Genetic Technologies

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Forward looking statements



This presentation may contain forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933 and Section 21E of the U.S. Securities Exchange Act of 1934 with respect to the financial condition, results and business achievements/performance of Genetic Technologies Limited (ACN 009 212 328) and certain of the plans and objectives of its management. These statements are statements that are not historical facts.

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Genetic Technologies is a leader in genomics



- Over a decade of R&D surrounding the development of polygenic risk scores with an extensive Patent Portfolio
- Creator of Laboratory Developed Tests (LDT) supported by proprietary polygenic risk scores (PRS) platform
- CLIA certified and NATA accredited to ISO15189 which allows us to operate in the North American and Australasian Markets
- Developing risk prediction platforms for the major causes of mortality in western society
- Strong scientific leadership under Dr Richard Allman in collaboration with some the world's most prestigious universities and medical institutes
- GeneType Breast Cancer and Colorectal tests are in market with anticipated release of Cardiovascular and T2D tests in Q3 CY20 & COVID-19 sdr in Q4 CY20
- CIT Platform Launched Sep 2020 for Consumer Initiated Sales

In 2021 will offer the most comprehensive suite of polygenic risk assessment

tests on the market:



Company Snapshot:

- Market capitalization as at 10 Sep 2020: US\$45.082M
- Dual listed on Australia Securities
 Exchange (ASX) & NASDAQ:
 GTG.AX, GENE
- No. Shares on 70% of Float on Nasdaq – 14m ADR's issue: 8,261,726,743 (ADR @ 600:1)
- Cash position as at 31 August 2020 A\$19.2M



Polygenic (Genetic) Risk Score



Our Platform

- Most common complex diseases (CCD) are a result of many genes acting in concert
- Polygenic Risk Score is a DNA based risk assessment (screening) tool that weighs a person's odds of developing a CCD by inspecting the genome (DNA)
- Genomic and non-genomic factors are considered including lifestyle and family history
- Validated risk stratification method = (GWAS)
- Identifies high-risk individuals for low risk and high risk people for personalized precise screening



Polygenic Risk Scores (PRS) Platform



Proprietary platform developed over the past decade and supports multiple PRS tests targeting healthy individuals to identify serious disease risk.

- PRS is a DNA based risk assessment tool that weighs a person's odds of developing common complex disease(s)
- GTG's proprietary risk stratification platform is based on AI and big data analytics and is internationally validated by genome wide association studies (GWAS)
- Platform supports PRS tests that allow for personalised precise solutions for high, average and low risk individuals and delivers actionable results for those individuals and their physicians – personalized screening, lifestyle solutions, chemoprophylaxis (medical intervention) and surgical intervention, if appropriate



Product test pipeline and status



- Our platform supports risk predictive testing in major oncological, metabolic, regenerative and infectious disease indications (including COVID-19)
- Our tests in market and development cover up to 70% off causes of morbidity and mortality in the US
- GeneType Breast Cancer and Colorectal tests in market and anticipate market release of Cardiovascular and T2D tests Q3 CY20 and COVID-19 Serious Disease Risk test in Q4 CY20



Disease coverage



- Our product development strategy aims to provide coverage of the most significant causes of morbidity and mortality in the US
- It covers up to 70% of causes of mortality

Incidence of underlying causes of mortality in the US



- Breast Cancer
- Colorectal Cancer
- Type 2 Diabetes
- Cardiovascular Disease
- Other causes

SOURCE: NCHS, National Vital Statistics System, Mortality https://www.cdc.gov/nchs/products/databriefs/db355.htm

Data sources: National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention, 2019 https://cancerstatisticscenter.cancer.org/?_ga=2.118034377.1123388856.1600219325-238729237.1600219325#!/

GTG has developed a world-first polygenic risk test for breast cancer

Genetic Technologies

Easy-to-use test solves the compliance problem

Risk stratification enables precision screening and personalised prevention



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Simple cheek swab that help determine a woman's risk of developing breast cancer

