

GENETIC SIGNATURES LIMITED
ACN 095 913 205

PROSPECTUS

To raise up to \$15 million by an Offer of up to 37,500,000 Shares at \$0.40 each, with a minimum raising of \$12 million

IMPORTANT NOTICES

Offer

The Offer contained in this Prospectus is an invitation to acquire fully paid ordinary shares ("Shares") in Genetic Signatures Limited (ACN 095 913 205) ("Company" or "Genetic Signatures"). This Prospectus is issued by the Company.

Lodgement and listing

This Prospectus is dated 7 November 2014 ("Prospectus Date") and a copy was lodged with the Australian Securities and Investments Commission ("ASIC") on that date.

The Company will apply to ASX Limited ("ASX") within seven days after the Prospectus Date for admission of the Company to the official list of ASX and quotation of its Shares on ASX. None of ASIC, ASX or their officers take any responsibility for the content of this Prospectus or for the merits of the investment to which this Prospectus relates.

Expiry Date

No Shares will be issued or sold on the basis of this Prospectus after its expiry date, being the date 13 months after the Prospectus Date.

Note to Applicants

The information in this Prospectus is not financial product advice and does not take into account your investment objectives, financial situation or particular needs.

It is important that you read this Prospectus carefully and in its entirety before deciding whether to invest in the Company. In particular, you should consider the risk factors that could affect the performance of the Company. You should carefully consider these risks in light of your personal circumstances (including financial and tax issues) and seek professional guidance from your stockbroker, solicitor, accountant or other independent professional adviser before deciding whether to invest in Shares.

Some of the key risk factors that should be considered by prospective investors are set out in Section 4. There may be risk factors in addition to these that should be considered in light of your personal circumstances.

No person named in this Prospectus, nor any other person, guarantees the performance of the Company or the repayment of capital or any return on investment made pursuant to this Prospectus.

No offering where offering would be illegal

This Prospectus does not constitute an offer or invitation in any place in which, or to any person to whom, it would not be lawful to make such an offer or invitation. No action has been taken to register or qualify the Shares or the Offer, or to otherwise permit a public offering of the Shares in any jurisdiction outside Australia. The distribution of this Prospectus outside Australia may be restricted by law and persons who come into possession of this Prospectus outside Australia should observe any such restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

This Prospectus has been prepared for publication in Australia and may not be distributed to any person, and the Shares may not be offered or sold, in any country outside Australia except to the extent permitted below.

United States

This Prospectus may not be distributed in the United States unless it is attached to an Offering Circular for distribution solely to a limited number of "accredited investors", as defined in Rule 501(a) under the US Securities Act of 1933 (the "US Securities Act").

The Shares have not been, and will not be, registered under the US Securities Act or the securities laws of any state of the United States, and may not be offered or sold in the United States, except in transactions exempt from the registration requirements of the US Securities Act and applicable US state securities laws.

United Kingdom

Neither the information in this Prospectus nor any other document relating to the Offer has been delivered for approval to the Financial Conduct Authority in the United Kingdom and no prospectus (within the meaning of section 85 of the Financial Services and Markets Act 2000, as amended ("FSMA")) has been published or is intended to be published in

respect of the Offer Shares. This Prospectus is issued on a confidential basis to fewer than 150 persons (other than "qualified investors" (within the meaning of section 86(7) of FSMA)) in the United Kingdom, and the Shares may not be offered or sold in the United Kingdom by means of this Prospectus, any accompanying letter or any other document, except in circumstances which do not require the publication of a prospectus pursuant to section 86(1) FSMA. This Prospectus should not be distributed, published or reproduced, in whole or in part, nor may its contents be disclosed by recipients to any other person in the United Kingdom.

Any invitation or inducement to engage in investment activity (within the meaning of section 21 FSMA) received in connection with the issue or sale of the Shares has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in the United Kingdom in circumstances in which section 21(1) FSMA does not apply to the Company.

In the United Kingdom, this Prospectus is being distributed only to, and is directed at, persons (i) who fall within Article 43 (members or creditors of certain bodies corporate) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005, or (ii) to whom it may otherwise be lawfully communicated (together "relevant persons"). The investments to which this Prospectus relates are available only to, and any invitation, offer or agreement to purchase will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Italy

The offering of the Shares in the Republic of Italy has not been authorised by the Italian Securities and Exchange Commission (Commissione Nazionale per le Società e la Borsa, "CONSOB") pursuant to the Italian securities legislation and, accordingly, no offering material relating to the Shares may be distributed in Italy and the Shares may not be offered or sold in Italy in a public offer within the meaning of Article 1.1(t) of Legislative Decree No. 58 of 24 February 1998, as amended ("Decree No. 58"), other than:

- to qualified investors ("Qualified Investors"), as defined in Article 100 of Decree No. 58 by reference to Article 34-ter of CONSOB Regulation No. 11971 of 14 May 1999, as amended ("Regulation No. 11971"); and
- in other circumstances that are exempt from the rules on public offer pursuant to Article 100 of Decree No. 58 and Article 34-ter of Regulation No. 11971.

Any offer, sale or delivery of the Shares or distribution of any offer document relating to the Shares in Italy (excluding placements where a Qualified Investor solicits an offer from the issuer) under the paragraphs above must be:

- made by investment firms, banks or financial intermediaries permitted to conduct such activities in Italy in accordance with Legislative Decree No. 385 of 1 September 1993 (as amended), Decree No. 58, CONSOB Regulation No. 16190 of 29 October 2007 (as amended) and any other applicable laws; and
- in compliance with all relevant Italian securities, tax and exchange controls and any other applicable laws.

Any subsequent distribution of the Shares in Italy must be made in compliance with the public offer and prospectus requirement rules provided under Decree No. 58 and the Regulation No. 11971, unless an exception from those rules applies. Failure to comply with such rules may result in the sale of such Shares being declared null and void and in the liability of the entity transferring the Shares for any damages suffered by the investors.

Financial information presentation

Section 6 sets out in detail the financial information referred to in this Prospectus. The basis of preparation of that information is set out in Section 6.2.

All financial amounts contained in this Prospectus are expressed in Australian dollars and rounded to the nearest \$0.1 million unless otherwise stated. Any discrepancies between totals and sums

of components in tables contained in this Prospectus are due to rounding.

This Prospectus contains forward looking statements which are identified by words such as "may", "could", "believes", "estimates", "expects", "intends" and other similar words that involve risks and uncertainties.

Any forward looking statements are subject to various risk factors that could cause the Company's actual results to differ materially from the results expressed or anticipated in these statements. Such statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its Directors and management. Forward looking statements should therefore be read in conjunction with, and are qualified by reference to, the discussion of the historical financial information in Section 6, the risk factors as set out in Section 4 and other information in this Prospectus.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward looking statements contained in the Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward looking statements. The Company has no intention of updating or revising forward looking statements, or publishing prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information, contained in this Prospectus, except where required by law.

Disclaimer

No person is authorised to give any information or to make any representation in connection with the Offer described in this Prospectus which is not contained in this Prospectus. Any information not so contained may not be relied upon as having been authorised by the Company or any other person in connection with the Offer. You should rely only on information in this Prospectus.

The Company, the Lead Manager and the Share Registry disclaim all liability, whether in negligence or otherwise, to persons who trade Shares before receiving their holding statement.

This disclaimer does not purport to disclaim any warranties or liability which cannot be disclaimed by law.

Exposure Period

The Corporations Act prohibits the Company from processing Applications in the seven day period after the date of Prospectus Lodgement ("Exposure Period"). The Exposure Period may be extended by ASIC by up to a further seven days. The purpose of the Exposure Period is to enable the Prospectus to be examined by market participants prior to the raising of funds. Applications received during the Exposure Period will not be processed until after the expiry of the Exposure Period. No preference will be conferred on any Applications received during the Exposure Period.

Obtaining a copy of this Prospectus

A paper copy of the Prospectus is available free of charge to any person in Australia by calling the Genetic Signatures Offer Information Line on 1300 737 760 (within Australia) or +61 2 9290 9600 (outside Australia) from 8.30am until 5.30pm AEDT Monday to Friday during the Offer Period.

This Prospectus is also available to Australian resident investors in electronic form at the Offer website, www.geneticsignatures.com. The Offer constituted by this Prospectus in electronic form is available only to Australian residents accessing the website within Australia. It is not available to persons in other jurisdictions (including the United States). Persons who access the electronic version of this Prospectus should ensure that they download and read the entire Prospectus.

Applications for Shares may only be made on the appropriate Application Form attached to, or accompanying, this Prospectus in its paper copy form, or in its electronic form which must be downloaded in its entirety from www.geneticsignatures.com. By making an Application, you declare that you were given access to the Prospectus, together with an Application Form. The Corporations Act prohibits any person from passing the Application Form on to another person

unless it is attached to, or accompanied by, this Prospectus in its paper copy form or the complete and unaltered electronic version of this Prospectus.

Photographs and Diagrams

Photographs and diagrams used in this Prospectus that do not have descriptions are for illustration only and should not be interpreted to mean that any person shown in them endorses this Prospectus or its contents or that the assets shown in them are owned by the Company.

Diagrams used in this Prospectus are illustrative only and may not be drawn to scale. Unless otherwise stated, all data contained in charts, graphs and tables is based on information available at the date of this Prospectus.

Company Website

Any references to documents included on the Company's website at www.geneticsignatures.com are for convenience only, and none of the documents or other information available on the Company's website is incorporated herein by reference.

Defined terms and abbreviations

Defined terms and abbreviations used in this Prospectus are explained in Section 12. Unless otherwise stated or implied, references to times in this Prospectus are to AEDT.

Privacy

By completing an Application Form, you are providing personal information to the Company and the Share Registry, which is contracted by the Company to manage Applications. The Company and the Share Registry on their behalf, collect, hold and use that personal information to process your Application, service your needs as a Shareholder, provide facilities and services that you request and carry out appropriate administration.

Once you become a Shareholder, the Corporations Act and Australian taxation legislation require information about you (including your name, address and details of the Shares you hold) to be included in Company's public register. The information must continue to be included in the Company's public register if you cease to be a Shareholder. If you do not provide all the information requested, your Application Form may not be able to be processed. The Company and the Share Registry may disclose your personal information for purposes related to your investment to their agents and service providers including those listed below or as otherwise authorised under the *Privacy Act 1988* (Cth):

- The Share Registry for ongoing administration of the Shareholder register;
- The Lead Manager in order to assess your Application;
- Printers and other companies for the purpose of preparation and distribution of documents and for handling mail;
- Market research companies for the purpose of analysing the Company's shareholder base and for product development and planning; and
- Legal and accounting firms, auditors, management consultants and other advisers for the purpose of administering, and advising on, the Shares and for associated actions.

You may request access to your personal information held by or on behalf of the Company. You can request access to your personal information or obtain further information about the Company's privacy practices by contacting the Share Registry or the Company. The Company aims to ensure that the personal information it retains about you is accurate, complete and up-to-date. To assist with this, please contact the Company or the Share Registry if any of the details you have provided change.

In accordance with the requirements of the Corporations Act, information on the Shareholder register will be accessible by members of the public.

Lead Manager

The Lead Manager to the Offer is Lodge Corporate Pty Ltd.

THIS DOCUMENT IS IMPORTANT AND SHOULD BE READ IN ITS ENTIRETY.

DEAR INVESTOR,

On behalf of the Board I am delighted to present you with the opportunity to invest in Genetic Signatures Limited. The Offer provides an opportunity for you to share in the Company's exciting future.

Genetic Signatures has developed and commercialised a range of diagnostic tests based on the Company's proprietary 3 Base™ platform technology. The Company's *EasyScreen*™ product range is already in use by major hospitals in Australia for the routine detection of infectious diseases such as pathogens that can cause gastroenteritis, Norovirus and *C. difficile*. Genetic Signatures plans to launch additional products for the detection of pathogens associated with respiratory diseases, sexual health infections, MRSA, tuberculosis and meningitis.

The global molecular diagnostic market represents a growing segment of the global in vitro diagnostic market due to the speed, sensitivity and specificity of molecular diagnostics. Genetic Signatures' tests have the ability to quickly and accurately screen patient samples for a wide array of pathogens that are most commonly associated with medical conditions such as gastroenteritis. A more effective clinical assessment allows better patient care and treatment.

