Genetic Signatures

Transforming Molecular Diagnostics

1H FY23 Market Update

March 2023

Disclaimer

This presentation has been prepared by Genetic Signatures Limited ACN 095 913 205 (the Company or GSS) and approved by the Board of Directors for release. It comprises written materials/slides for a verbal presentation concerning the Company and should be read in that context. This presentation is proprietary to GSS. It may not be reproduced, disseminated, quoted or referred to, in whole or in part, without express consent of GSS.

No representation or warranty, express or implied, is or will be made in relation to, and no responsibility or liability (whether for negligence, under statute or otherwise) is or will be accepted by the Company or by any of its officers, directors, shareholders, employees or advisers as to or in relation to the accuracy or completeness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this presentation or any omission from this presentation or of any other written or oral information or opinions provided now or in the future to any interested party or its advisers. In particular, no representation or warranty is given as to the achievement or reasonableness of any plans, future projections, management targets, prospects or returns and nothing in this presentation is or should be relied upon as a promise or representation as to the future.

The Company expressly disclaims all liability for any loss or damage of whatsoever kind (whether foreseeable or not) which may arise from any person acting on any information and opinions relating to the Company contained in this presentation or any information which is made available in connection with any further enquiries, notwithstanding any negligence, default or lack of care. In furnishing this presentation, the Company undertakes no obligation to provide any additional information.

Subject to any continuing obligation under applicable law or relevant listing rules of the ASX, the Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements in these materials to reflect any change in expectations in relation to any forward-looking statements or any change in events, conditions or circumstances on which any statement is based. Nothing in these materials shall under any circumstances create an implication that there has been no change in the affairs of the Company since the date of the presentation.

This presentation is for information purposes only and does not constitute or form part of any offer or invitation to acquire, sell or otherwise dispose of, or issue, or any solicitation of any offer to sell or otherwise dispose of, purchase or subscribe for, any securities, nor does it constitute investment advice, nor shall it or any part of it nor the fact of its distribution form the basis of, or be relied on in connection with, any or contract or investment decision. Without limiting the foregoing, this presentation does not constitute an offer to sell, or a solicitation of an offer to buy, any securities in the United States. The securities of Genetic Signatures have not been, and will not be, registered under the U.S. Securities Act of 1933, as amended (Securities Act) or the securities laws of any state or other jurisdiction of the United States, and may not be offered or sold in the United States except in compliance with the registration requirements of the Securities Act and any other applicable securities laws or pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and any other applicable securities laws.

The receipt of this presentation by any person and any information contained herein or subsequently communicated to any person is not to be taken as constituting the giving of investment advice by the Company or any other person to any such person. No such person should expect the Company or any of its officers, directors, shareholders, employees or advisers to owe it any duties or responsibilities and should take its own professional advice. The Recipient must rely solely on its own knowledge, investigation, judgement and assessment of the matters which are the subject of this presentation and to satisfy itself as to the accuracy and completeness

Investment highlights

- **Proprietary 3base® technology platform** - a revolutionary approach for molecular diagnostics

- **Dramatically simplifies multiple pathogen testing** from a single sample (multiplexing); more informative—simpler with fewer reagents

- **Strong commercial adoption** in AU market – expanding into EU & US
  - 4 Diagnostic Test Kits cleared – 5 new kits completing development
  - Strong underlying growth in core revenue streams – 1H FY23 sales of $10.4M with 72% from syndromic testing products

- **Multiple drivers for growth** – funded from anticipated future cash flow and existing balance sheet
  - Commercial expansion into large international markets (EU & US)
  - Product expansion - multiple new products completing development or registration
  - Instrument expansion – embed **3base®** technology in high-volume customers sites

