



Genetic Technologies – Business Update

The Future: *Unlocking personalised preventative medicine*

9 February 2023

Authorised by the Board of Directors of Genetic Technologies Limited

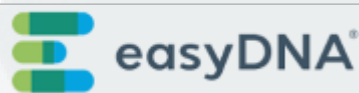
ASX: GTG
NASDAQ: GENE

World leading portfolio

Most comprehensive guideline driven portfolio for human and animal health.

- Patented GeneType Multi Risk Test
- Non-Invasive Prenatal Testing (NIPT)
- Carrier screen testing
- Pharmacogenomics
- Oncogenetic diseases
- Pet care

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



Patented* Genetype tests Integrate polygenic risk and clinical risks for critical medical conditions

Genetype tests integrate individual's familial, clinical and genetic information to actionable clinical insights.

A non-invasive saliva based test combines genetic and clinical risk models with cutting-edge research. We're leading a personalised healthcare revolution.

Our medical practitioners, scientists and technicians have developed the next generation of integrated predictive genetic testing and assessment tools – empowering physicians and patients to proactively manage health.

- ✓ **10 Patent families covering the GeneType products**
- ✓ **4 Patents granted in the US**
- ✓ **2 Patents granted in China**
- ✓ **9 Patents pending Worldwide**

Global Overview

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57

Employees
globally

40

Countries

25

Patents Granted*
(9 Pending
Worldwide*)

14

Test Categories

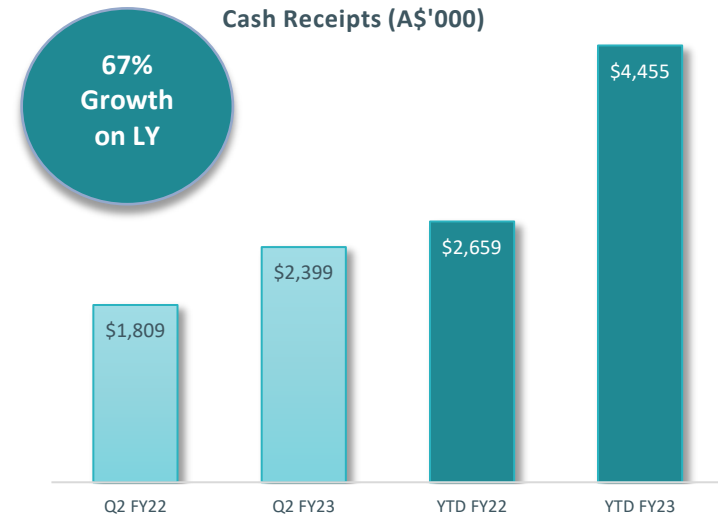
51

Tests

12

Partner
Laboratories

Delivering Revenue and Growth – Q2 FY23



Q2 CASH RECEIPTS

A\$2.4m

CASH BALANCE

A\$12.4m*

GROSS MARGIN

A\$1.08m

GROSS MARGIN

45%

Strategic & Operational Highlights:

- Cash receipts from customers A\$2.4m +32% on last year and 15% on previous quarter;
- YTD Receipts from customers total A\$4.45 million up 67% on prior year
- 6 consecutive qtrs. of growth on prior year
- R&D Tax Incentive of A\$1.96m expected in Q3 2023
- Strategic Partnership launched with QIAGEN global diagnostics
- Invited to India and UAE as guests of MedAchievers to explore GeneType MultiTest launch strategy
- GeneType Risk Test outperforms traditional risk assessments for breast cancer in identifying risk by up to 9 times
- Ten active engagements with U.S. payer groups, with a combined coverage of 42 million lives, including insurers, payers, and Key Opinion Leaders (KOL's)
- Presentations at ASCG Gi Cancers Symposium in San Francisco

*Includes R&D Tax Incentive of A\$1.96m expected Q3 2023; Includes proceeds from 7 February Capital Raise
All revenues for the period '21 & '22 are 'out of pocket' our strategy for reimbursement should become effective in 2023 FY

NEW Strategic Alliance with Qiagen

The alliance will establish and develop a 'Centre of Excellence' facility in Australia