The Company's target markets are major hospitals and pathology laboratories undertaking infectious disease screening. Genetic Signatures is well positioned to capitalise on the significant global market opportunity with a business model that drives economic and health benefits for community.

With initial sales in Australia and Europe, the Company now seeks to expand its revenue base to other major geographies, including the USA. The Company's commercial plan is based on regulatory, market entry and intellectual property strategies. The Company has been able to attract a well-credentialed management and Board team with a proven track record in building high growth companies.

Detailed information about the Offer and the financial and operating performance of the Company are set out in this Prospectus. It also includes a description of the key risks associated with an investment in the Company in Section 4 such as risks related to competition, product development, regulatory approvals, key staff, supplier dependence, manufacturing and production, foreign exchange, the Company's expenditure program, sufficiency of funding and intellectual property. I encourage you to read it carefully and in its entirety before making your investment decision.

To apply for Shares, you will need to fill out the Application Form attached to this Prospectus. If you have any questions about how to apply for Shares, please call the Genetic Signatures Offer Information Line on 1300 737 760 (within Australia) or +61 2 9290 9600 (outside Australia) from 8.30am until 5.30pm (AEDT) Monday to Friday during the Offer period. The Offer is expected to close at 5.00pm (AEDT) on Friday, 12 December 2014.

Genetic Signatures is at its most exciting phase and through this Offer is seeking to raise \$12 million to \$15 million primarily to fund the commercial expansion into the European and US markets and the development of additional products.

On behalf of the Board and senior management team, I look forward to welcoming you as a Shareholder.

Yours sincerely,



Nick Samaras

CHAIRMAN



Table of Contents

Chairman's Letter	1
Highlights of the Offer	3
01. Investment Overview	4
02. Company Overview	17
03. Market Overview	28
04. Risks	38
05. Directors and Management	43
06. Financial Information	51
07. Investigating Accountant's Report	59
08. Intellectual Property Report	64
09. Additional Information	84
10. 3Base™ Technology	97
11. Significant Accounting Policies	100
12. Glossary	106
Corporate Directory	IBC

We have developed and commercialised a range of molecular diagnostics (MDx) based on a proprietary platform technology 3Base™

Highlights of the Offer

Important Dates

Prospectus Date	7 November 2014
Opening date for Applications (9.00am)	17 November 2014
Closing date for Applications (5.00pm)	12 December 2014
Issue and allotment of Shares	18 December 2014
Expected despatch of holding statements	18 December 2014
Expected date of quotation of Shares on the ASX	23 December 2014

Note: This timetable is indicative only. Unless otherwise indicated, all times are in AEDT. The Company and the Lead Manager reserve the right to vary the dates and times of the Offer, including to close the Offer early or to accept late Applications, either generally or in particular cases without notification. The Company may issue Shares immediately after the Minimum Subscription is achieved. Investors are encouraged to submit their Applications as soon as possible.

Key Offer Statistics

	Based on Minimum Subscription being raised	Based on Maximum Subscription being raised
Offer Price per Share	\$0.40	\$0.40
Total number of Shares available under the Offer	30,000,000	37,500,000
Gross proceeds from the Offer ¹	\$12,000,000	\$15,000,000
Total number of Shares on issued under the ESP	4,680,000	4,680,000
Total number of Shares on issue on completion of the Offer ²	84,193,990	91,693,990
Indicative market capitalisation ³	\$33,677,596	\$36,677,596

1 Equal to Shares issued under the Offer multiplied by the Offer Price.

2 Includes the number of Shares available under this Offer plus Shares retained by the Existing Shareholders.

3 Equal to the total number of Shares on issue on completion of the Offer multiplied by the Offer Price.

The background features a large, abstract geometric composition. A large white triangle points towards the top right. Within this white space, there is a smaller, tilted rectangular area containing a microscopic image of a textured, blue, crystalline or organic structure. The rest of the page is filled with various shades of blue, forming large geometric shapes that create a sense of depth and movement.

Investment Overview 01.

01. Investment Overview

1.1. Business overview

Topic	Summary	More information
Who is Genetic Signatures?	<p>Genetic Signatures is a specialist molecular diagnostics (MDx) company focused on the development and commercialisation of its proprietary platform technology, 3Base™.</p> <p>Genetic Signatures has developed and commercialised a suite of real time PCR based products which are now being used by major hospitals in Australia for the routine detection of infectious diseases. The Company's proprietary MDx technology provides high-volume hospitals and pathology laboratories with 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.</p>	Section 2.1
What is MDx and why is it important?	<p>Molecular diagnostics refers to the detection of specific sequences of the genome, the DNA or RNA that define an organism. It is a modern technique that is usually performed in a pathology laboratory as it is useful in the detection of infectious agents, which is important for patient management and for infection control. Laboratories are moving from traditional diagnostic methods to molecular diagnostics primarily due to improvements in speed and accuracy.</p>	
What are current MDx techniques and how does the technology of Genetic Signatures differ?	<p>Current MDx techniques start with a patient sample which is treated so that only the nucleic acid (DNA and/or RNA) is made accessible for testing. The nucleic acid is then interrogated for a specific target or multiple targets which indicate the presence of a particular infectious agent. These techniques usually rely on individual primers and probes to seek, amplify and detect each target. The method of detecting multiple targets in one tube is referred to as “multiplexing” a process which can reduce the sensitivity and specificity of a test due to the interactions of multiple primers and probes.</p> <p>Genetic Signatures' 3Base™ platform technology is a molecular technique whereby the naturally occurring DNA and RNA sequences are changed to reduce the sequence variation between subtypes. The technology employs a patent protected chemical transformation of the DNA and RNA sequences which reduces the complexity of the genetic code. The process of reducing the variation between sequences can enhance the detection of multiplexed assays where multiple targets are detected in the one tube. This is achieved by allowing a simpler design of molecular assays for the simultaneous detection of multiple targets.</p>	Section 2.2
Does Genetic Signatures have any patents over its MDX technology?	<p>Genetic Signatures' 3Base™ platform and products are protected by a number of patents.</p> <p>The Company has a broad overarching patent protecting the 3Base™ technology platform expiring in 2024 and another more specific patent protecting the use of 3Base™ in each of the Company's general pathology products which expires in 2031.</p>	Sections 2.5 and 8

01. Investment Overview

Topic	Summary	More information
How will Genetic Signatures generate income?	<p>The Company has developed and commercialised products for the use in detection of infectious diseases, branded as <i>EasyScreen</i>TM. The Genetic Signatures core 3BaseTM technology has applications in a number of areas, including cancer detection assays, food testing and other applications. The Company has chosen to focus its near-term efforts on the detection of infectious agents as it has been identified as the largest, nearest and most readily addressable market opportunity.</p> <p>Genetic Signatures sold its first product in Australia under the <i>EasyScreen</i>TM brand in late 2010. This product led to the subsequent development of the current suite of enteric screening kits. The Company presently has 5 major hospitals in NSW, Australia, utilising <i>EasyScreen</i>TM in their routine detection practice. The Company received regulatory approval to commence sales into the European Union (EU) in 2012 and appointed a distributor in Italy in 2013. The Company is currently in discussions with distributors in a number of other EU jurisdictions. The Company plans to enter the United States (US) healthcare market in 2015.</p> <p>The Company is also developing other products for respiratory, MRSA, sexual health infection, tuberculosis and meningitis screening. The Respiratory and MRSA products are in Beta Testing. The sexual health infections, tuberculosis and meningitis products are at earlier stages of development.</p>	Sections 2.1, 2.2 and 2.4

1.2. Investment highlights

Topic	Summary	More information
Next generation products	<p>The ability to screen quickly and accurately for a wide array of infectious diseases (or pathogens) is a critical requirement for hospitals and pathology laboratories globally. Real time Polymerase Chain Reaction (PCR) forms a key part of modern molecular diagnostic techniques in testing for infectious diseases, including dangerous pathogens.</p> <p>Genetic Signatures has developed and commercialised a suite of real time PCR based products now being used by major hospital groups in Australia for the routine detection of infectious diseases. The Company's proprietary MDx technology provides high-volume hospitals and pathology laboratories with 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.</p>	Sections 2.2 and 2.3
Proprietary technology driving product development for large customers in multiple markets	<p>Genetic Signatures has a proprietary platform technology 3BaseTM which forms the basis of its range of tests used in the detection of infectious diseases and branded <i>EasyScreen</i>TM. The Company's products support high-volume hospitals and pathology laboratories in providing rapid turnaround (time to results) on screening patient samples with a high degree of specificity.</p> <p>Genetic Signatures' customers are currently represented by large hospital and pathology laboratories in Australia, and its products have been developed to meet existing and planned future requirements for customers in both its current and planned target markets of the US and the EU.</p> <p>Genetic Signatures' products have also been developed to be platform agnostic, thereby maximising the addressable market by reducing the need for capital expenditure by customers.</p>	Sections 2.2, 2.3, 2.5 and 8

01. Investment Overview

Topic	Summary	More information
Clinical utility driving economic benefits for customers	Genetic Signatures' suite of reagent products provides distinct advantages for customers in improving performance on the routine detection of infectious pathogens in patient samples. The Company's products support customers to increase the breadth of pathogens detected in a high throughput environment, thereby enabling early detection, supporting improved patient outcomes and reduced customers staffing and inpatients costs.	Sections 2.2 and 2.3
Product on market in Australia and undertaking commercial launch in large global markets	<p>Genetic Signatures' suite of reagent products have been through extensive customer validation in Australia over the past 4 years, with several high profile customers leading the way including Westmead Hospital, St. Vincent's Hospital, Prince of Wales Hospital and Royal North Shore Hospital. 37,880 tests were performed by customers in Australia in FY14 using the Company's <i>EasyScreen™</i> reagent products.</p> <p>The Company established operations in the EU in 2013 with the appointment of a General Manager – EU Operations and has subsequently appointed an Italian distributor (in April 2014) and an Israeli distributor (in October 2014).</p> <p>The Company established operations in the US in 2014 with the appointment of an experienced management team led by ex Laboratory Corporation of America, Inc. (LabCorp) executive Mr Mike Aicher.</p> <p>Genetic Signatures believes that it is now well positioned to achieve commercial scale and success in each of these markets. The proceeds of the Offer are primarily to be applied to increasing the Company's business development and sales activities with a view to achieving rapid growth via a continued commercial rollout of its reagent products in Australia, and entry into the US and EU markets.</p>	Sections 2.1 and 2.4
Large addressable markets	<p>Genetic Signatures operates in the global MDx market which had sales of USD5.3 billion in 2012¹ and grew at 13% per annum per annum from 2009 to 2012.² The Company currently sells product into the Australian MDx market and has established operations over the past year in the key markets of the US and Western Europe. In 2012, these markets represented (in aggregate) 80.25% of the total MDx test sales globally.³</p> <p>Annual sales in the sub-segments within the MDx market that are covered by the Company's current infectious disease products and its additional products in development and in Beta Testing with customers (covering respiratory and MRSA, meningitis, tuberculosis and sexual health infections) are estimated by independent research firm Kalorama to grow to USD1,770 million globally in 2017.⁴</p>	Section 3
Attractive business model	Scalable and attractive business to business model with understood regulatory pathways and high industry margin. The Company's proprietary platform technology supports rapid expansion and is readily scalable.	Sections 2.2 and 2.4