Company Snapshot

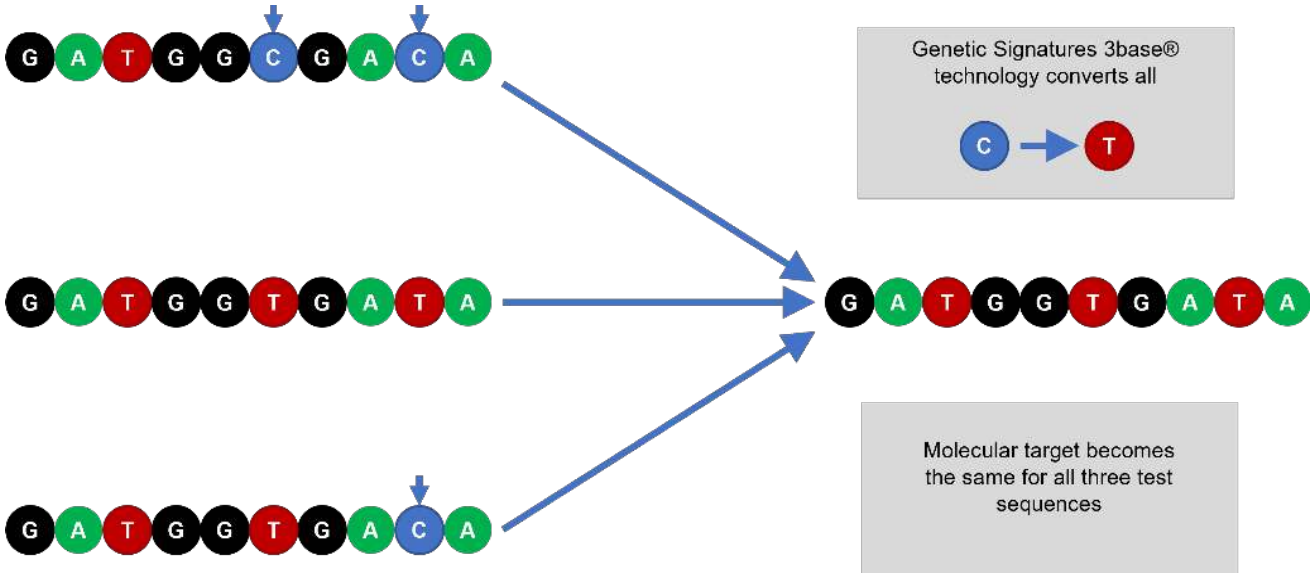
Financial information

Share price (13-Mar-23)	A$0.79
Shares on issue	143.4m
Market capitalisation	**A$113.3m**
Cash (31-Dec-22)	A$26.8m
Debt (31-Dec-22)	Nil
Enterprise value	**A$86.5m**

Top shareholders %

Asia Union (Chris Abbott private investment)	26.2%
Perennial Value Management	15.0%
Fidelity International	6.9%
Directors & management	3.0%

How 3base® simplifies molecular targets



* Human Papilloma virus sequences

- **Molecular diagnostic tests are based on DNA/RNA sequences**
  - DNA/RNA is unique to each organism.
- **Genetic Signatures 3base®** makes multiplex testing easier:
  - **More informative** – detect related pathogens/genes using fewer tests;
  - **Simpler** – fewer reagents with better matched, reaction conditions.

3base® simplifies Syndromic Testing – *EasyScreen™* Kits

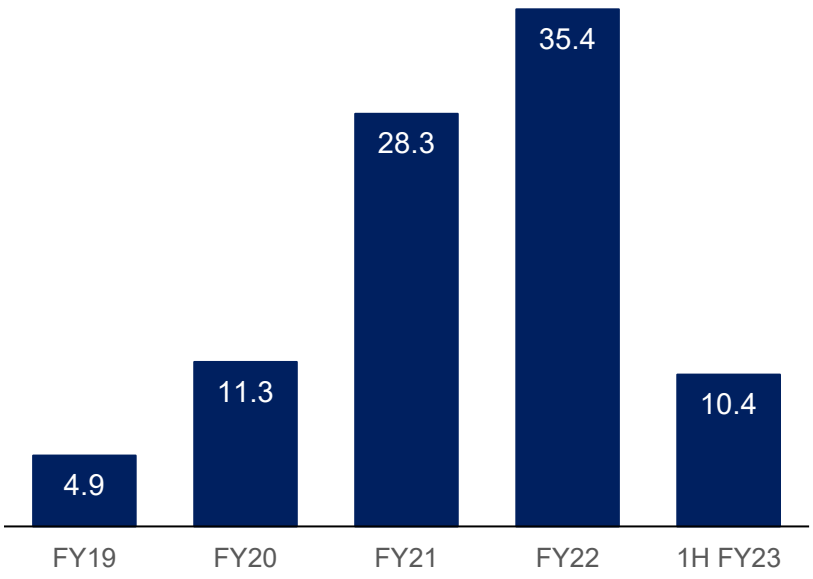
- **Syndromic testing:** simultaneously test for multiple pathogens that all can cause the same signs and symptoms
  - **Respiratory infections**: cough, runny nose, sore throat, headache
  - **Gastrointestinal infections**: nausea, diarrhea, vomiting, cramps, fever

