Genetic Signatures

ASX Announcement 13 August 2021

Investor Webinar Presentation

Genetic Signatures Limited (ASX: GSS) ("Genetic Signatures" or "the Company") is pleased to announce its participation in the Share Cafe Webinar - Micro/Small Cap "Hidden Gems" Webinar to be held today (Friday 13 August 2021) from 12:30pm AEDT / 10:30am AWST.

Dr John Melki, Genetic Signatures CEO will provide an overview of the Company's specialist molecular diagnostics technology, 3base™ which has the ability to screen for a wide array of infectious pathogens, with a high degree of specificity in rapid time. A copy of the investor presentation to be delivered during the webinar is attached.

This FREE webinar is able to be viewed live via Zoom and will provide viewers the opportunity to hear from, and engage with, a range of ASX-listed leading micro/mid cap companies.

To access further details of the event and to register at no cost, please copy and paste the following link into your internet browser:

https://us02web.zoom.us/webinar/register/5416151767246/WN_Iy0gUcDXTXGv5EPs_7MnMA

A recorded copy of the webinar will be made available following the event.

For further information, see our website (www.geneticsignatures.com) or contact us as below:

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Announcement authorised by Genetic Signatures' Board of Directors

About Genetic Signatures Limited: Genetic Signatures is a specialist molecular diagnostics (MDx) company focused on the development and commercialisation of its proprietary platform technology, ***3base***™. Genetic Signatures designs and manufactures a suite of real-time Polymerase Chain Reaction (PCR) based products for the routine detection of infectious diseases under the *EasyScreen*™ brand. Genetic Signatures' proprietary MDx ***3base***™ platform technology provides high-volume hospital and pathology laboratories the ability to screen for a wide array of infectious pathogens, with a high degree of specificity, in a rapid throughput (time-to-result) environment. Genetic Signatures' current target markets are major hospital and pathology laboratories undertaking infectious disease screening.

Genetic Signatures

Transforming Molecular Diagnostics

"Driving better healthcare through innovation"

Using 3base™ technology to improve syndromic screening.

Company Presentation

August 2021

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Executive Summary

Genetic Signatures
Transforming Molecular Diagnostics

The Company

- Founded 20 years ago, by Geoff Grigg, ex Divisional Head, CSIRO biomolecular engineering
- ASX listed Molecular Diagnostics Company, operations in Australia, Europe and the US
- Developed novel nucleic acid technology called 3base™ which simplifies detection of infectious diseases, via multiplexed syndromic panels
- 3base™ is less susceptible to mutations
- Issued patents for method and workflow to 2031+

Technological applicability

- Infectious diseases
- Cancer screening
- Epigenetics

Solid history of growth

- YoY growth since listing
- 4 year CAGR – 93% (2018-2021)
- 151% increase in sales FY21 vs FY20
- Instrument installations grown 4-fold since start of pandemic
- Labs using *EasyScreen™* tests in AU, EU, US

Sales model

- High throughput laboratories with predictable revenue
- Annuity style revenue – “printer & cartridge”
- New tests introduced to customers once established

Multiple regulatory registrations

- Enterics, SARS-CoV-2, Respiratory, STI, CPO/ESBL in EU
- Enterics, SARS-CoV-2, Respiratory, CPO/ESBL in AU
- SARS-CoV-2 (exempt), Enteric Protozoan FDA trial in US

Trusted & Proven Technology

A **'Syndromic Screening'** approach allows users to test a broad range of clinically relevant pathogens based on patient symptoms, helping clinicians make an accurate diagnosis

- Streamlined universal sample processing kits linked to highly **multiplexed real-time PCR screening assays**
- Applicable to **bacterial, fungal, protozoan and viral** (DNA & RNA) targets
- The *EasyScreen*™ Detection kits **simultaneously detect a larger number of pathogen targets** in a shorter time than conventional methods
- 3base™ **can detect all COVID variants**, including Delta, to the same limit of detection as reference SARS-CoV-2 virus

