overview**

- Cash burn of A\$2.2 million in Q2 FY'22 (compared to Q1 FY'22: A\$1.9 million) as we continue to grow EasyDNA brand sales and develop and commercialize our geneType tests
- Cash reserves of A\$13.5 million after EasyDNA acquisition costs of A\$3.5 million give 22 month<sup>1</sup> runway to:
  - Support the introduction and distribution of new geneType products in the United States and Europe
  - Develop the direct-to-consumer sales channel through EasyDNA
  - Reimbursement studies for the polygenic risk tests;
  - Introduction of germline testing division;
  - General product research and development; and
  - For general working capital and potential acquisitions.

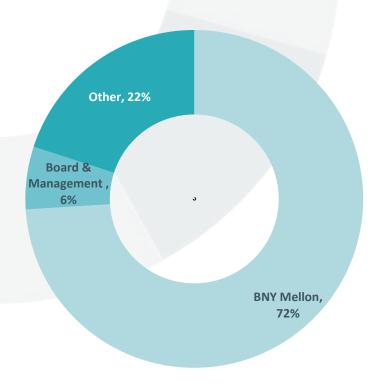
A\$'000	30 Sep 2021	31 Dec 2021	Change
Net operating cashflow	(1,939)	(2,157)	(11%)
Receipts from customers	850	1,809	113%
Research and Development and Staff costs	1,321	1,313	1%
Cash	15,742	13,509	(14%)

<sup>1</sup> Based on cashflow projections



# **Corporate Overview**





## **Dual Listed on the ASX and Nasdaq**

Financial Information	
Share price (AUD) as at 20 January 2022	0.5c
ADR price (USD) as at 20 January 2022	\$2.08
Ord Shares on Issue (M)	9,234
ASX 52-week trading (AUD low/high)	0.4/1.4c
Nasdaq 52-week trading (USD low/high)	1.77/8.18
Market Cap (A\$M/US\$M)	46.13/33.48
Cash at 31 December 2021	A\$13.5m
Cash at 30 September 2021	A\$15.7m
Debt (30 September and 31 December 2021)	nil



# **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 hospitalisation withs 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.