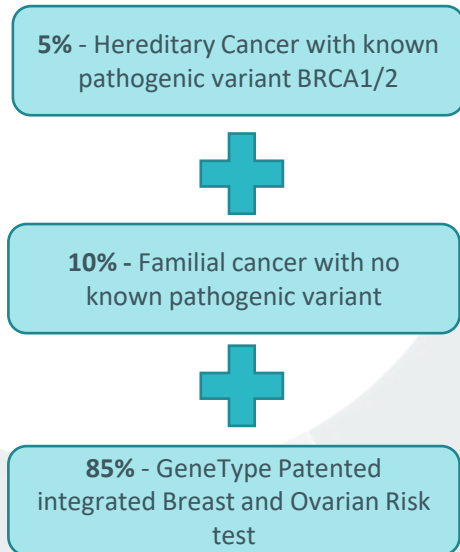
QIAGEN will support the enhancement of GTG capabilities through software, hardware, consumable and technical solutions, including:

- Reagents and QIAGEN's proprietary QCII software to complete Next Generation Sequencing (NGS) validation in house.
- The rollout will include QIAGEN's QIAseq targeted DNA Pro Sample to Insight solutions for NGS Oncology and customized inhouse data analysis tools to provide sample to result service for GTG customers



NEW Comprehensive Breast and Ovarian Cancer test

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



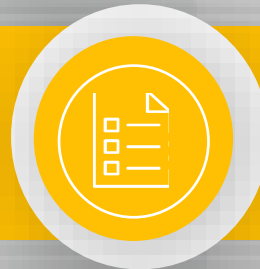
- The test evaluates a women's risk of developing Breast and/or Ovarian Cancer either from a hereditary genetic mutation or from the far more common familial or sporadic cancer. (Announced Feb 3, 2023)
- GTG's unique approach "appends" the detection of the 13 major "actionable" Breast and Ovarian cancer 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
- Showcase at BRCA 2023 in Montreal

Our FOCUS

Core '4'



Execute the B2B commercialisation of the geneType multi-risk test



Demonstrate clinical validity & clinical utility of geneType tests



EasyDNA & Affinity DNA Revenue Growth: Tests, Channels. & Markets



Innovation: Next Generation of capability – Starting with Epigenetics

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 annum⁴ for the US payer

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

Diseases Areas

Oncology

Breast Cancer
Colorectal Cancer
Prostate Cancer
Melanoma
Pancreatic Cancer
Ovarian Cancer