3base™ Technology

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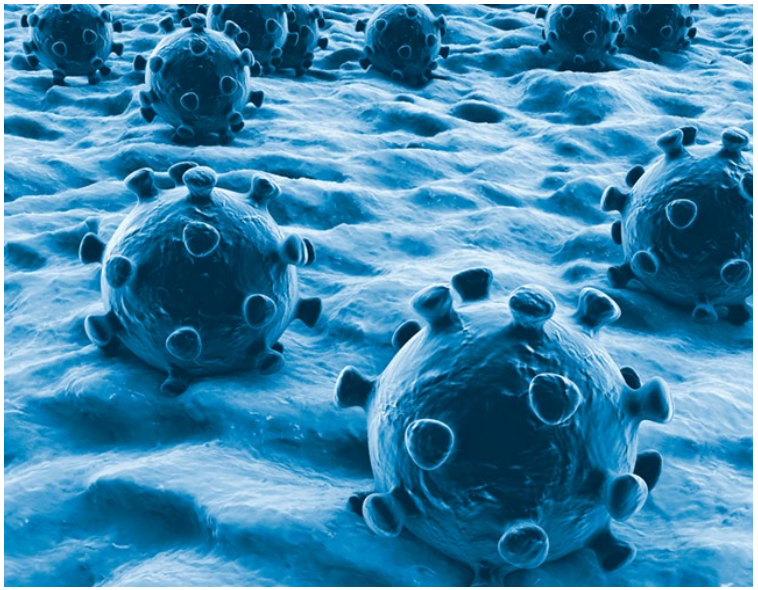
The 3base™ genome is less susceptible to mutations

Cytosine (C) is the most unstable of the 4bases

- It spontaneously deaminates to Uracil (U) and ultimately Thymine (T) in DNA
- This rate is some 140-fold higher in single-stranded molecules (eg ssRNA viruses such as SARS-CoV-2)
- 3base™ is 'immune' to C-T and T-C mutations



We have tested our assays on the Alpha, Beta, Gamma and Delta SARS-CoV-2 variants; all variants are detected to the same limit of detection as reference SARS-CoV-2 virus. Of the reported SARS-CoV-2 sequences in July 2021, **98.79% are a perfect match to the GSS assays** without further modification.

12 Months in Review

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September 2020
Record quarterly revenue up 585% on pcp

December 2020
Supply agreement with Boston Medical Center – 1st US customer

December 2020
Quarterly revenue up 744% on pcp

January 2021
CE-IVD received for *EasyScreen™* STI Genital Pathogen Detection Kit

March 2021
Quarterly revenue up 136% on pcp

April 2021
US-based Neil Gunn appointed NED. Former President Roche Sequencing Solutions

June 2021
Annual revenue up 151% on pcp

June 2021
New **3base**™ Detection Kits in development – Measles/Mumps/Rubella, Tick borne diseases, Dermatophytes

July 2021
$4m+ sales orders received in July

Continued Strong Revenue Growth

Increasing contribution from international business

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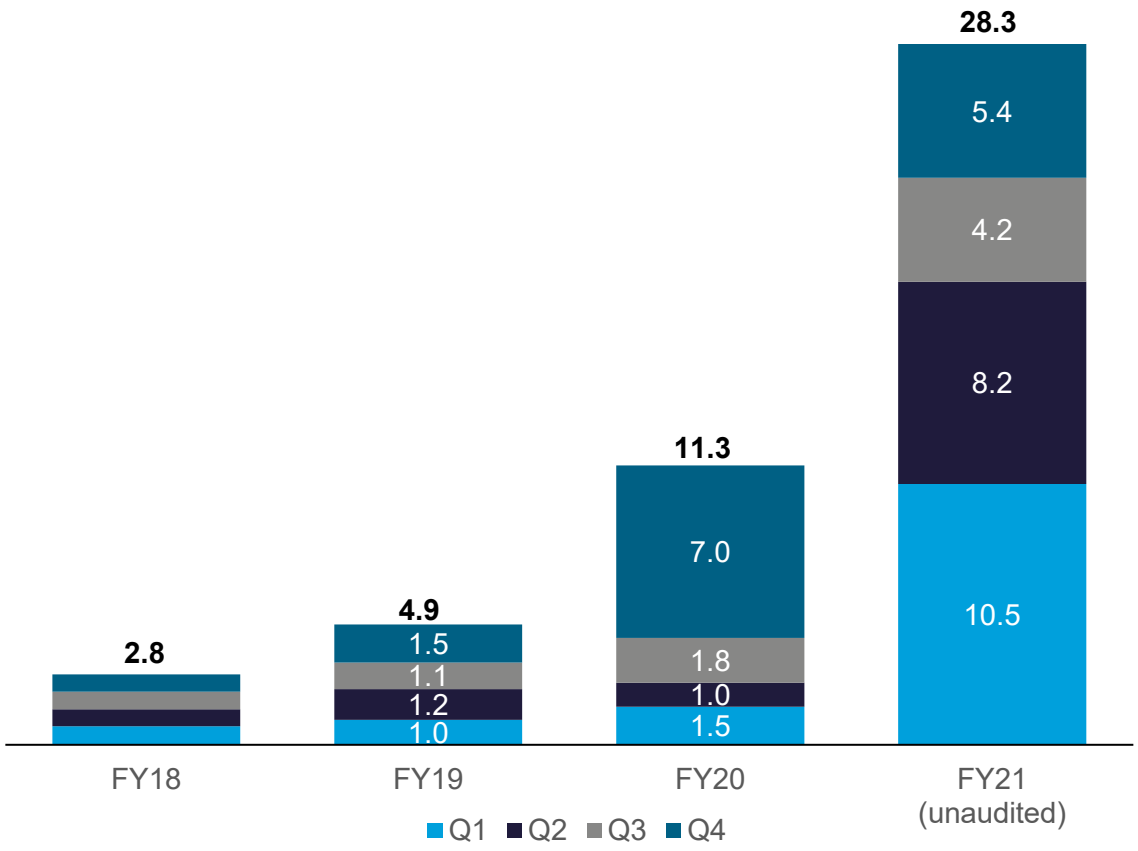
Quarterly revenue from sales (A$m)