Identifying 5-year and lifetime risk

Clinically actionable results targeting sporadic breast cancer

Informs screening and health monitoring for those most at risk

Validated for use in caucasian, african american & hispanic women over 35 yr

GeneType's technology covers up to 85% of breast cancer

GTG has developed a world-first polygenic risk test for colorectal cancer

Easy-to-use test solves the compliance problem (Test kit geneType geneType Colorectal cancer risk assessment test

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Risk stratification enables precision screening and personalised prevention

Clinically actionable results

5-year, 10-year and lifetime risk

Informs screening and health

monitoring for those most at risk

Report sent to your doctor

GeneType's technology covers up to 95% of colorectal cancer

Genetic

Technologies



COVID-19 sdr (serious disease risk)

COVID-19 at a glance



- About 30 million confirmed COVID-19 cases worldwide, with a mortality of almost 1 million*
- Pandemic management strategies vary depending on country, but mostly one size fits all approaches
- New Normal = maintaining social restrictions (distancing/isolation) until a vaccine is found; businesses and the economy struggle to recover, mental health emerges as a serious parallel challenge
- COVID-19 vaccine may take another 8-12 months to rollout, unclear timeline, efficacy, safety profile, ease of scaling up production and costs of development
- The coronavirus could cost the global economy more than \$2.7 trillion – equivalent to the entire GDP of the UK**



COVID-19 sdr (serious disease risk)



- COVID-19 sdr is Genetic Technology's COVID-19 Response a low-cost, accurate assessment tool that is designed to assist in pandemic management in lieu of a vaccine
- It is the world's first genomic test to predict the risk of hospitalization and of developing life-threatening complications, should the patient contract COVID-19



Assist with risk stratification; designed to improve ongoing pandemic management – protect high-risk, identify low-risk and possibly contribute to a safe herd immunity solution

Development Progress To-Date



COVID-19 sdr is designed to enable the targeting of limited vaccine resources to those at highest risk of developing life threatening complications should they contract the virus





Fast-tracking development

- In discussions with major international reagent suppliers = > 5 million test a week
- Eligible for fast-tracking with US and Australian regulators
- Applying for CE mark



Market Release

• Anticipated early Q4 2020



Suggested use of Genetype's COVID-19 Serious Disease Risk

- Simple to implement
- Suitable for people aged 30-65
- Designed to identify high risk and low risk individuals
- Can be offered as a priority to first responders, health workers, transport and food supply groups
- Could prioritize early intervention of high risk groups who are infected with COVID-19
- Could be used to prioritize vaccination candidates
- Could be used to safely implement herd immunity in the absence of a safe/effective vaccine candidate

Intellectual property is a core advantage



GTG has a strong patent portfolio covering the breast cancer risk assessment test

5 Patents granted in the US

- 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

7 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



The Next 12 months:

+ Complete development of High density multi disease tests covering >70% mortality in western society using a single swab and delivering low cost, accurate risk data.

+ Establish new divisions: Oncology, Metabolic diseases, Cardiovascular disease, Mental health (including cognitive decline), pharmacogenomics (Pgx), wellness.

+ Commission Next Generation Sequencing (NGS) compete for the relatable monogenic space and combine monogenic and polygenic testing under one integrated service to deliver 100% genetic risk cover.

+ Establish a subscription service which will update individuals as to their ongoing disease risk without the need to re-test and for as little as \$1 a day.

+ CIT Platform and Telehealth for Consumer Initiated Testing including COVID-19 sdr Test and entire product portfolio

Our board







Dr. Jerzy "George" Muchnicki MBBS Executive Director & Chief Executive Officer (Interim)



Dr. Lindsay Wakefield MBBS Non – Executive Director



Mr. Peter Rubinstein BSc, BEc, LLB Chairman - Non – Executive Director



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