Phase 1 Launch ²

Cardiovascular

Atrial Fibrillation
Coronary Artery Disease

Metabolic

Type 2 Diabetes



Phase 2 Launch ³

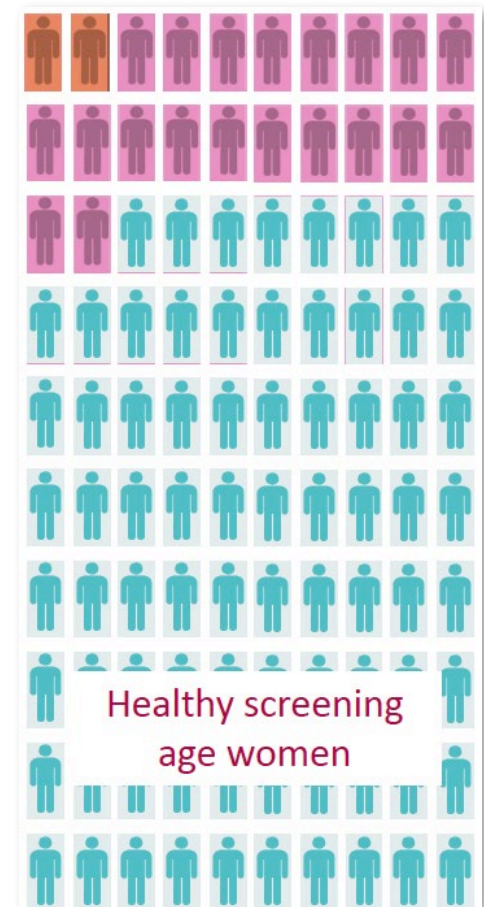
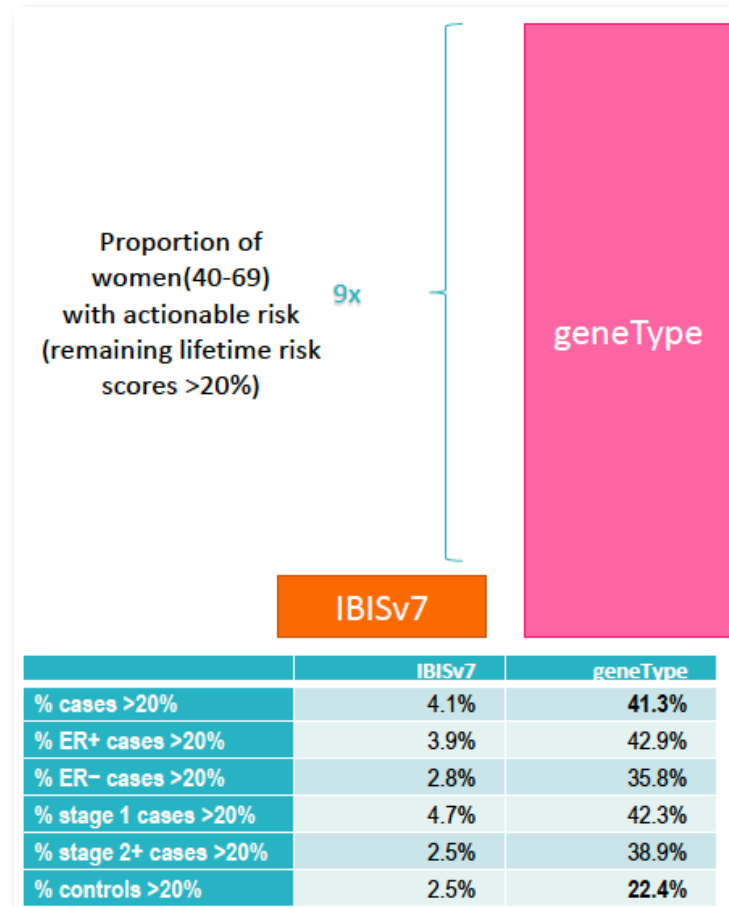
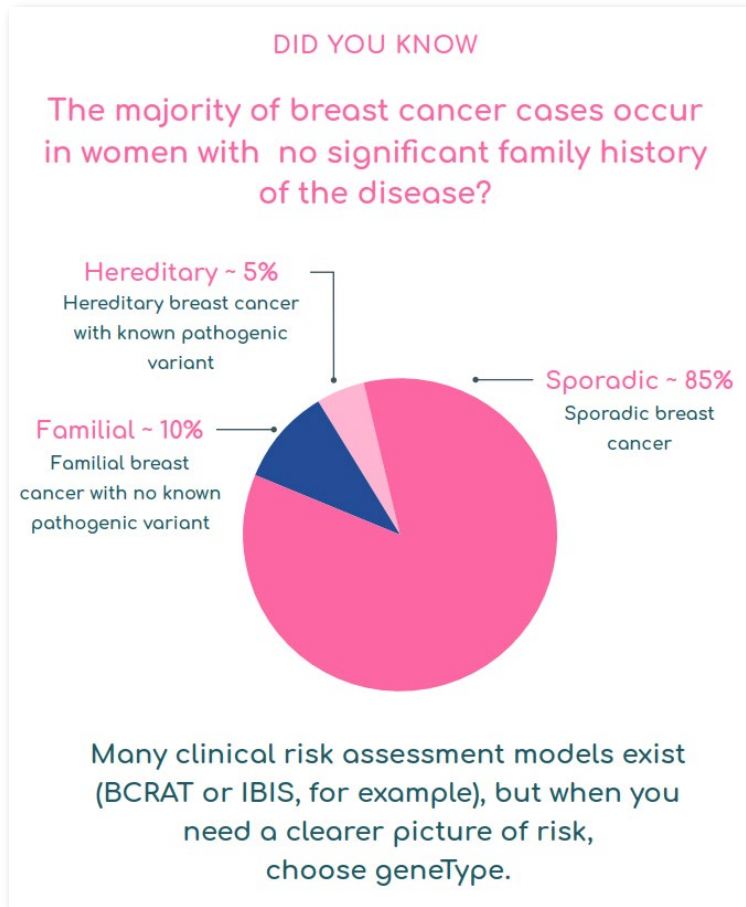