1 Kalorama MDx Report, page 7

2 Kalorama MDx Report, page 7

3 Kalorama MDx Report, page 94

4 Kalorama MDx Report, page 9

01. Investment Overview

Topic	Summary	More information
Commercialisation built on regulatory, market entry and IP strategies	<p>Genetic Signatures' approach to commercialisation in each market is supported by review and analysis of regulatory requirements, market conditions and freedom to operate issues that it considers relevant for the market.</p> <p>The Company's broad patent position extends to 2024 on the core platform technology, and to 2031 on each of the reagent products utilising the platform technology.</p>	Sections 2.4 and 2.5
Well-credentialed Board with track record in MDx industry	<p>Nick Samaras (Chairman) – previous senior executive roles with Applied Biosystems and Perkin Elmer</p> <p>John Melki (CEO) – responsible for leading the development and commercialisation of Genetic Signatures' products</p> <p>Robert Birrell (Director and CFO) – previous senior corporate roles with Woolworths Ltd and Austar United Communications Ltd.</p> <p>Mike Aicher (Executive Director – US Operations) – previously CEO and founder of National Genetics Institute (NGI) and acquired by Laboratory Corporation of America, Inc. (LabCorp) in 2000, and later responsible for LabCorp's Western Division in the US</p> <p>Phillip Isaacs (Non-Executive Director) – previously Managing Director, Asia Pacific, for Beckman Instruments</p> <p>Pat Noland (Non-Executive Director) – currently Director and CEO at StrataDx, and previously Senior VP at LabCorp</p>	Section 5

1.3. Summary of key risks

Topic	Summary	More information
Competition	The biotechnology and diagnostic industries are highly competitive, and include companies with significantly greater financial, technical, human, research and development, and marketing resources than the Company. The Company's competitors may discover and develop products in advance of the Company and/or products that are more effective than those developed by the Company.	Section 4.1(a)
Product development	The Company has a number of products relating to enteric screening kits that it has commercialised. The Company also has a number of other products in Beta Testing and in earlier stages of development. The products in Beta Testing and earlier stages of development are at a relatively early developmental stage and further substantial development is necessary. If the Company's products are not ultimately proven to be effective for diagnostic purposes, the Company's business and resulting value may be materially harmed.	Section 4.1(b)
Regulatory approvals	Genetic Signatures may fail in seeking regulatory approval in the US in respect of any of its products and/or regulatory approvals in Australian and the EU in respect of its products that are not currently being commercialised.	Section 4.1(c)

01. Investment Overview

Topic	Summary	More information
Inability to recruit and retain key staff	Genetic Signatures currently employs or engages as consultants, a number of key members of its management and scientific team. The loss of any of these people's services could materially and adversely affect Genetic Signatures and may impede the achievement of its research, product development and commercialisation objectives. Further, the successful development of Genetic Signatures will require the services of additional staff. There can be no assurance that the Company will be able to attract appropriately qualified and experienced additional staff.	Section 4.1(d)
Dependence on suppliers	There can be no certainty that any components that Genetic Signatures requires for manufacturing of its products will be available in the future. If any such component becomes unavailable, failure to find a suitable alternative component will require a re-design to the Company's products that could impact the Company's capacity to manufacture and may involve a larger amount of financial investment.	Section 4.1(e)
Manufacturing/production risks	Genetic Signatures has not yet manufactured its products on a larger scale and therefore cannot guarantee it will be able to meet the needs of its potential Australian, European and US customers. The manufacture of MDx assays is very complex and associated with uncertainties in relation to issues such as impurities and consistency of the product as well as manufacturing capacity and price of large scale manufacturing.	Section 4.1(f)
Foreign exchange risk	The Company's financial reports are prepared in Australian dollars. However, a proportion of the Company's sales revenue, expenditures and cash flows are generated in, and assets and liabilities are denominated in, Euros and US dollars. Any adverse movements of Euros or US dollars against the Australian dollar as well as other adverse exchange rate fluctuations or volatility could have an adverse effect on the Company's future financial performance and position. The Company does not currently hedge against this foreign exchange risk.	Section 4.1(g)
Expenditure program	Genetic Signatures has not entered into contracts for any of the material items covered by its anticipated expenditure program set out in Section 1.5, nor does it have binding quotations in relation to some such items. While the Directors are confident Genetic Signatures will be able to source suitable suppliers, there is a risk that Genetic Signatures may not be able to source those suppliers at the estimated expenditure in Section 1.5.	Section 4.1(h)
Sufficiency of funding	Although the Directors believe that, on completion of the Offer, the Company will have sufficient working capital to carry out its stated objectives, there can be no assurance that such objectives can be met without further funding.	Section 4.1(i)
Intellectual property rights	There is no guarantee that the Company's patent rights comprise all of the rights that the Company needs to be entitled to freely use and commercialise its products. If third party patents or patent applications contain claims infringed by the Company's technology and these claims are valid, the Company may be unable to obtain licenses to these patents at a reasonable cost, if at all, and may also be unable to develop or obtain alternative technology. If such licenses cannot be obtained at a reasonable cost, the business could be significantly impacted. Further, the enforceability of the patents owned by the Company may be challenged and the Company's patents could be partially or wholly invalidated following challenges by third parties.	Section 4.2(a)

01. Investment Overview

Topic	Summary	More information
Infringement of third party intellectual property	If a third party accuses the Company of infringing its intellectual property rights or if a third party commences litigation against the Company for the infringement of patent or other intellectual property rights, the Company may incur significant costs in defending such action, whether or not it ultimately prevails. In addition, parties making claims against the Company may be able to obtain injunctive or other equitable relief that could prevent the Company from further developing discoveries or commercialising its products. In the event of a successful claim of infringement against the Company, it may be required to pay damages and obtain one or more licences from the prevailing third party.	Section 4.2(b)

1.4. Key financial information

Topic	Summary	More information																																
What is the key financial information?	<p>The financial position of Genetic Signatures as at 30 June 2014 and the pro forma financial position after the Offer is set out in the table below.</p> <table><tr><th></th><th>As at 30 June 2014 Audited \$</th><th>Pro forma at Minimum Subscription \$</th><th>Pro forma at Maximum Subscription \$</th></tr><tr><td>Current Assets</td><td>2,584,404</td><td>13,365,404</td><td>16,152,404</td></tr><tr><td>Non-current Assets</td><td>395,310</td><td>395,310</td><td>395,310</td></tr><tr><td>Total Assets</td><td>2,979,714</td><td>13,760,714</td><td>16,547,714</td></tr><tr><td>Current Liabilities</td><td>368,794</td><td>368,794</td><td>368,794</td></tr><tr><td>Non-current Liabilities</td><td>1,681</td><td>1,681</td><td>1,681</td></tr><tr><td>Total Liabilities</td><td>370,475</td><td>370,475</td><td>370,475</td></tr><tr><td>NET ASSETS</td><td>2,609,239</td><td>13,390,239</td><td>16,177,239</td></tr></table>		As at 30 June 2014 Audited \$	Pro forma at Minimum Subscription \$	Pro forma at Maximum Subscription \$	Current Assets	2,584,404	13,365,404	16,152,404	Non-current Assets	395,310	395,310	395,310	Total Assets	2,979,714	13,760,714	16,547,714	Current Liabilities	368,794	368,794	368,794	Non-current Liabilities	1,681	1,681	1,681	Total Liabilities	370,475	370,475	370,475	NET ASSETS	2,609,239	13,390,239	16,177,239	Section 6
	As at 30 June 2014 Audited \$	Pro forma at Minimum Subscription \$	Pro forma at Maximum Subscription \$																															
Current Assets	2,584,404	13,365,404	16,152,404																															
Non-current Assets	395,310	395,310	395,310																															
Total Assets	2,979,714	13,760,714	16,547,714																															
Current Liabilities	368,794	368,794	368,794																															
Non-current Liabilities	1,681	1,681	1,681																															
Total Liabilities	370,475	370,475	370,475																															
NET ASSETS	2,609,239	13,390,239	16,177,239																															
No financial forecasts	<p>The Directors have considered the matters set out in ASIC Regulatory Guide 170 regarding inclusion of prospective financial information in a disclosure document such as this Prospectus. They believe that they do not have a reasonable basis to forecast future earnings as the operations of the Company are at the development and commercialisation stage. Accordingly, forecast projection information would contain a broad range of potential outcomes and possibilities that preclude preparation of reliable forecasts or projections.</p>																																	
Will the Company pay dividends?	<p>Given the early stage of the Company in its commercial rollout activities and the fact that the Company is yet to record a profit, the Board has no expectation of paying a dividend for the foreseeable future.</p>																																	

1.5. Key terms and conditions of the Offer

Topic	Summary	More information																					
Who is the issuer of this prospectus?	Genetic Signatures Limited (ACN 095 913 205).																						
What is the Offer?	<p>This Prospectus relates to an initial public offer of up to 37,500,000 Shares at a price of \$0.40 each to raise up to \$15 million.</p> <p>The Offer is subject to the Company raising a minimum of \$12 million.</p> <p>The Shares being offered will represent between 35.6% to 40.9% of the total Shares on issue on completion of the Offer.</p>	Section 9.3																					
What is the purpose of the Offer?	<p>The purposes of the Offer are to:</p> <ul style="list-style-type: none"> raise capital to accelerate the growth of Genetic Signature's business; achieve listing on the ASX to broaden the Shareholder base and provide a market for Shares in Genetic Signatures; pay the expenses of the Offer; and provide further working capital for the Company. 																						
Is the Offer underwritten?	No. The Offer is not underwritten. Genetic Signatures has appointed Lodge Corporate Pty Ltd as Lead Manager to the Offer.	Section 9.7(a)																					
Is there a minimum subscription amount?	Yes. The Minimum Subscription for the Offer is \$12 million, being the receipt of valid applications for not less than 30 million Shares. If this Minimum Subscription is not achieved by the date 4 months after the Prospectus Date, the Company will repay all money received from Applicants (without interest).																						
What is the proposed capital structure and market capitalisation of the Company following the Offer?	<table> <tr> <th></th><th>Based on Minimum Subscription being raised</th><th>Based on Maximum Subscription being raised</th></tr> <tr> <td>Total number of Shares at date of this Prospectus</td><td>49,513,990</td><td>49,513,990</td></tr> <tr> <td>Total number of Shares available under the Offer</td><td>30,000,000</td><td>37,500,000</td></tr> <tr> <td>Total number of Shares issued under the ESP</td><td>4,680,000</td><td>4,680,000</td></tr> <tr> <td>Total number of Shares on issue on completion of the Offer</td><td>84,193,990</td><td>91,693,990</td></tr> <tr> <td>Indicative market capitalisation⁵</td><td>\$33,677,596</td><td>\$36,677,596</td></tr> <tr> <td>Total proceeds from the Offer (before costs)</td><td>\$12,000,000</td><td>\$15,000,000</td></tr> </table>		Based on Minimum Subscription being raised	Based on Maximum Subscription being raised	Total number of Shares at date of this Prospectus	49,513,990	49,513,990	Total number of Shares available under the Offer	30,000,000	37,500,000	Total number of Shares issued under the ESP	4,680,000	4,680,000	Total number of Shares on issue on completion of the Offer	84,193,990	91,693,990	Indicative market capitalisation ⁵	\$33,677,596	\$36,677,596	Total proceeds from the Offer (before costs)	\$12,000,000	\$15,000,000	Section 9.3
	Based on Minimum Subscription being raised	Based on Maximum Subscription being raised																					
Total number of Shares at date of this Prospectus	49,513,990	49,513,990																					
Total number of Shares available under the Offer	30,000,000	37,500,000																					
Total number of Shares issued under the ESP	4,680,000	4,680,000																					
Total number of Shares on issue on completion of the Offer	84,193,990	91,693,990																					
Indicative market capitalisation ⁵	\$33,677,596	\$36,677,596																					
Total proceeds from the Offer (before costs)	\$12,000,000	\$15,000,000																					