- **Syndromic testing**
  - Allows single test to determine the potential cause of a disorder
  - Avoids having to order separate tests for each possible pathogen

- **Genetic Signatures' *EasyScreen*™ is ideal for Syndromic Testing**
  - Tests for over 100 different types of pathogens
  - Able to detects variants (i.e. different strains or subtypes)
  - Combine tests to create *EasyScreen*™ Syndromic Detection Test Kits
  - Detect >20 different pathogens from a single sample

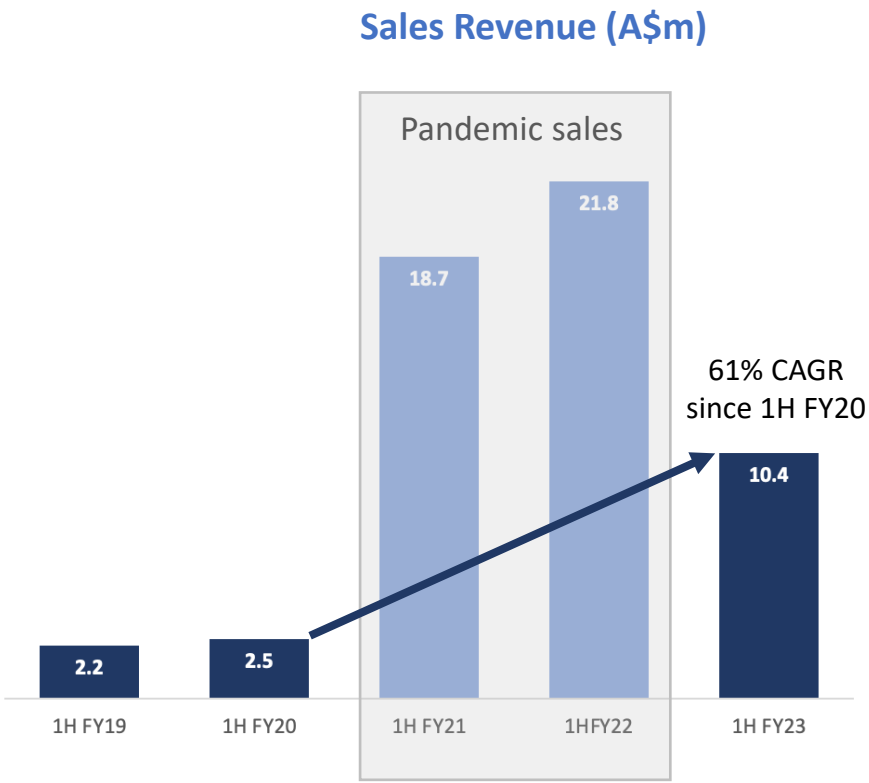
Strong underlying growth in core revenue streams

Sales Revenue (A$m)



- **1H FY23 sales $10.4 million**
  - Anticipated material decline in pathogen-specific molecular testing for SARS-CoV-2 experienced across the industry
  - Replaced with growing syndromic respiratory sales— long-term, durable market
  - Several Covid customers currently trialing or commenced purchase of *EasyScreen™* kits for other indications
  - Non-Covid only sales up 49% pcp and account for 72% of sales in 1H FY23
  - 9% sales to international customers—set to grow with increased EU presence and as products cleared in US
- **Maintain successful strategy of targeting focus towards high-volume customer groups**
  - High-throughput labs
  - Multi-hospital groups
  - Private pathology chains
  - Government-led programs