Guideline driven, Actionable results

1. TGA, FDA and EU regulatory approval granted to the sponsor, DNA Genotek
2. Commercial availability expected Q1 CY2022
3. Commercial availability upon regulatory approval
4. Budget Impact Model prepared by Alva10

GeneType Identifies up to 9 Times More Cancer Risk Patients Compared to Existing SoC Models¹

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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 – MultiTest
Cardiovascular – MultiTest
Metabolic – MultiTest
COVID Rick Test
Pharmacogenomics

Direct to Consumer Testing (DTC)

with no medical supervision



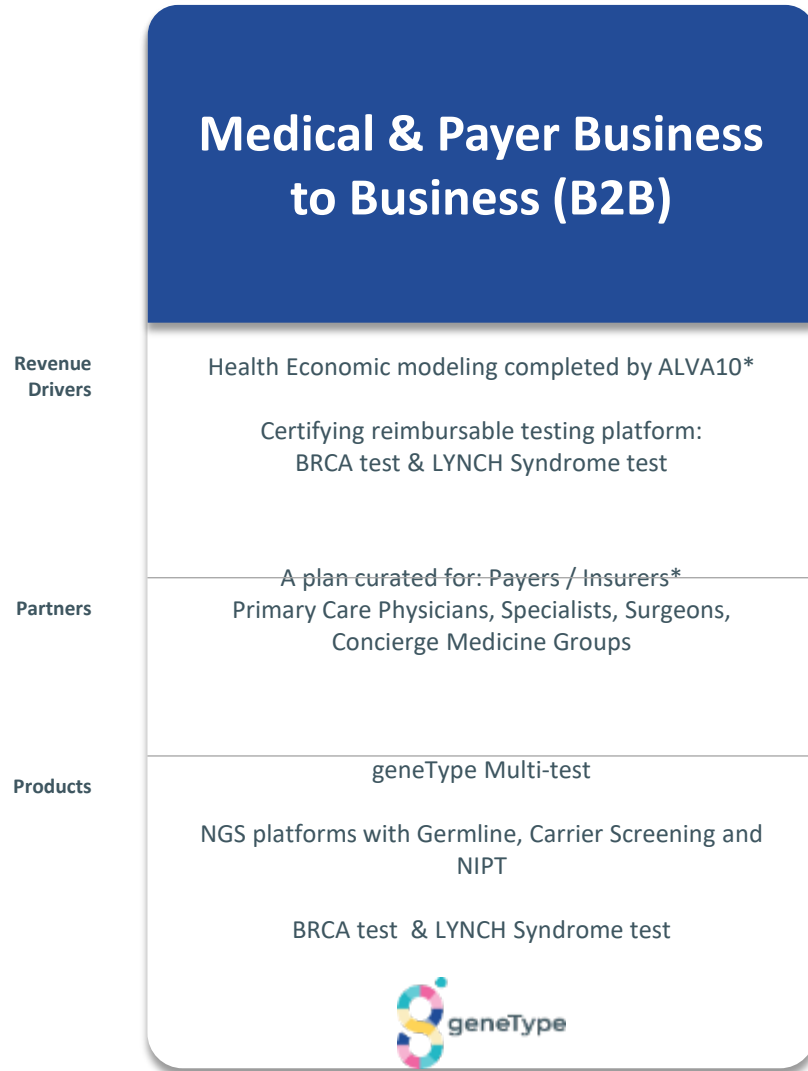
Ancestry
Paternity
Health & Wellbeing
Pharmacogenetics



Animal
Drug testing
Relationship
DNA Storage

Pathways to Market – highest priority

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Payer coverage is the key driver of revenues for geneType

Coverage from payers in the US will accelerate adoption of geneType Risk Assessment Tests more widely

Budget Impact Model (BIM) demonstrates significant health & economic benefits of implementing the geneType Breast Cancer Risk Assessment Test

11 Active conversations with payer groups in the US

US Payers include:

- Humana – 17 million lives covered
- Aetna – 22.1 million live covered
- Independence Blue Cross – 3 million lives covered