5 Equal to the total number of Shares on issue on completion of the Offer multiplied by the Offer Price.

01. Investment Overview

Topic	Summary	More information
Who are the owners of Genetic Signatures and what interest will they retain?	<p>The owners of Genetic Signatures are the Existing Shareholders. On completion of the Offer, they will collectively hold 54.0% to 58.8% of the total Shares on issue.⁶</p> <p>The Existing Shareholder with the largest shareholding is Asia Union Investments. Asia Union Investments is the family company of one of the Company's founders CM Abbott. It has been supporting the Company since its inception. On completion of the Offer, Asia Union Investments will hold 40.2% to 43.8% of the total Shares on issue.⁷</p> <p>With the exception of Asia Union Investments:</p> <ul style="list-style-type: none"> • none of the Existing Shareholders will hold or have voting power in 5% or more of the Shares on the completion of the Offer; and • the Directors do not expect any Shareholder to control the Company on the completion of the Offer. 	Section 9.3
Will any Shares be subject to escrow?	<p>Yes. The Company expects that, in accordance with the ASX Listing Rules, mandatory escrow arrangements will apply to up to 3,572,854 Shares held by the Existing Shareholders.⁸ In addition, voluntary escrow arrangements will apply in respect of a further 34,236,690 Shares held by one of the Existing Shareholders, Asia Union Investments. The total number of Shares expected to be subject to escrow represents up to approximately 41% to 45% of the total number of Shares on issue on completion of the Offer. 18,434,065 of these Shares will be released from escrow 1 year after the Listing Date and the remaining balance will be released from escrow 2 years after the Listing Date. Shares may be released earlier in certain circumstances.</p> <p>In addition, the 4,680,000 Shares issued under the ESP, representing a further 5.1% to 5.6% of the total number of Shares on issue on completion of the Offer, will be subject to trading restrictions. These ESP Shares will vest and become clear of those trading restrictions progressively over a 4 year period.</p> <p>No escrow will apply to Shares issued under the Offer.</p>	Sections 9.4 and 9.8(d)
Will the Shares be listed?	<p>Genetic Signatures will apply to ASX for admission to the official list of ASX and quotation of Shares on ASX under the code GSS.</p> <p>Completion of the Offer is conditional on ASX approving this application. If approval is not given within three months after such an application is made, the Offer will be withdrawn and all Application Monies received will be refunded without interest as soon as practicable in accordance with the requirements of the Corporations Act.</p> <p>The ASX takes no responsibility for this Prospectus or the investment to which it relates. The fact that the ASX may admit Genetic Signatures to the official list is not to be taken as an indication of the merits of Genetic Signatures or the Shares offered for subscription.</p>	

⁶ Based on Maximum Subscription and Minimum Subscription being raised, respectively, and assuming that no Existing Shareholder subscribes for Shares under the Offer and excluding Shares issued under the ESP.

⁷ Based on Maximum Subscription and Minimum Subscription being raised, respectively, and assuming that Asia Union Investments does not subscribe for Shares under the Offer.

⁸ The ASX may review these restrictions during its consideration of the Company's application for admission to the Official List of the ASX. Final details of any restriction or escrow arrangements will be disclosed prior to commencement of official quotation of the Company's Shares.

Topic	Summary	More information
Expenditure program – how the Company will use the funds raised from the Offer	<p>If the Company raises the Minimum Subscription, the Company aims to complete the following objectives:</p> <ul style="list-style-type: none"> • initiate targeted sales and marketing activity in Australia, the EU and the US in 2015 by expanding local sales and marketing team in Australia and establishing offices and engaging local sales and marketing teams in the EU and the US; • recruit and train skilled resources in 2015 to support customer installations in the US and the EU; • complete further demonstrations of the product suite to prospective customers in Australia and other jurisdictions where possible; • register the Company's enteric viral kits on the Australian Therapeutic Goods Register and obtain CE marking for these products in the EU in early 2015; • complete the Beta Testing of the Company's respiratory and MRSA products in early 2015 and, by the end of 2015, register these products on the Australian Therapeutic Goods Register and obtain CE marking (indicating compliance with EU legislation) for these products in the EU; • continue prosecution and maintenance of the Company's existing patent portfolio; • advance the development of the Company's sexual health infections, tuberculosis and meningitis products and undertake and complete Beta Testing of these products by early 2016 for sexual health infections and tuberculosis products and by early 2017 for meningitis product and, following completion of Beta Testing, register these products on the Australian Therapeutic Goods Register and obtain CE marking for these products in the EU; • augment the technical and manufacturing capabilities to support the growing business by engaging more employees to manufacture, pick, pack and despatch the Company's products in 2015; and • increase the administrative resources available to support the growing business. <p>If the Company raises more than the Minimum Subscription, the additional funds will be used for the recruitment of additional global technical resources, acceleration of regulatory compliance programs in relevant jurisdictions and further business establishment and expansion activities.</p> <p>Below is a summary of the proposed use of funds raised under the Offer. Investors should note that the anticipated expenditure program may vary from the actual expenditure incurred by the Company.</p>	

01. Investment Overview

Topic	Summary		More information
Expenditure program – how the Company will use the funds raised from the Offer (continued)		Based on Minimum Subscription being raised	Based on Maximum Subscription being raised
	Source of funds		
	Subscriptions for Shares under the Offer	\$12,000,000	\$15,000,000
		Based on Minimum Subscription being raised	Based on Maximum Subscription being raised
	Use of funds		
	Australian sales and marketing and customer support	\$1,120,000	\$1,440,000
	EU sales and marketing and customer support	\$1,262,000	\$1,477,000
	US sales and marketing and customer support	\$1,882,000	\$2,235,000
	Regulatory approvals and IP	\$1,106,000	\$1,226,000
	Further product development	\$3,100,000	\$3,100,000
	Future working capital and other	\$2,311,000	\$4,090,000
	Costs of the Offer	\$1,219,000	\$1,432,000
	Total	\$12,000,000	\$15,000,000
Working capital	In the opinion of the Directors, on completion of the Offer the Company will have sufficient working capital to carry out its objectives as stated in this Prospectus.		

01. Investment Overview

Topic	Summary	More information														
What are the key dates of the Offer?	The key dates of the Offer are as follows:	Important Dates														
	<table><tr><th>Event</th><th>Target date</th></tr><tr><td>Date Prospectus lodged with ASIC</td><td>7 November 2014</td></tr><tr><td>Opening date for Applications</td><td>17 November 2014</td></tr><tr><td>Closing Date for Applications (at 5.00 pm, AEDT)</td><td>12 December 2014</td></tr><tr><td>Expected allotment and issue date</td><td>18 December 2014</td></tr><tr><td>Despatch of holding statements</td><td>18 December 2014</td></tr><tr><td>Commencement of trading on ASX</td><td>23 December 2014</td></tr></table>		Event	Target date	Date Prospectus lodged with ASIC	7 November 2014	Opening date for Applications	17 November 2014	Closing Date for Applications (at 5.00 pm, AEDT)	12 December 2014	Expected allotment and issue date	18 December 2014	Despatch of holding statements	18 December 2014	Commencement of trading on ASX	23 December 2014
	Event		Target date													
	Date Prospectus lodged with ASIC		7 November 2014													
	Opening date for Applications		17 November 2014													
	Closing Date for Applications (at 5.00 pm, AEDT)		12 December 2014													
	Expected allotment and issue date		18 December 2014													
	Despatch of holding statements		18 December 2014													
Commencement of trading on ASX	23 December 2014															
Other than the date this Prospectus was lodged with ASIC, the above dates are subject to change by the Company and are indicative only. The Company may close the Offer early or accept late Applications without notifying anyone. The Company may issue Shares immediately after the Minimum Subscription is achieved. You are encouraged to submit your Application as soon as possible.																
How do I participate in the Offer?	<p>To participate in the Offer, you need to complete the Application Form attached to or accompanying this Prospectus and send it with the applicable Application Monies to the Share Registry by no later than 5.00 pm (AEDT) on the Closing Date. The Company has discretion about which Applications it accepts and how it allocates Shares. The Company may close the Offer early or accept late Applications without notifying anyone. You are encouraged to submit your Application as soon as possible.</p> <p>You may only apply for Shares using the Application Form attached to or accompanying this Prospectus. You must not give another person an Application Form unless you also give them a copy of this Prospectus.</p>															
What are the terms of payment?	<p>You can pay by bank draft or cheque made payable to “Genetic Signatures Ltd – Share Issue Account”. See the Application Form for further details about how to pay for Shares.</p> <p>All payments must be in Australian dollars. Payment must be submitted with your Application Form. If the correct payment is not included, your Application may be rejected. If you are not issued all of the Shares you apply for, your payment for the unissued Shares will be returned to you (without interest).</p>															

01. Investment Overview

Topic	Summary	More information
When will the new Shares be issued?	Shares will be issued and a holding statement sent to successful Applicants (at the postal address stated in the Application Form) as soon as practicable after the Closing Date. Currently the Company expects to despatch holding statements on 18 December 2014.	
What is the minimum application size?	If you apply for Shares under the Offer, you must apply for a minimum of 5,000 Shares for a total subscription price of \$2,000. You can apply for additional Shares in multiples of 100 Shares for an additional \$40 for each multiple. Depending on how many investors apply for Shares, you may not be issued all or any of the Shares you apply for.	
What are the rights attaching to Shares?	The Shares will, on issue, rank equally with existing fully paid Shares in all respects from the date of their issue. If you acquire Shares, you will be bound by the Company's constitution.	Section 9.5
Where can I find more information about this Prospectus or the Offer?	You can obtain a hard copy of this Prospectus (with the Application Forms attached to it) free of charge by calling the Genetic Signatures Offer Information Line on 1300 737 760 (within Australia) or +61 2 9290 9600 (outside Australia) from 8.30am until 5.30pm AEDT Monday to Friday during the Offer Period. You can also download an electronic copy of this Prospectus from www.geneticsignatures.com .	

Company Overview 02.



02. Company Overview

2.1. Introduction

(a) Overview

Genetic Signatures has developed and commercialised a range of molecular diagnostics (**MDx**) products based on its proprietary platform technology 3Base™. The Company's range of products is designed to provide hospital and pathology laboratory customers with a comprehensive solution in molecular testing, with specific and significant advantages over existing products.

Genetic Signatures' executive management team combines the scientific skills of the technology developers with the business acumen of industry veterans experienced in critical expansion markets. The Company is led by CEO John Melki who has a background in research and developmental science. He is supported by CSO Douglas Millar who has over 20 years' experience in MDx and the technology owned by the Company and CFO Robert Birrell who has extensive financial and operational experience. International expansion is led by Mike Aicher in the US, a well-credentialed executive in the US MDx market, and Susan Keese in the EU, who is experienced in introducing MDx assays into EU member states.

(b) The business

Genetic Signatures is a specialist MDx company focused on the development and commercialisation of its proprietary platform technology, 3Base™. Genetic Signatures has developed and commercialised a suite of real time Polymerase Chain Reaction (**PCR**) based products using this technology which are now being used by major hospitals in Australia for the routine detection of infectious diseases. The Company's proprietary MDx technology provides high-volume hospitals and pathology laboratories with 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.

The Company has developed and commercialised products in Australia for the use in detection of infectious diseases, branded as *EasyScreen*™. The Genetic Signatures core 3Base™ technology has applications in a number of areas, including cancer detection assays, food testing and other applications. The Company has chosen to focus its near-term efforts on the detection of infectious agents as it has been identified as the largest, nearest and most readily addressable market opportunity.

Genetic Signatures sold its first product in Australia under the *EasyScreen*™ brand in late 2010. This product led to the subsequent development of the current suite of enteric screening kits. The Company presently has 5 major hospitals in NSW, Australia utilising *EasyScreen*™ in their routine detection practice. The Company received regulatory approval to commence sales into the European Union in 2012 and appointed a distributor in Italy in April 2014 and in Israel in October 2014. The Company is currently in discussions with distributors in a number of other EU jurisdictions. The Company has established operations in the US in 2014 with the appointment of an experienced management team and plans to commence sales the US healthcare market in 2015.

EasyScreen™ covers a suite of real-time MDx kits for the detection of enteric pathogens, namely:

- *EasyScreen*™ *C. difficile* Detection Kit
- *EasyScreen*™ *C. difficile* Reflex Kit
- *EasyScreen*™ Enteric Protozoan Detection Kit
- *EasyScreen*™ Enteric Bacterial Detection Kit
- *EasyScreen*™ Enteric Viral Detection Kit

In addition to the enteric products above, the Company also has additional products in Beta Testing with customers. One of these products is designed to test for MRSA infections and the other to detect respiratory infections. Further assays for meningitis, tuberculosis and sexual health infections and are in product development (see Section 2.2(c)).