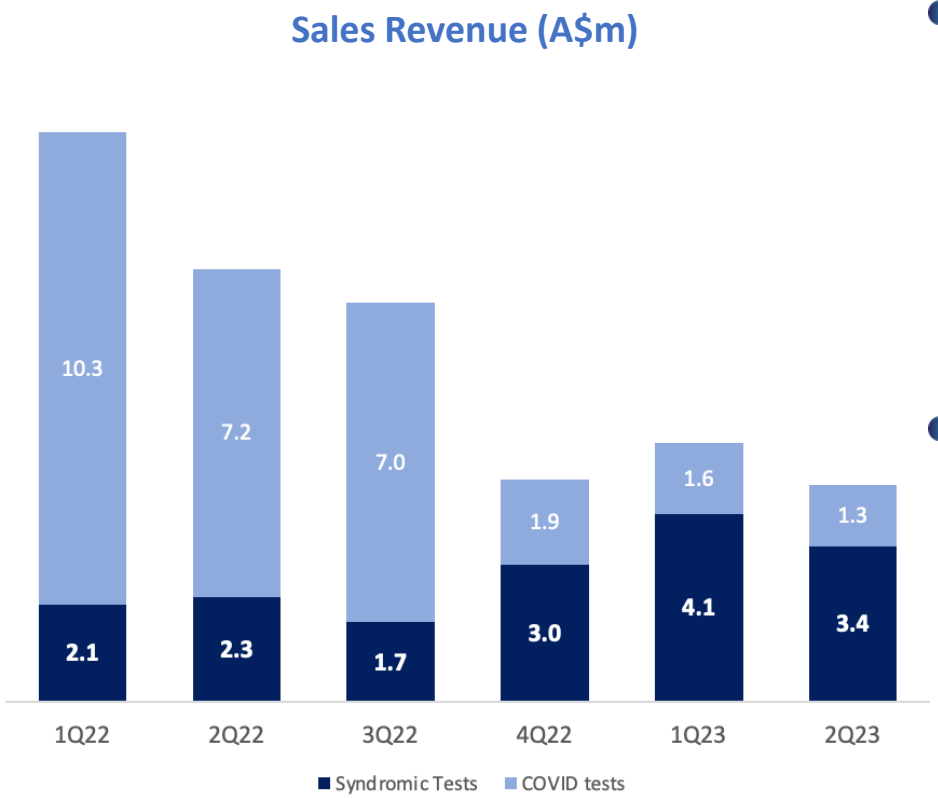
Robust underlying growth though pandemic



- **Covid "sugar hit"**
  - Revenues in FY21 & FY22 were significantly boosted by Covid molecular test sales during pandemic
  - Inevitable decline in sales of Covid molecular tests as pandemic management practices evolved

- **Provided opportunity for GSS to establish strong foundation for long-term growth**
  - Strong balance to support growth initiatives (product expansion, international markets, new instruments)
  - Significantly expanded customer base and awareness of **3base**® technology and benefits
  - Material growth in business compared to pre-pandemic trajectory:
    - Half year sales up 416% v 1H FY20 (pre-pandemic)
    - Equates to 61% CAGR over 3 years

Revenue dominated by sale of syndromic tests



Sales mix returning to syndromic tests focus

- Ensured company continued to build sales of syndromic tests throughout pandemic while benefitting from Covid opportunity
- Revenue dominated by syndromic tests with sales at significantly higher level than pre-pandemic
- **3base**® technology may provide future opportunities as new strains and variants continue to emerge

Strong growth drivers to provide long-term, durable growth from syndromic test sales

- Multi-pathogen testing for respiratory infections likely to be long-term growth market
- Syndromic testing increasingly recognised as providing more effective and timely healthcare
- Unique approach and benefits of **3base**® technology recognised by customers

Financial Summary – 1H FY23 Profit & Loss

A'000s	1H FY23	1H FY22
Sales revenue	10,405	21,838
Cost of materials	(3,759)	(6,283)
Gross profit	**6,646**	**15,555**
Freight	(716)	(607)
Employee benefits expense	(6,945)	(5,673)
Scientific consumables & clinical trials	(2,097)	(1,619)
Other expenses	(3,058)	(2,213)
EBITDA	**(6,170)**	**5,443**
Depreciation & amortisation	(702)	(814)
EBIT	**(6,872)**	**4,629**
Other income	392	72
Profit/(loss) before tax	**(6,480)**	**4,701**
Income tax expense	-	-
Net income	**(6,480)**	**4,701**