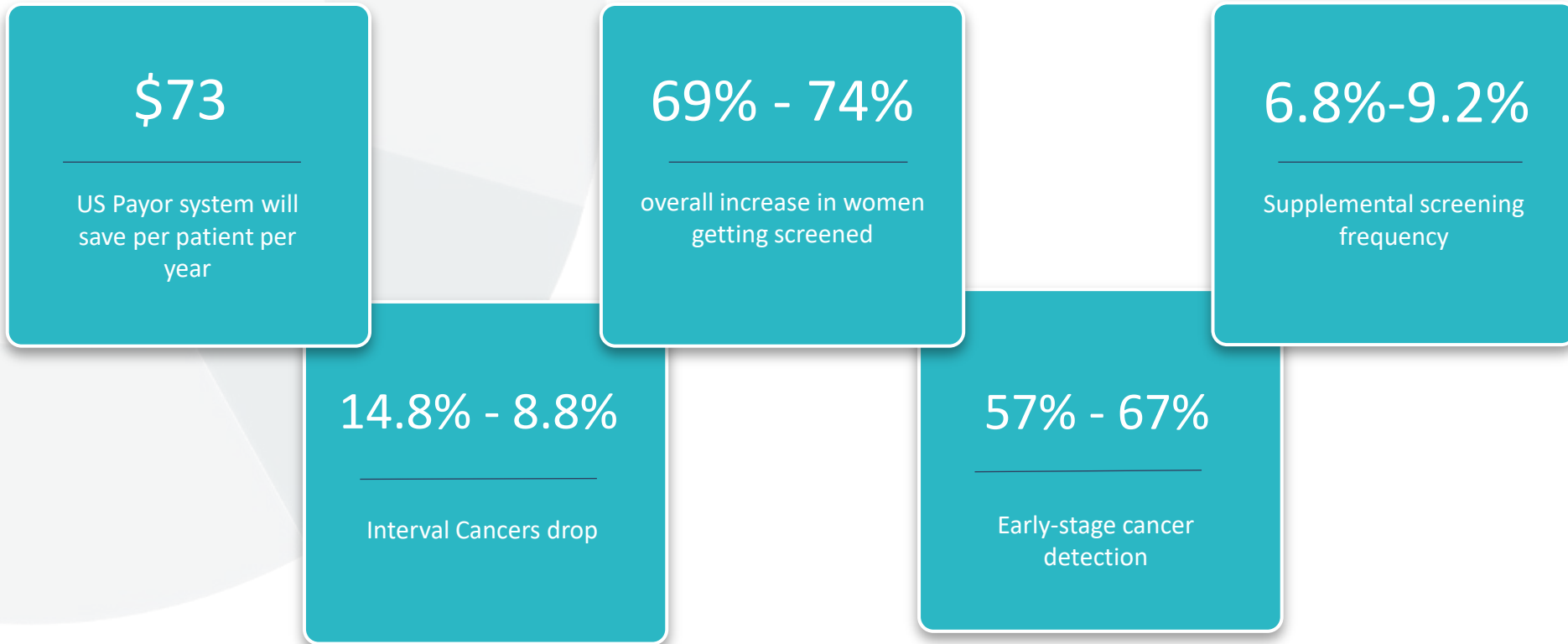
Smaller payers such as employer groups have potential to move quickly

BIM validates the benefits of implementing geneType

* Corporates and Insurance market entry assessment in progress and Health Economic Model being completed by ALVA10.