The Company employs a business to business model and its customers are represented by hospitals and pathology laboratories that utilise MDx for the use in the routine detection of infectious diseases. The Company generated \$0.68 million revenues in the FY14 financial period, with \$0.52 million of income derived from the sale of *EasyScreen*™ diagnostic kits in Australia. The Company also supplies reagents incorporating its 3Base™ technology to academic laboratories on a research use only basis, sold under the *MethylEasy*™ brand. The *MethylEasy*™ kits are used by research labs to assess the levels of DNA Methylation in biological samples.

02. Company Overview

(c) Large market opportunity

Genetic Signatures operates in the global MDx market which had sales of USD5.3 billion in 2012¹ and grew at 13% per annum from 2009 to 2012.² The Company currently sells product into the Australian MDx market and has established operations over the past year in the key markets of the US and Western Europe. In 2012, these markets represented (in aggregate) 80.25% of the total MDx test sales globally.³

Annual sales in the sub-segments within the MDx market that include the Company's current infectious disease products and its additional products in development and in Beta Testing with customers (covering respiratory and MRSA, meningitis, tuberculosis and sexual health infections) are estimated by independent research firm Kalorama to grow to USD1,770 million globally in 2017.⁴

(d) Company history

The Company was established in 2001 to develop and commercialise proprietary sodium bisulphite conversion technology, which became the foundation of the Company's 3Base™ technology. The original technology was developed under the guidance of Genetic Signatures' founder and respected Australian scientist, the late Dr Geoffrey Grigg, whilst working with CSIRO in the early '90s. Dr Grigg observed developments in the field of gene sequencing whilst on sabbatical in Cambridge with Sir. Gregory Winter, after which he conceived a means to detect what he considered would be the next frontier of developmental science, the epigenetic phenomena known as "Methylation". Genetic Signatures further developed its technology, 3Base™ to a point where it is now being used in a diagnostic setting, as detailed in Section 2.2(b). Dr Grigg was also a founder of listed biotechnology companies Cambridge Antibody Technology and Peptech.

The Company protected its underlying technology by lodging multiple patent applications covering the 3Base™ platform technology, and its use for the detection of certain infectious diseases, in 2004 in jurisdictions including Australia, the EU and the US. The Company was granted the umbrella 3Base™ patent in Australia in August 2007, the US patent in November 2010 and the EU patent in November 2012.

The commercial launch of the first *EasyScreen*™ product in Australia occurred in late 2010. The Company appointed Susan Keese as General Manager of the EU operations in 2013, and an initial distributor agreement was executed with Astra Formedic, Italy, in April 2014 and with Advansys Technologies for Life Limited, Israel, in October 2014. Genetic Signatures established US operations in 2014 with appointment of Mike Aicher as Executive Director – US Operations.

2.2. Products and Technology

(a) Current molecular diagnostic technology

Current molecular techniques start with a patient sample which is treated so that only the nucleic acid (DNA and/or RNA) is made accessible for testing. The nucleic acid is then interrogated for a specific target or multiple targets which indicate the presence of a particular infectious agent or agents. These techniques usually rely on individual primers and probes to seek, amplify and detect each target. The method of detecting multiple targets in one tube is referred to as "multiplexing" a process which can reduce the sensitivity and specificity of a test due to the interactions of multiple primers and probes.

(b) 3Base™ platform technology

Genetic Signatures' 3Base™ platform technology is a molecular technique whereby the naturally occurring DNA and RNA sequences are changed to reduce the sequence variation between subtypes. The technology employs a patent protected chemical transformation method of the DNA and RNA sequences which reduces the complexity of the genetic code. The process of reducing the variation between sequences can enhance the detection of multiplexed assays where multiple targets are detected in the one tube. This is achieved by allowing a simpler design of molecular assays for the simultaneous detection of multiple targets. For a more detailed explanation please see Section 10.

(c) Development pathway (historical and future) and milestones/timeline

Genetic Signatures follows a defined process in the development and commercialisation of its diagnostic products. The first part of the process, Experimental Analytical Validation, is comprised of (i) assay design and review, (ii) assay optimisation on synthetic targets and review, (iii) determination of assay performance regarding sensitivity and specificity and (iv) assay optimisation on clinical specimens. The second part of the process, Clinical and Regulatory Validation and Release is comprised of (i) Providing the assay to key laboratories under a beta test program where assay performance is determined on clinical specimens (ii) reviewing assay design based on feedback, (iii) limited release under a Research Use Only program and (iv) regulatory approvals.

1 Kalorama MDx Report, page 7

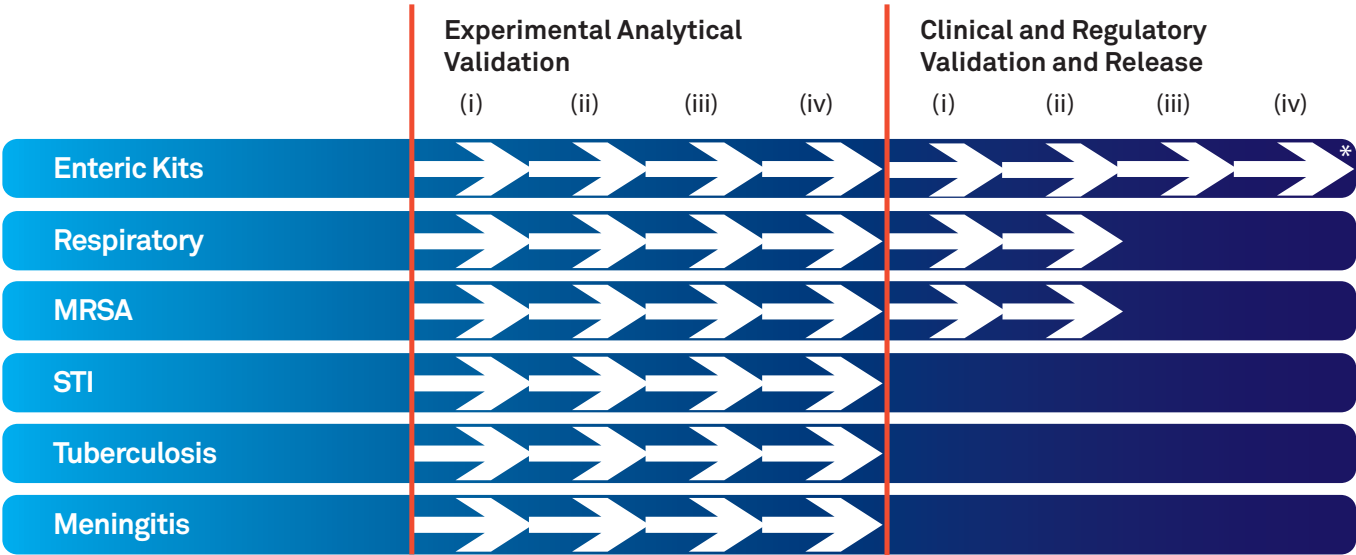
2 Kalorama MDx Report, page 7

3 Kalorama MDx Report, page 94

4 Kalorama MDx Report, page 168

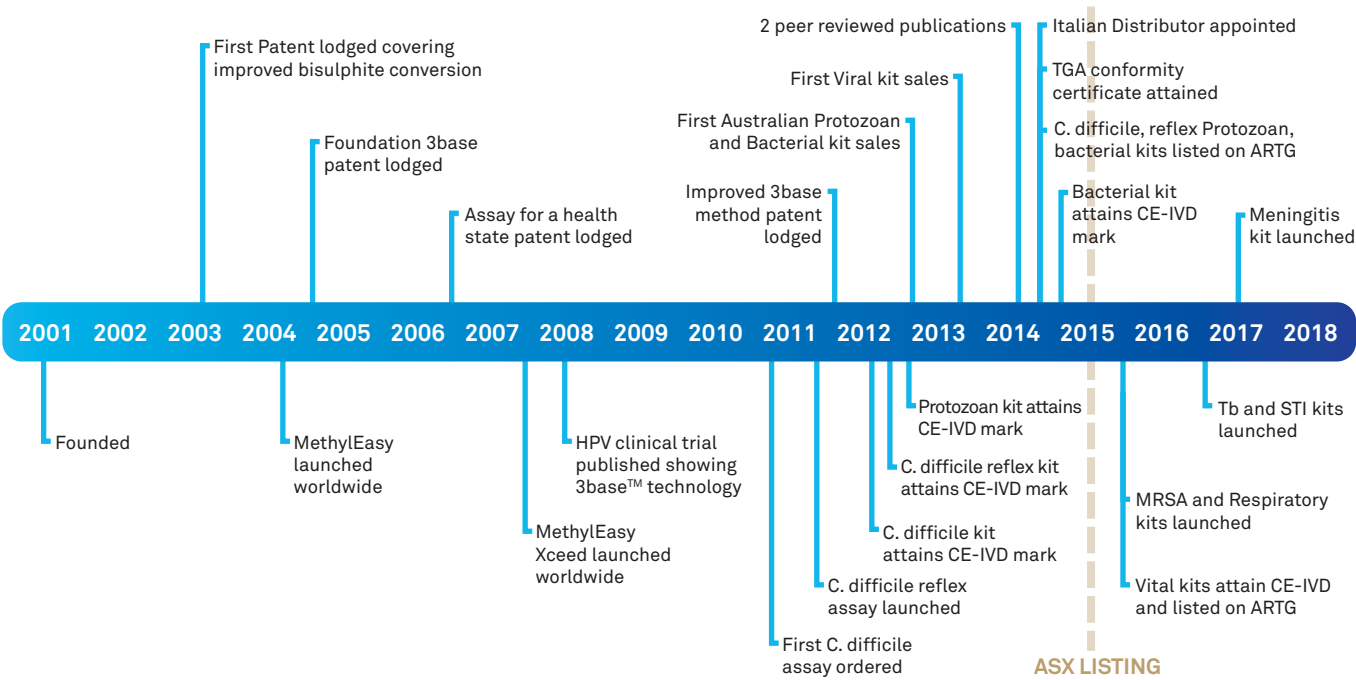
02. Company Overview

The following graph indicates the relative stage of development of Genetic Signatures' existing MDx products and those currently in development. The Enteric kits are currently in the market earning revenues and both Respiratory and MRSA are being evaluated by customers in a Beta Testing form.



*4/5 Enteric products are listed on the ARTG and are CE-IVD marked. The remaining product is being prepared for submission.

The graph below indicates key milestones and achievements that the Company has achieved in relation to its discoveries, patent applications and issuance market entry activities and release and expected release of products to the market.



(d) **EasyScreen™ – Key features and novel/differentiating features**

Genetic Signatures products have been specifically designed for the MDx market and customers are hospitals and pathology laboratories. Genetic Signatures provides customers with wide coverage (number of infectious agents detected) in a high throughput environment providing rapid turnaround (time to result).

Genetic Signatures products work with existing customer systems to deliver a wider array of highly specific results in 4 – 5 hours that would have traditionally taken up to 4 – 5 days. The key advantages of the *EasyScreen*™ products over existing detection techniques employed by customers include:

- open platform – ability to integrate into current workflows; compatible with multiple extraction and real time PCR instruments;
- a complete workflow solution – easily implemented in most microbiology laboratories;
- comprehensive coverage – extensive bacterial, protozoan and viral targets;
- inbuilt controls in every reaction – giving the customer confidence in the results;
- high throughput – allowing more samples to be processed, resulting in a faster turnaround time;
- no batching required – allowing flexibility in run sizes with no wastage of reagents; and
- dedicated software – provides automated interpretation for the end user.

(e) **Quality management systems and regulatory approach**

The Company maintains dual ISO 9001 and ISO 13485 (medical device manufacturing) certifications. It has been ISO 9001 compliant since 2007 and ISO 13485 compliant since 2012. Genetic Signatures' ISO 13485 compliant Quality Management System (**QMS**) has been audited by the Therapeutic Goods Authority, resulting in the issuance of a conformity certificate required for Australian manufacture of medical devices. The standards are central to the Company's QMS and together are required for the authorised supply of IVD medical devices in Australia and Europe.