- **Record sales of $28.3m** in FY21, 2.5 times FY20 sales
- International sales represent **21% of revenue,** up from 10% in FY20
- **Strong demand for tests** continue due to ongoing outbreaks
- **Multiple new instruments** installed across FY20 and FY21. GSS instrument numbers quadrupled since start of COVID
- New instrument placements will continue to support **future demand for tests**
- **$30.1m cash balance** positions the Company well to **drive future growth**

Regional Summary

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Focus on securing long-term customer contracts with high throughput pathology groups, hospitals and government run programs

North America

- Direct sales in USA, sales & support teams in place
- Distributor appointed in Canada
- Selling SARS-CoV-2 kits to CLIA laboratories
- Enteric Protozoan product in clinical trials for FDA clearance; targeting up to 40% market share within 5 years
- 150 targets available under ASR program

EMEA

- Direct sales in Germany and UK, distributors elsewhere
- Sales and support teams in UK and Germany
- Currently selling SARS-CoV-2
- Five product groups with CE-IVD (Enteric, SARS-CoV-2, Respiratory, STI, ESBL/CPO)
- Sales to US funded research lab in Africa (Kenya)

Australia/NZ

- Sales & support in Australia; also head office, R&D and manufacturing
- Direct sales
- Supplies estimated 10% of all testing volume in Australia in target assays
- TGA registration for four product groups (Enteric, SARS-CoV-2, Respiratory, ESBL/CPO); STI lodged

FDA Approvals Program

Enteric Protozoan Market Dynamics

- Est. 5.5m Enteric Protozoan tests p.a in the US
- Initial focus on **largest 30 "high throughput" centralised labs**
- Smaller decentralised labs more accessible with development of new testing hardware
- Whilst awaiting clearance, GSS can sell "parts/ingredients" of **3base™** kits to centralised labs under ASR program

Enteric (Protozoan) revenue potential p.a.[2]

Revenue per test (US$)	20% Market Share	30% Market Share	40% Market Share
US$20	$22.0m	$33.0m	$44.0m
US$30	$33.0m	$49.5m	$66.0m
US$40	$44.0m	$66.0m	$88.0m

Status

- 3 sites running FDA trials for GSS. Expect sample collection to be completed by end August 2021
- If successful likely sites will adopt test under ASR program
- FDA submission goal for late 2021
- Aiming to win 40% of Enteric Protozoan market within 5 years

1. Bell Potter Securities Estimates (Initiation of Coverage Report) and World Market for Molecular Diagnostics, 5th. Edition (Infectious Disease, Oncology, Blood Screening, Pre-Natal and Other Areas) | Kalorama Information, Published: 1/9/2013.
2. Assumes 5.5 million Enteric Protozoan tests undertaken p.a. in US