Economic Modeling in the US Payer System¹

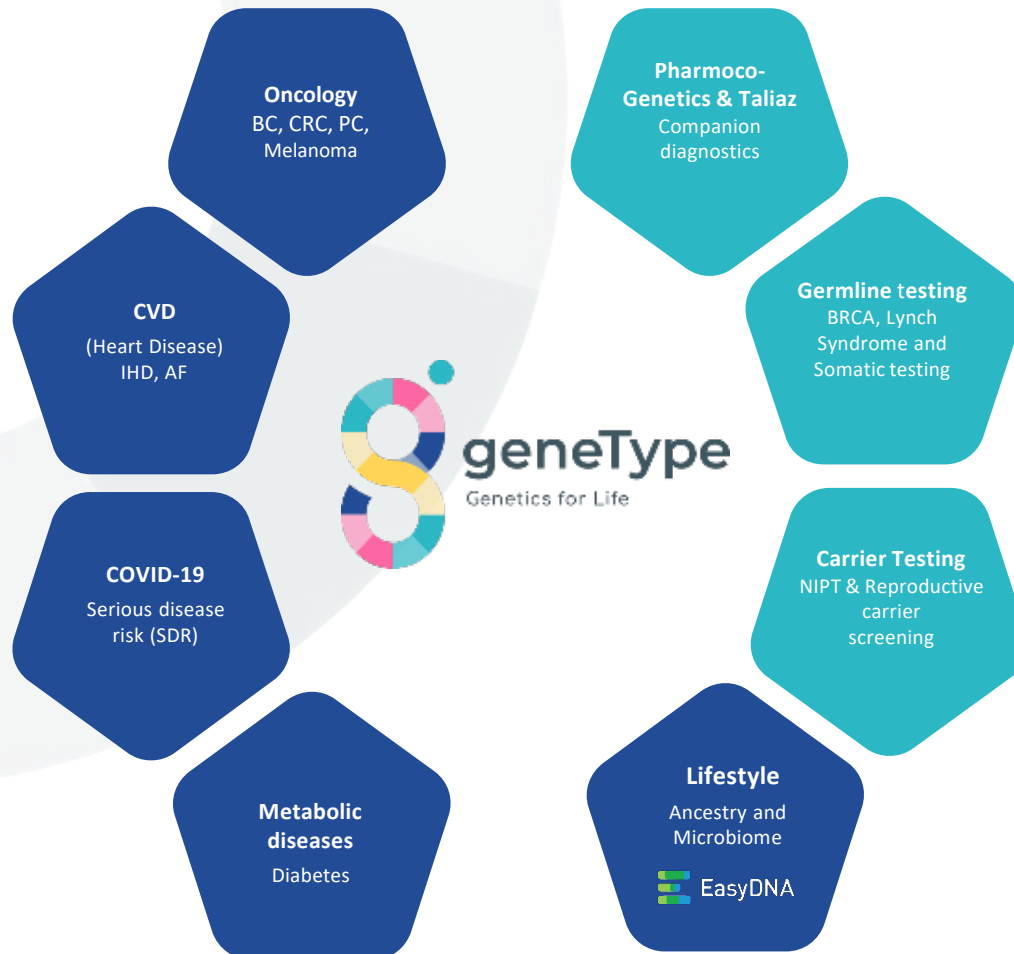
The economic benefit to the payers in the US is US\$1.4B per annum



3.6% in annual savings to a payer system in the screening and treatment of breast cancer.