Market entry into the US market is supported by the Company's current QMS and regulatory accreditation, however certain aspects of these systems may need to be assessed against the FDA's QSR standards to ensure full compliance. Additional analysis and activities will be undertaken to ensure continued compliance with all quality and regulatory conditions considered relevant to the Company's activities

(f) **Opportunity to extend 3Base™ for expansion of product portfolio**

The Genetic Signatures core 3Base™ technology has applications in a number of areas. These areas include cancer detection assays (which combine the simultaneous detection of infectious agents and cancer biomarkers), food testing and veterinary and environmental applications. While the Company hasn't planned at this stage to develop these avenues it may do so in the future or may seek to licence its technology to others for use in such areas at some point. The Company has chosen to focus its near-term efforts on the detection of infectious agents as it believes this area has the best benefit / risk profile.

2.3. Customer benefits

The Company's suite of *EasyScreen*™ assays provide distinct competitive advantages, supporting the commercialisation strategies employed in each global jurisdiction. The Company's products are compatible with standard equipment available in most potential hospital and laboratory customers identified. Being platform agnostic largely eliminates the need for capital expenditure by customers.

Set out below are two case studies to demonstrate how the Company's products are utilised by customers in their routine detection of infectious agents in patient samples.

(a) **Case Study 1: Pilot Study 2013 – EasyScreen™ versus Traditional Methods**

The Company's products were tested to assess the clinical utility of the *EasyScreen*™ assays in detecting infectious agents in clinical specimens as compared to traditional detection techniques.

A total of 279 clinical specimens were tested and the sensitivity of the assays to detecting pathogens and the specificity of the assays in identifying specific pathogens are shown in table 1 below.

02. Company Overview

Table 1: Pilot Study 2013 – EasyScreen™ versus Traditional Methods

Pathogen detected	EasyScreen™	Sensitivity %	Specificity %	Additional pathogens
Viruses (Nora, Rota, Adeno, Astro)	69	100	97.1%	25
<i>C. difficile</i>	58	84.8	99.4	9
<i>Campylobacter</i> spp	48	100	100	0
<i>Salmonella</i> spp.	42	97.7	100	1
<i>Shigella</i> spp.	11	100	99.5	0
<i>L. monocytogenes</i>	1	NA	NA	1
<i>Y. enterocolitica</i>	3	100	100	2
<i>D. fragilis</i>	10	100	100	10
<i>B. hominis</i>	17	100	100	16
<i>G. intestinalis</i>	12	92.3	100	7
<i>Cryptosporidium</i> spp.	3	100	100	3
<i>Entamoeba</i> complex	5	NA	NA	5
Totals	279			79

The results presented in table 1 were generated in approximately 4 hours, which compares to up to 4 – 5 days when using traditional microbiology techniques.

This study also demonstrated that an additional 79 pathogens were detected (last column above) that would not have been detected using traditional microbiology testing methods.

Viral gastroenteritis is regarded as being a highly infectious disease, which makes missed viral infections particularly important from an infection control viewpoint. Rapid and sensitive diagnosis is critical in identifying transmissible infections before they are inadvertently spread to others.

The EasyScreen™ range of enteric tests identifies up to 22 causes of gastroenteritis (including viral) which, to the Company's knowledge, is the largest number of any commercial test. A broader testing menu is important in ensuring that only testing for a limited number of micro-organisms does not miss active infections.

The Company's products allow customers to increase the breadth of pathogens detected in a high throughput environment, thereby improving outcomes and saving downstream costs by preventing the infection of other patients.

(b) Case Study 2: St Vincent's Hospital (SydPath) Evaluation Study 2014 – EasyScreen™ versus Traditional Methods

The Company's products were tested as part of an evaluation study in 2014 with St Vincent's Hospital pathology service, SydPath, located in Sydney, Australia. The primary focus of this study was to assess the clinical utility of EasyScreen™ in detecting infectious agents in patient samples as compared to traditional methods.

SydPath evaluated the EasyScreen™ enteric range, identifying 44 infections that their existing testing would have missed (from 221 patient specimens), as shown below in table 2. Missed infections within the hospital environment can have substantial downstream consequences such as the closing down of wards (e.g. Norovirus).

Table 2: St Vincent's Hospital (SydPath) Evaluation Study 2014 – EasyScreen™ versus Traditional Methods

Pathogen detected	Conventional methods*	EasyScreen™
<i>Campylobacter</i>	7	9
<i>Salmonella</i>	8	9
<i>Shigella</i>	5	6
<i>C. difficile</i>	3	7
<i>Yersinia</i>	–	1
<i>Cryptosporidium</i>	–	1
<i>Giardia</i>	9	12
<i>Dientamoeba fragilis</i>	4	20
<i>Blastocystis hominis</i>	16	21
<i>Entamoeba histolytica</i>	1	1
Norovirus group II	–	7
Adenovirus	–	1
Adenovirus 40/41	–	1
Sapovirus	–	1
Total	53	97

* Viruses were not tested routinely using conventional methods

Dr Damien Stark from SydPath has written a peer-reviewed journal article describing the increased sensitivity of the EasyScreen™ Enteric Protozoan Detection Kit as compared to traditional detection methods.⁵

On the strength of these evaluations, SydPath has now implemented the EasyScreen™ assays into its routine testing procedures.

Dr Damien Stark provided the following commentary: ***"I find that the fast turnaround time and the number of targets tested in the EasyScreen™ assays allow me to more rapidly identify highly infectious agents, potentially stopping the spread to other healthy individuals and thereby saving the health system money."***

2.4. Commercialisation strategy

(a) Approach

The Company's approach has been to develop the technology and products it believes will be successful in the global diagnostics market using its domestic market of Australia for the initial testing of those products. Genetic Signatures relied on key opinion leaders, testing laboratories and performed in depth review and analysis of the regulatory requirements and market conditions in shaping and executing its entry into the Australian market.

The Company undertakes further reviews and analysis for each jurisdiction that it wishes to enter. The review and analysis for each jurisdiction includes, but is not limited to, reviews and analysis of issues relating to freedom to operate, government reimbursement and the dynamic nature of the existing regulatory and market environment, to the extent that that the Company considers relevant to the particular market. The Company's quality management system history provides the platform for exploring and developing appropriate market entry strategies for each major jurisdiction.

The review and approach to each market determines what type of product (kit/reagent) is offered and the appropriate sales channel.

5 "Diagnostic Microbiology and Infectious Disease" 78(2): 149-152, February 2014.

02. Company Overview

Table 3: Genetic Signatures Commercialisation – infectious diseases detection

Australia	Currently in market with 5 hospital customers Testing for 22 causes of gastroenteritis Two new products being Beta Tested by customers
European Union	Established operations in 2013 Signed Italian distributor in April 2014 and testing with large pathology laboratories Signed Isreali distributor in October 2014 Currently in discussions with distributors in a number of additional jurisdictions
United States	Established operations in 2014 with appointment of key personnel Anticipate entering market in 2015

(b) Australia

The Company has been active in the Australian IVD market since 2010, when it sold its first MDx product. It pursues a direct sales approach in this market, selling Australian Register of Therapeutic Goods listed products directly into hospitals and pathology laboratories.

The Company employs a business-to-business revenue model in Australia and contracts directly with hospital and pathology laboratories. Genetic Signatures generates revenue when customers order specific *EasyScreen*™ tests to be used on patient samples. The Company is paid directly by customers, and is not directly reliant on insurance reimbursement and related payments from third parties, including patients.

The Company identified a number of strategic targets in 2011 to approach as initial customers. The Company has used these initial customers as key opinion leaders to obtain feedback on and, demonstrate the clinical utility of and economic benefit from using *EasyScreen*™ products, before the Company embarked on a full scale roll out of its products in Australia. The Company's Australian division generated \$0.52 million in diagnostic sales in fiscal 2014, which included servicing five customers with only one product, the enteric screening kits. Each of these customers was at a different stage of embedding *EasyScreen*™ in their laboratories and accordingly the Company believes volumes will improve once the tests are fully embedded in these laboratories. Importantly, working closely with these customers, the Company was able to identify unmet demand for additional products, including respiratory kits, MRSA, meningitis and the sexual health kit. These products are now at various stages of development (see Section 2.2(c)).

The Company appointed an experienced business development executive in June 2014, who is expected to support the generation of an expanded customer base and growing sales volumes in domestic territories in the current fiscal year. Key new customer opportunities have been identified, tests and demonstrations organised and the Company will appoint additional resources as customer volumes warrant.

The Company's Australian research and development operations are serviced in collaboration with the Virology Research Laboratory operated by the University of New South Wales in Randwick, NSW and manufacturing operations are serviced from dedicated facilities in Maroubra, with a total number of employees of 11.

In Australia, the Company sells a suite of real-time molecular diagnostic kits for the detection of enteric pathogens under the *EasyScreen*™ brand, namely:

- *EasyScreen*™ *C. difficile* Detection Kit
- *EasyScreen*™ *C. difficile* Reflex Kit
- *EasyScreen*™ Enteric Protozoan Detection Kit
- *EasyScreen*™ Enteric Bacterial Detection Kit
- *EasyScreen*™ Enteric Viral Detection Kit

In addition the following products are being supplied as part of the Company's Beta Testing programs:

- *EasyScreen*™ MRSA Detection Kit
- *EasyScreen*™ Respiratory Viral Detection Kit
- *EasyScreen*™ Respiratory Bacterial Detection Kit

02. Company Overview

(c) European Union

The Company entered the European Union market in 2013 with the appointment of a General Manager – EU Operations who is based in London and is responsible for establishing partnerships with appropriate distributors of CE marked IVD diagnostic products, as well as assisting in CE marking for new Genetic Signatures products. The General Manager commenced discussions with various distributors which led to the appointment of the Genetic Signatures' first EU distributor in Italy in April 2014, after CE marking was obtained for the Company's initial products. An Israeli distributor was also appointed in October, 2014.

The Company is at various stages of negotiations with potential distributors in other EU jurisdictions. The Company's products will be sold in this region as kits under the *EasyScreen*™ banner (as in Australia).

To build awareness of the Genetic Signatures brand and *EasyScreen*™ product offerings, the Company is developing clinical and scientific recognition by the European community of experts and leaders in the field of infectious disease by attending key conferences in the region on a regular basis, engaging collaborators to undertake evaluations and/or comparative evaluations of *EasyScreen*™ products and supporting the submission of abstracts to conferences and articles to scientific journals.

Genetic Signatures contracts directly with distributors who in turn contract directly with hospital and pathology laboratories. The Company generates revenue when it directly bills the distributor for orders placed for *EasyScreen*™ kits. Volume will be driven by the use by the distributor's customers (the hospitals and laboratories) when they order the Company's products to perform specific tests on patient samples. The Company is paid directly by the distributor, and is not directly reliant on insurance reimbursement and related payments from third parties including patients.

The Company signed its first distribution agreement in the EU with the appointment of Italian distributor Astra Formedic SL in April 2014. Customer evaluation of the *EasyScreen*™ products is ongoing.

Genetic Signatures generated \$0.06 million in EU diagnostic sales in its limited Italian launch for fiscal 2014 which included initial supply of a testing unit to Astra Formedic.

Supply of *EasyScreen*™ products is initially from the Company's Australian operations, with plans to establish EU manufacturing upon achieving appropriate contracted volumes.

(d) United States

The Company will seek to enter the US market with strategic customer relationships and partnerships. Its products will be available initially as research-use-only/reagent products.

The reason Genetic Signatures will make its products available as research-use-only/reagent products initially relates to the Company's desire to raise awareness of its products and generate revenues as quickly as possible in the US. Ultimately, however, the Company is likely to validate its products on popular laboratory equipment and seek regulatory approval to sell its products directly into pathology laboratories.

As with the other regions in which Genetic Signatures operates, it will receive payment directly from the business it sells to. It will not be required to seek funds from third parties for its products.

The Company has already identified a number of strategic partners as initial customers who, as in Australia will act as key opinion leaders, providing market validation for the products and indirectly promoting them. The Company expects to commence sales into the US in CY15.

Genetic Signatures has commenced appointing a team in the US to commence the rollout of its products. The details of members of the team can be found in Section 5.2.

Supply of research-use-only/reagent products will be initially supplied from the Company's Australian operations in 2015, with plans to establish US manufacturing upon achieving appropriate contracted volumes.