EasyScreen™ Product Portfolio

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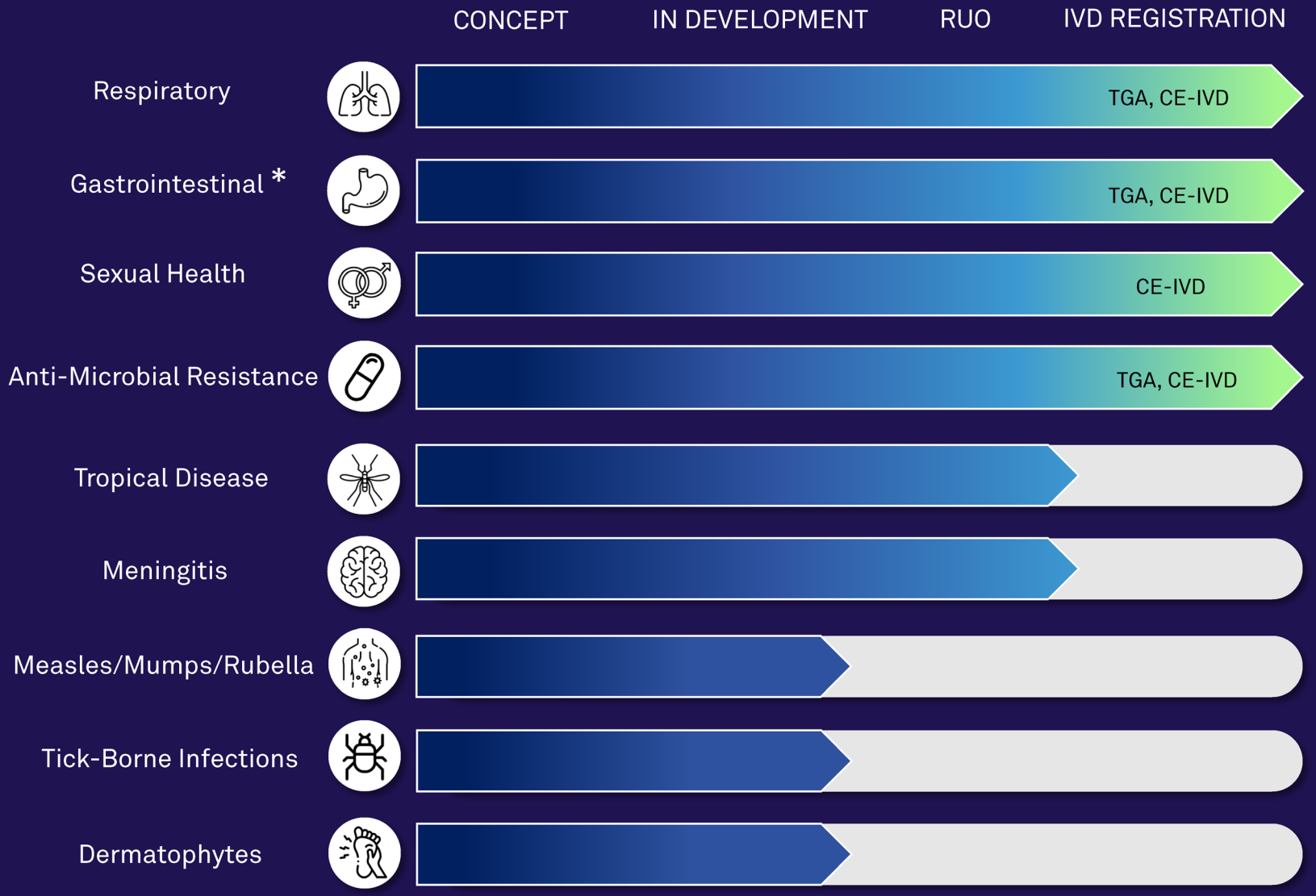

*FDA for protozoa underway

Looking Forward

Multiple growth opportunities

Focus on long-term customer contracts & customer satisfaction

- Secure long-term customer contracts with high throughput pathology groups, hospitals and government run programs
- Provide reliable quality customer service to build strong relationships

Leverage COVID-19 to promote new tests to new & existing customers

- Increasing international recognition via *EasyScreen™* SARS-CoV-2 launch creates new avenues to expand customer base
- Tests become embedded in workflow & customers typically adopt new tests once workflow established leading to favourable unit economics
- Targeting additional North American & European contracts

Further product development

- FDA submission for the *EasyScreen*™ Enteric Protozoan Detection Kit
- TGA registration for *EasyScreen*™ STI / Genital Pathogen Detection Kits (CE-IVD received Jan-21)
- CE-IVD and TGA registration including for *EasyScreen*™ Flavivirus / Alphavirus Detection Kits
- Additional products under development: measles, mumps & rubella, tick-borne diseases & dermatophytes
- Next generation 3base™ “sample to result” instrument

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