Divisions of Operations

- Existing divisions
- Emerging divisions



NEW Universal sample collection kit with TGA, FDA and EU regulatory approval¹

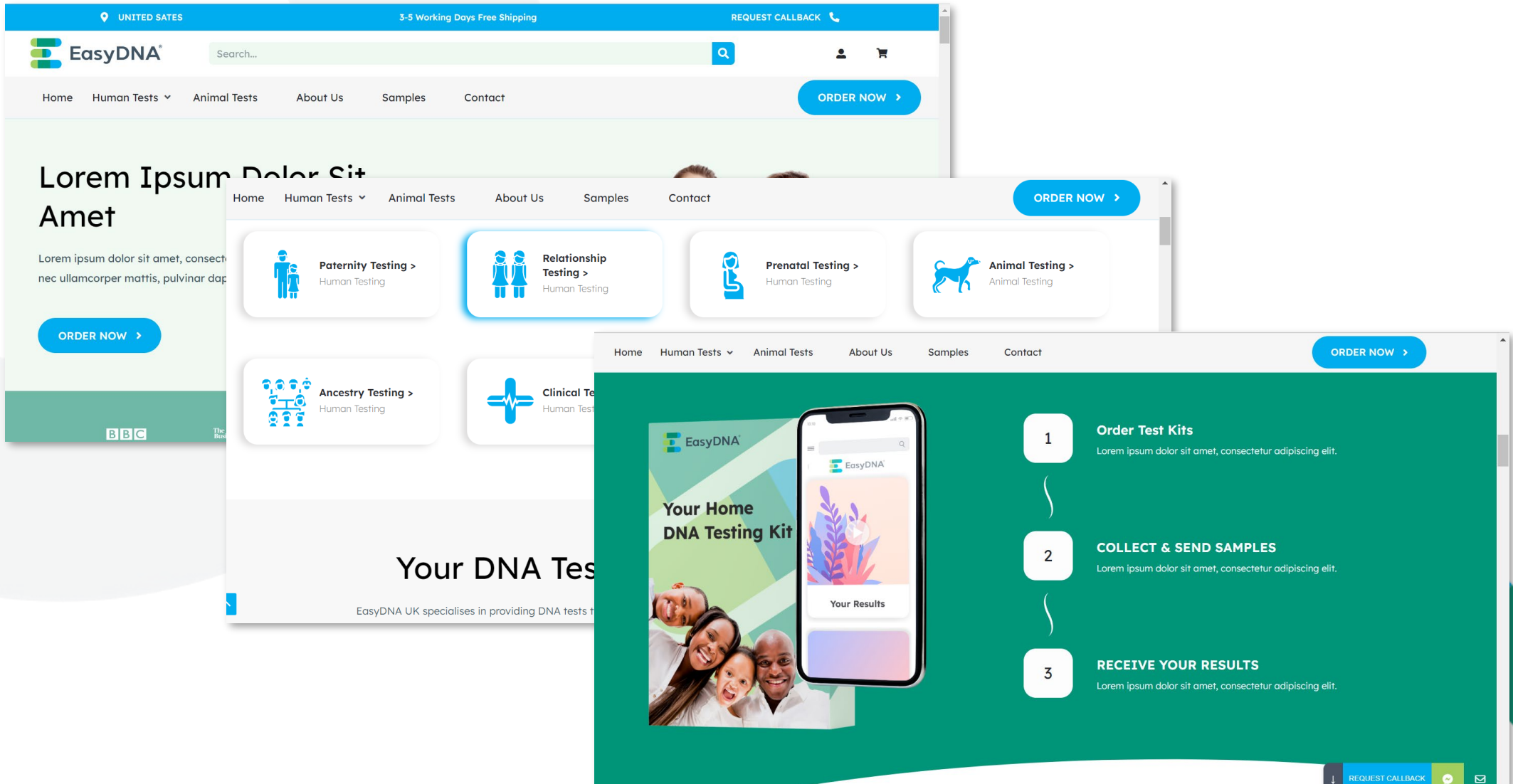
DTC - Growth strategy for EasyDNA

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eCommerce Growth strategy for EasyDNA

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Collaborations

Professor Bernard Rosner



Channing Division of Network Medicine, Brigham and 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

Professor Graham Colditz



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

Professor John Hopper



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

Collaborations

Professor Jon Emery



THE UNIVERSITY OF
MELBOURNE



VCCC
Alliance
Overcoming cancer together

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

**Memorial Sloane Kettering
Cancer**



Memorial Sloan Kettering
Cancer Center

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

Ohio State University



THE OHIO STATE
UNIVERSITY

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

Snapshot and Achievements last 12 months

GeneType commercialization

- ✓ Phase 1 commercial release of the geneType Multi-Risk test in US
- ✓ >90 medical practices on-boarded launching the foundation of geneType Hubs in Australia
- ✓ AffinityDNA
- ✓ Completed 2 Acquisitions – EasyDNA and
- ✓ Presentations by Dr Erika Spaeth at:
 - ✓ ASCOGI Cancers Symposium Jan 2023
 - ✓ San Antonio Breast Cancer Symposium,
 - ✓ Precision Medicines leaders summit
 - ✓ Precision Medicine World Conference

Partnerships

- ✓ Launch with A/Prof Charles Siles providing immediate access to more than 1,000 referring primary care physicians and 15,000 patients annually in Australia
- ✓ Partnerships with Australian Breast Care Centre and Dr Nicole Yap
- ✓ Launch of screening for breast cancer risk with Prof Bruce Mann at Royal Women's Hospital in Melbourne

EasyDNA & Affinity DNA

- ✓ NEW EasyDNA Website ready for launch
- ✓ NEW eCommerce Platform ready launch
- ✓ Launch Carrier Testing and Non-Invasive Prenatal Tests (NIPT) into Europe
- ✓ Partnering in India with stud farms extending paternity infrastructure into the equine industry
- ✓ Launch DNA storage solution in GTG NATA approved facility

Clinical Validity and IP Strategy

- ✓ Published in PLOS ONE
- ✓ Published in Journal of Precision Medicine
- ✓ Published in European Journal of Cancer prevention
- ✓ Published in journal Breast Cancer Research and Treatment
- ✓ 25 Patents granted or pending
- ✓ 4 papers published
- ✓ 3 papers under review