The Company's products that it expects will be initially available in the US as research-use-only/reagent products are:

- MRSA
- Enteric bacterial detection kit
- Enteric protozoan detection kit
- Enteric viral detection kit
- Respiratory pathogen kit
- *C. difficile* detection kit

2.5. Intellectual property

(a) Overview

Genetic Signatures' 3Base™ platform and products are protected by a number of patents, securing its rights in the markets in which it has chosen to operate. The patent portfolio has been built over a 13 year period and patents have been granted in the major jurisdictions in which the Company currently operates and/or expects to operate (see table 4).

The Company has a broad overarching patent protecting the 3Base™ technology platform expiring in 2024 and another more specific patent protecting the use of 3Base™ in each of the Company's general pathology products which expires in 2031.

The Genetic Signatures patent portfolio provides the Company with protection from competitors copying its specific techniques.

(b) IP strategy supporting commercialisation

The Company's patent strategy has been built with the objective of protecting its technology, thereby enabling it to bring products to market.

Genetic Signatures believes that its intellectual property is key to the Company's ability to operate in the molecular space and gives it a key competitive advantage and product differentiation over other products in the same space. Since lodging its parent patent, the Company has identified key broad technological advancements and has also sought patent protection for those advancements.

The Company's patent strategy supports the commercialisation and market entry into each jurisdiction. In order to access the molecular diagnostic market, the Company has employed real-time PCR detection of its 3Base™ targets, as this is the most commonly used molecular diagnostic method in the world. The use of real-time PCR requires in-licensing of certain technologies in some jurisdictions. In the markets that the Company currently operates in, no additional in-licensing is required to use real-time PCR. The Company may choose to in-licence certain technologies to accelerate market entry into additional jurisdictions. These licences are readily available and terms pre-defined and immaterial.

In addition to its patents, the Company has developed certain know-how in the development of its products. The knowledge extends to the implementation of the patents into a commercial product and involves applying specific steps, which enable the technology to run optimally. The Company fully intends to continue its research and development and considers it likely that this will result in further patents.

Table 4: Current Patent Portfolio

Patent	PCT Number	Priority Date	Status
Methods of Genome Amplification	PCT/AU2004/000722	17 June 2003	Granted AU, DE, FR, GB, US
Nucleic Acid Detection Assay	PCT/AU2004/001196	4 September 2003	Granted AU, DE, FR, GB, US, CA, CN, JP
Treatment of Nucleic Acid	PCT/AU2004/000549	2 May 2003	Granted AU, DE, FR, GB, US, CN, JP
Amplification blocker comprising intercalating nucleic acids (INA) containing intercalating psuedonucleotides (IPN)	PCT/AU2005/001374	10 September 2004	Granted AU, DE, FR, GB, US, CN, JP, DK (CA – Pending)
Methods for Simplifying Microbial Nucleic Acids by Chemical Modification of Cytosines	PCT/AU2005/001840	3 December 2004	Granted AU, CN, Europe, IN, ID, MY, MX, NZ, SG, ZA, US, US-CIP (BR, CA, IL, JP, KP – Pending)
Isothermal Strand Displacement Amplification Using Primers Containing A Non-Regular Base	PCT/AU2006/000698	26 May 2005	Granted AU (CA, CN, Europe, JP, US – Pending)
Assay for a Health State	PCT/AU2006/001349	14 September 2005	Granted AU, DE, FR, GB (CA, CN, JP, US – Pending)
Enzymes for Amplification and Copying Bisulphite Modified Nucleic Acids	PCT/AU2008/001751	27 November 2007	(AU, CA, CN, JP, Europe, US – Pending)
Molecular Detection Assay	PCT/AU2011/001156	7 September 2011	

For further details see Section 8.

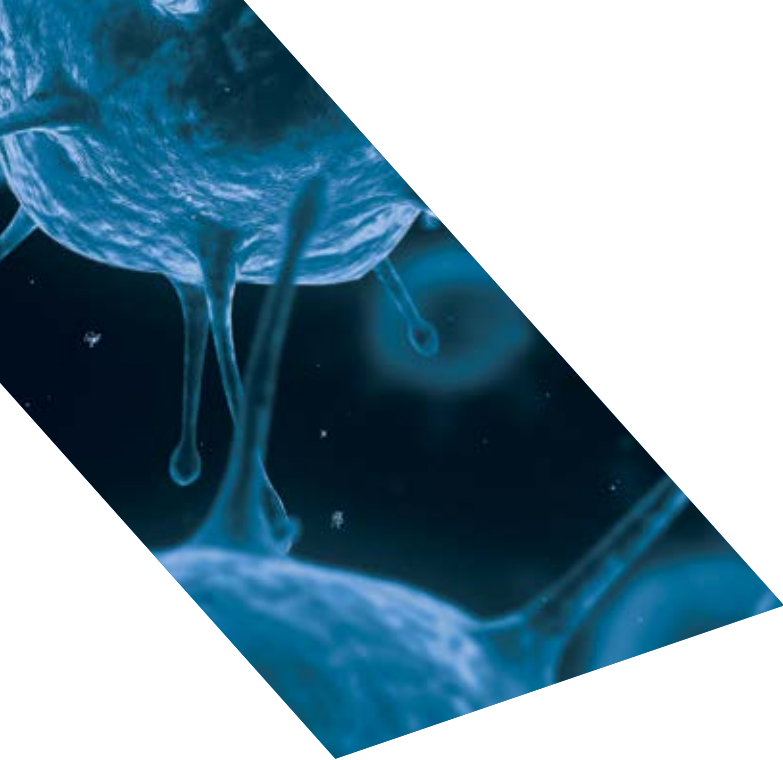
(c) Patent families

The patents of Genetic Signatures can be grouped into a number of patent families. These families can in turn be broadly grouped into the following categories:

- Current Technologies
 - › ***Simplification of Genomes for Microbial Detection (3Base™)*** – Treating naturally occurring nucleic acids with bisulphite and using the result to detect pathogens and disease.
 - › ***Methylation Detection Kits*** – MethylEasy™ – Products to enable R&D organisations to detect Methylation patterns in DNA.
- Emerging Technologies
 - › ***Methylation Detection Research for DNA*** – A variety of methods and techniques to explore these phenomena in nucleic acids by the specific amplification of methylated sequences.
 - › ***Isothermal Amplification*** – A method for amplification and detection of nucleic acids at a fixed temperature.
 - › ***Engineered enzymes for enhanced PCR*** – A novel enzyme has been engineered, in collaboration with the LMB in Cambridge UK, to improve the efficiency and speed of PCR amplification of bisulphite treated nucleic acids.
 - › ***Improving cervical cancer diagnosis*** – A method combining the detection of HPV with the Methylation status of the infected genome to improve cancer diagnosis and reduce needless surgical intervention.

(d) Further information

For further information, see the Intellectual Property Report in Section 8.



Market Overview 03.

03. Market Overview

3.1. Introduction

In vitro diagnostics (**IVD**) refers to tests that are used to detect or diagnose diseases or infections performed under a controlled environment such as in a pathology laboratory. Kalorama estimates that sales in the global IVD market were USD54.6 billion in 2013¹ and estimates that these will grow at an annual compound growth rate (**CAGR**) of 4% from 2013 to 2018 to reach USD65.0 billion in 2018.²

Molecular diagnostics is a technique used to analyse genetic codes and expression of these codes (analysing DNA and RNA). It represents a growing segment of the global IVD market,³ due to: its speed and exquisite sensitivity and specificity; and the growing detection of infectious diseases (including MRSA, *C. difficile* and tuberculosis) and chronic diseases (including cancer, diabetes and cardiovascular disease).

According to Kalorama:

- sales in the global MDx segment (comprising part of the global IVD market) were USD5.3 billion in 2012⁴ and these were expected by Kalorama to grow at 8% CAGR from 2012 to 2017;⁵
- sales in the Western European MDx market were USD1.1 billion in 2012⁶ and these were expected by Kalorama to grow at 6% CAGR over the same period;⁷ and
- sales in the North American MDx market were USD3.0 billion in 2012⁸ and these were expected by Kalorama to grow at 9% CAGR from 2012 to reach a USD4.6 billion market in 2017.⁹

Kalorama has not estimated MDx sales in Australia however, based on an Australian Government report on IVD devices, Genetic Signatures has conservatively estimated that the Australian MDx market represents approximately 1.25% of the global MDx market.¹⁰ Based on this estimate and the Kalorama MDx Report, Australian MDx sales would have been approximately USD66 million in 2012. Based on this figure and applying a growth rate of 5% CAGR, sales in the market will reach approximately USD85 million by 2017 in Australia.

The global MDx market can be further segmented into sub-categories. Genetic Signatures' current products address infectious diseases. Kalorama estimated sales in the global MDx market in 2012 for products which address infectious diseases at USD2.8 billion¹¹ and estimates that these will grow at 7% pa from 2012 to 2017.¹² Genetic Signatures' current products have been developed to be used as a screen for infectious agents in various disease settings, including enteric, respiratory and MRSA. Kalorama estimate that hospital acquired infections together with respiratory diseases represent a large proportion of these disease settings at approximately 21% of the Microbiology/Virology MDx market as a sub-category.¹³

3.2. Market size

(a) Global size

The global MDx market at USD5.3 billion represents a growing portion of the global IVD market, and is depicted in figure 1 and figure 2 below.

Growth in the MDx market is being supported by an increase in infectious diseases testing in the large markets of North America and Western Europe, together with expansion in the number of pathology laboratory laboratories performing molecular testing in these markets.

1 Kalorama IVD Report, page 7

2 Kalorama IVD Report, page 7

3 Kalorama IVD Report, page 7

4 Kalorama MDx Report, page 7

5 Kalorama MDx Report, page 7

6 Kalorama MDx Report, page 94

7 Kalorama MDx Report, page 94

8 Kalorama MDx Report, page 94

9 Kalorama MDx Report, page 94

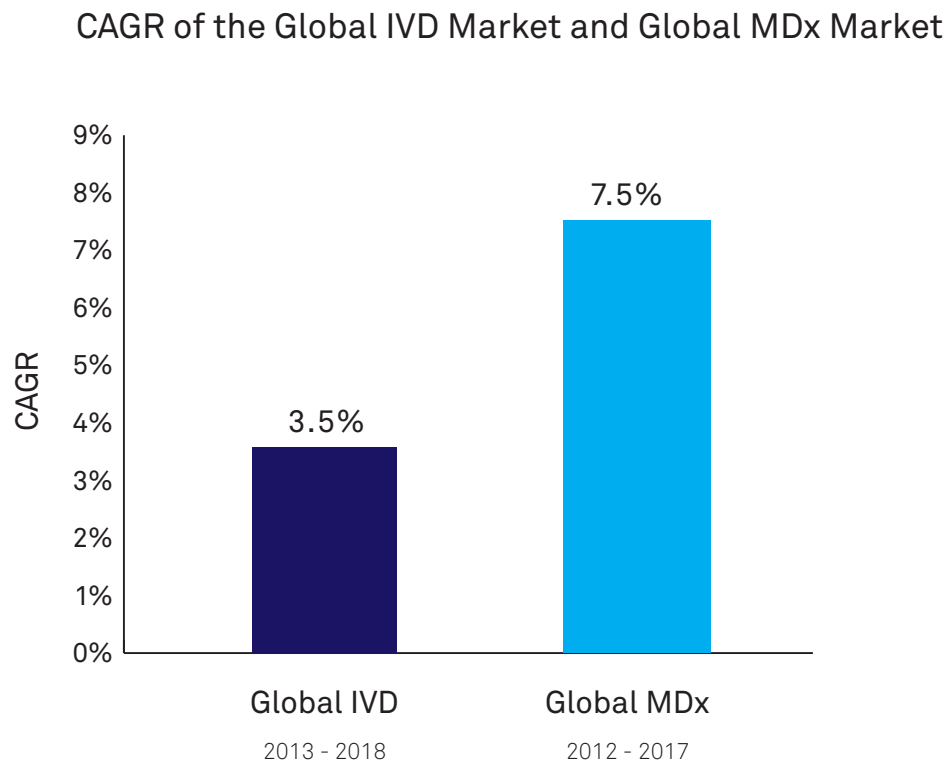
10 Australian Government Department of Health and Ageing, *Cost Recovery Impact Statement: Regulation of In-Vitro Diagnostic Devices*. September 2009, <http://www.tga.gov.au/pdf/archive/fees-cris-ivd-091020.pdf>