Investing in the future

- Peak COVID testing in 1H FY22
- 1H FY23 includes a prov. for stock write down of $719k
- 71% GM excluding stock provision - in line with pcp

- Additional personnel, particularly overseas
- Ongoing R&D activity, clinical trials for FDA clearance
- Increased travel & marketing

$26.8m cash @ 31 Dec, no debt

Robust pipeline with multiple products cleared for sale

Enteric Protozoan kit will provide entry to North America

North America accounts for 40% of the global molecular diagnostics market

- **High need for Enteric Protozoan Kit**
  - 5.5 million tests conducted in the US pa
  - Primarily culture/microscopy: slow, labour intensive, unreliable
  - Detects leading protozoan infections
- **Enteric Protozoan Screening Kit**
  - First *EasyScreen*™ product for US
  - 510(k) filing in April 2023
- **US Market preparation activities underway**
  - KOL webinars
  - Sales & marketing presence in US
  - Warehousing facility in Los Angeles
  - Initial focus on 30 high-throughput, centralised labs
- **First 3base® product for the US**
  - Regulatory dossier relevant for other *EasyScreen*™ products

US 510(k) for Enteric Protozoan filing by end of April

- **Final steps underway**
  - Recruitment for trial involving 1,500 clinical samples was completed in July 2022
  - For the several assays in GSS's Enteric Protozoan Kit that were not included in the predicate device (comparator assay), GSS has had to develop validated comparative tests for verification to provide the final data required to file the 510(k) application
  - The final external study requires tests to be conducted at three sites by staff who have not used the test previously (multi-site reproducibility study)
  - Currently awaiting Institutional Review Board (IRB) approval at the final site—expected in the coming weeks
  - Remain on track to file the 510(k) application to the FDA in April 2023

Second product in clinical testing to support US FDA filing

Next product

- Multi-pathogen syndromic test
- Significant benefits from **3base®** technology for this application
- Easier trial as all targets are in a predicate device

Trial initiated

- Trial to be conducted at four sites in the US
- First 2 sites have commenced patient recruitment
- Other 2 sites at site-initiation stage
- Targeting 510(k) filing in mid-CY2024

Business development activity in overseas markets

- **Key appointments**
  - Distributor Channel Manager – Europe
  - Regulatory Affairs Associate – Europe
  - Head of Clinical Operations – North America
- **New distributors pending**
  - Israel
  - Middle East
- **Market preparation**
  - KOL focus group meeting in Texas – March 2023
- **Industry meetings**
  - Europe – ECCMID and others
  - USA – ASM and others
- **Customer trials**
  - Sites trialing Enteric & Respiratory kits for adoption

Growth initiatives

- **Leverage experience in AU market to grow international sales**
  - Europe – drive adoption of other **3base®** products
  - US – build **3base®** franchise once Protozoan Detection Kit is cleared
- **Build & expand portfolio of *EasyScreen*™ products**
  - Expand menu of **3base®** tests
  - Develop new *EasyScreen*™ Syndromic Test Kits
  - Secure registration for new *EasyScreen*™ products
- **Embed 3base® technology in high-value customer's workflow**
  - Increase adoption of *EasyScreen*™ kits for more applications
  - Broader range of commercial arrangements with customers
- **Next-generation, "sample-to-result" instrument**
  - Highly automated, high-throughput
  - Ideally suited for high-volume commercial users
  - Embed use of **3base®** with customers

Upcoming milestones – 12 months

- **US Enteric Protozoan Kit**
  - 510(k) filing April 2023
  - Launch product once clearance is granted
- **Increase sales and presence in UK and European markets**
  - Contracts with new customers
  - Direct sales force and distributor appointments
- **Complete US clinical trial for next *EasyScreen*™ product**
- **R&D initiatives for new products**
  - New tests and *EasyScreen*™ kits
  - Technology improvements
  - Development of Next Generation instrument prototype

Genetic Signatures
Transforming Molecular Diagnostics

Contact Us

Dr John Melki

Genetic Signatures Ltd

Chief Executive Officer

E: john.melki@geneticsignatures.com

P: +61 (0)2 9870 7580

Visit us

www.geneticsignatures.com

Follow us