Reimbursement activation

- ✓ Independently developed Budget Impact Model (BIM) identifies US\$1.4 billion dollars in annual saving by ALVA 10
- ✓ 11 Active payer 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

Thank you

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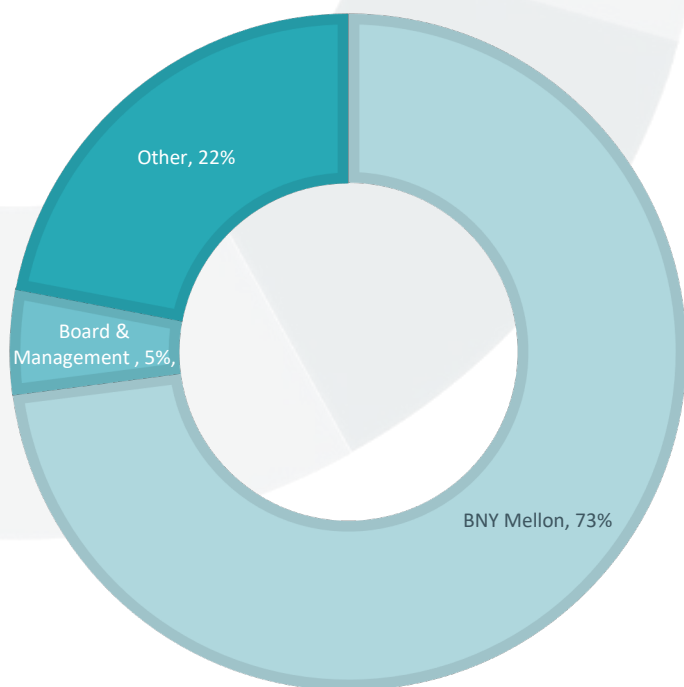


Appendices

Corporate Overview

Top 50 share registry breakdown

■ BNY Mellon ■ Board & Management ■ Other



Dual Listed on the ASX and Nasdaq

Financial Information

Share price (AUD) as at 7 February 2023 0.4c

ADR price (USD) as at 7 February 2023 \$1.63

Ord Shares on Issue (M) 11,542

ASX 52-week trading (AUD low/high) 0.2/1.3c

Nasdaq 52-week trading (USD low/high) 0.83/2.40

Market Cap (A\$M/US\$M) 46.17/29.42

Cash at 31 December 2022 A\$5.0m

Cash at 30 June 2022 A\$11.7m

Debt (30 June 2022 and 31 December 2022) nil

Financial Overview

- Net cash outflow of A\$2.8 million in Q2 FY'23 (compared to Q1 FY'23 outflow of: A\$3.4 million) as we continue to grow EasyDNA and Affinity DNA brand sales and develop and commercialise our geneType tests
- Cash reserves of A\$5.0 million at 31 December 2022 will be directed to:
 - to support the commercialisation of the GeneType Multi Risk test through the B2B channels with payers, insurers and employers in the United States and expand into Europe;
 - to drive new market opportunities in reimbursable categories by leveraging our strategic relationship with QIAGEN;
 - for funding product research and development;
 - to increase our sales and marketing presences and drive of its tests via the consumer-initiated testing platforms;
 - to execute the go to market, sales and marketing to launch the Comprehensive Hereditary Breast and Ovarian Cancer Risk Test as part of our germline genetic testing division; and
 - for other working capital and general corporate purposes.

A\$'000	30-Sep-22	31-Dec-22	Change
Net operating cashflow	(3,410)	(2,810)	-18%
Receipts from customers	2,056	2,399	17%
Research and Development and Staff costs	(2,126)	(1,565)	-26%
Cash	7,945	5,045	-37%

¹ Based on cashflow projections

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.Comm, FAICD, FCA, FGIA,
FTIA, F Fin
Non – Executive Director



Simon Morriss
GAICD
Chief Executive Officer



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



Erika Spaeth
PhD
Director of Clinical & Scientific
Affairs



Richard Allman
BSc, PhD
Scientific Advisor



Tony Di Pietro
B. Comm, CA, AGIA, 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 hospitalisation 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