11 Kalorama MDx Report, page 9

12 Kalorama MDx Report, page 9

13 Kalorama MDx Report, pages 167 and 168/ Table 8

Figure 1: CAGR in global MDx test sales relative to IVD market



Source: Kalorama MDx Report, page 7 and Kalorama IVD Report, page 7

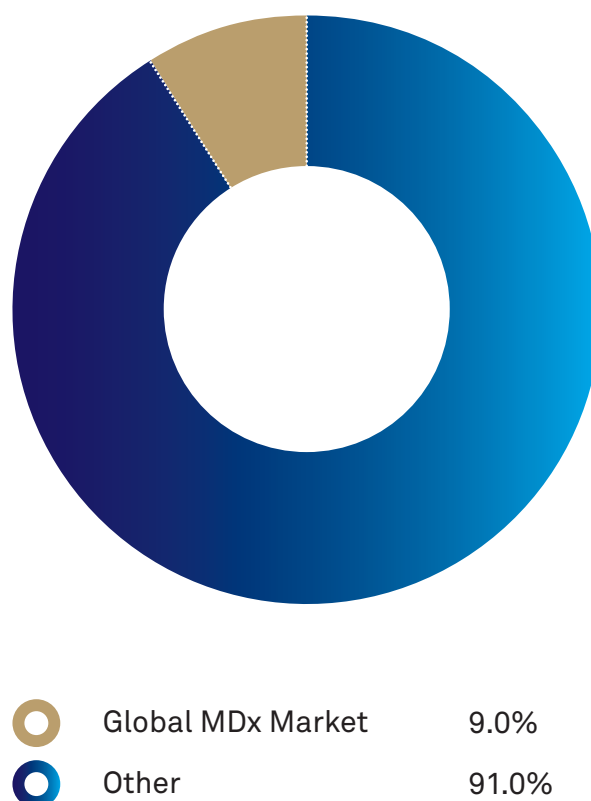
Advancements in molecular testing continues to fuel the growing trend away from using traditional techniques such as culture and microscopy to using MDx testing utilising real-time (RT) multiplex polymerase chain reaction (PCR) assays as a standard of care.

As stated above, MDx represents a subset of and is estimated by the Company as the fastest growing sector in the IVD market. The IVD market, however, does not include other diagnostic methods, such as cell culture and microscopy. Cell culture broadly refers to allowing the infectious agents in a patient's sample to grow to sufficient quantities such that they can be identified by one of several techniques. The exquisite sensitivity and specificity of MDx means that there is no longer a need to grow the agents up in order to identify them. The use of MDx also has significant advantages over microscopy, which is where a trained operator views a sample under magnification in order to visually identify an infection. Microscopy is a very insensitive and time consuming method and is costly in certain jurisdictions.

The reason the growth rate of the MDx is higher than that for the IVD market as a whole is, at least in part, a shift from cell culture and microscopy to MDx. Because the advantages of MDx over other forms of pathology testing are so great, this accelerated growth in MDx is expected to continue well into the future.

Figure 2: Global in-vitro diagnostics market, MDx segment

Global In-Vitro Diagnostics (IVD) Market in USD as at 2013



Source: Kalorama MDx Report, page 7 and Kalorama IVD Report, page 7

MDx is forecast by Kalorama to generate above overall IVD growth rates,¹⁴ however these figures (as represented in Figure 1) exclude revenues associated with non-regulator approved molecular tests (i.e. laboratory developed tests or LDTs). Given new tests, particularly in the US market, often begin life as LDTs and the ongoing shift to MDX, Genetic Signatures believes that inclusion of these tests would significantly increase the size of the current MDx market.

It is important to note that in Figure 1, the CAGRs were calculated over two different 5 year horizons (as indicated in the Figure) and that Genetic Signatures has produced Figure 2 by using information on global MDx sales in 2012 drawn from the Kalorama MDx Report and applying an 8% growth rate to it for 1 year to enable comparison to the information on global IVD sales in 2013 drawn from the Kalorama IVD Report.

14 Kalorama MDx Report, page 7 and Kalorama IVD Report, page 7

03. Market Overview

(b) Market size by region

North America represents the largest portion of the global MDx market, with (according to Kalorama) sales in 2012 of USD3.0 billion, representing 57% of the global market.¹⁵ Sales in the North America MDx market are forecast by Kalorama to increase at 9% CAGR from 2012 to reach USD4.6 billion in MDx sales in 2017.¹⁶

Western Europe (UK, France, Spain, Germany and Italy) comprises the second largest aggregate MDx market with (according to Kalorama) sales in 2012 of USD1.2 billion, representing 22% of the global market.¹⁷ Recent economic downturns in the region leading to rationalisation in the MDx industry and reforms in the healthcare sector have tempered Kalorama's forecast CAGR in Western Europe for the period from 2012 to 2017 to 6%.¹⁸ This market is forecast by Kalorama to reach USD1.6 billion in 2017.¹⁹

The Australian MDx market forms part of the rest of world (**ROW**) segment calculated by Kalorama at USD447 million in 2012,²⁰ as shown in table 5 below. Kalorama has not estimated MDx sales in Australia, however Genetic Signatures has estimated based on a 2009 Australian Government report on IVD devices that these sales represent approximately 1.25% of the global MDx market,²¹ giving it sales of approximately USD66 million in 2012 (based on the Kalorama MDx Report). Based on this figure and applying a growth rate of 5% CAGR, sales in the market will reach approximately USD85 million by 2017 in Australia.

Table 5: Market penetration of clinical molecular diagnostics, by geographic area (N. America, W. Europe, Japan, China, ROW), 2012-2017. Sales in USD millions

	Sales 2012	% Mkt	Sales 2017	% Mkt	CAGR
N. America	3,000	57	4,600	60	9
W. Europe (EU5)	1,165	22	1,580	21	6
Japan	525	10	670	9	5
China	160	3	220	3	7
ROW	447	8	560	7	5
Total	5,297	100	7,630	100	8

Source: Kalorama MDx Report, page 94

(c) Market size by segment

The Microbiology/Virology market represents the largest segment of the global MDx market.²² The Microbiology/Virology testing market encompasses any micro-organisms that make up the infectious bacterial and viral agents that can cause disease in humans.

The Microbiology/Virology market was valued by Kalorama at just under USD2.8 billion in 2012,²³ a figure which only includes market authorised assays and reagents sales, and excludes LDTs MDx, implying that the Microbiology/Virology market is, in fact, likely to be significantly larger. In addition to being the largest segment of the MDx market (53% in 2012),²⁴ microbiology/virology is forecast by Kalorama to generate a 7% CAGR to reach USD4.0 billion in 2017.²⁵

Molecular tests for infectious diseases make up the largest portion of MDx market at 53% (in 2012),²⁶ and this trend is expected by Kalorama to continue due to advancements in MDx for hospital acquired infections, respiratory viruses, viral

¹⁵ Kalorama MDx Report, page 94

¹⁶ Kalorama MDx Report, page 94

¹⁷ Kalorama MDx Report, page 94

¹⁸ Kalorama MDx Report, page 94

¹⁹ Kalorama MDx Report, page 94

²⁰ Kalorama MDx Report, page 94

²¹ Australian Government Department of Health and Ageing, *Cost Recovery Impact Statement: Regulation of In-Vitro Diagnostic Devices*. September 2009, <http://www.tga.gov.au/pdf/archive/fees-cris-ivd-091020.pdf>

²² Kalorama MDx Report, page 9

²³ Kalorama MDx Report, page 9

²⁴ Kalorama MDx Report, page 9

²⁵ Kalorama MDx Report, page 9

²⁶ Kalorama MDx Report, page 167

03. Market Overview

load testing for HIV and hepatitis and increased research into the clinically relevant subtle differences that can exist between micro-organisms of the same species.²⁷

Table 6: Global molecular diagnostics sales, by segment, 2012-2017. Sales in USD millions.

Segment	Sales 2012	% Mkt	Sales 2017	% Mkt	CAGR
Microbiology/Virology	2,797	53	3,970	52	7
Histology	1,040	20	1,690	22	10
Blood Screening	785	15	950	12	4
Prenatal	180	3	260	3	8
Coagulation	145	3	180	2	4
Inherited diseases	105	2	115	2	2
Tissue Typing	100	2	165	2	11
Cancer Markers	70	1	115	2	10
Pharmacodiagnosics	50	1	110	1	17
CTCs	25	0.5	75	1	25
Total	5,297	100	7,630	100	8

Source: Kalorama MDx Report, page 9

3.3. Addressable markets for Genetic Signatures' products

(a) Introduction

Genetic Signatures is currently focused on using their *EasyScreen*TM platform to test for enteric pathogens which cause gastroenteritis (e.g. *C. difficile* or Norovirus) (see Section 2.2), although the Company is developing, and intends to continue to develop, new tests to expand its menu and move into many of the markets in table 7. Genetic Signatures focused on a test for enteric pathogens first because it was a readily accessible, niche of great need. Genetic Signatures' product pipeline already has additional products for the detection of MRSA (in Beta Testing), respiratory infections (in Beta Testing), meningitis, tuberculosis and sexual health infections, all of which fall under the Microbiology/Virology segment of the global MDx market.

Gastroenteritis is a major widespread clinical problem and it has been estimated that there are 17.2 million gastroenteritis cases each year in Australia alone resulting in 250,000 visits to hospital emergency departments, 15,000 hospitalisations and 80 deaths.²⁸ Globally, there are nearly 1.7 billion cases of diarrhoeal disease every year and is responsible for killing around 760,000 children under 5 years of age every year.²⁹

The *EasyScreen*TM enteric screening kits enable early identification of the micro-organisms related to the cause of a patient's symptoms, allowing the appropriate treatment option to be administered by clinicians. In addition, the timely identification of toxigenic/reportable cases (and, therefore, a public health risk) will benefit patients, healthcare providers and the general community. Genetic Signatures is expanding the *EasyScreen*TM test menu and, as mentioned, already has additional products in Beta Testing. These include a test to detect MRSA (generally, hospital acquired infection) and one for respiratory infections (including influenza).

The addressable markets within the global MDx market that are covered by Company's current infectious disease products and additional products in development and in Beta Testing with customers (covering respiratory and MRSA, meningitis, tuberculosis and sexual health infections) is expected by Kalorama to grow to an estimated USD1,770 million globally in 2017.³⁰

²⁷ Kalorama MDx Report, page 167

²⁸ Source: Australian Government Department of Health and Aging, "The Annual Cost of Food borne illness in Australia, March 2006

²⁹ World Health Organization, Diarrhoeal disease, Fact sheet no. 330, April 2013

³⁰ Kalorama MDx Report, page 168. This is not intended to be a forecast or guarantee of sales. It is merely an indication of the addressable market. The Company does not make any representation regarding what portion of the addressable market it will be able to obtain. There can be no guarantee that the Company will increase its portion of the addressable market.

03. Market Overview

Table 7: Microbiology/virology test sales, 2012-2017. Sales in USD millions.

Test	Sales 2012	% Mkt	Sales 2017	% Mkt
HIV	900	32	1,100	28
Hepatitis	710	25	950	24
GC/Chlamydia	480	17	550	14
HAI	390	14	880	22
Respiratory	195	7	290	7
Organism ID	55	2	110	3
Mycobacteria, TB	46	2	50	1
Blood Culture	6	0.2	10	0.3
Others	15	1	30	1
Total	2,797	100	3,970	100

Source: Kalorama MDx Report, page 168

(b) United States

The US represents the largest segment of the global MDx market, and generated 57% of the global MDx test sales in 2012.³¹ Expansion in the number of pathology laboratories and investments in tests for infectious diseases and cancer tests is supporting MDx market growth in the US being above the overall IVD market growth in the US. Kalorama estimates that the US MDx market will generate 9% CAGR from 2012 to reach USD4.6 billion in 2017.³²

A key driver of the US MDx market growth according to Kalorama is the increasing number of pathology laboratories that offer molecular tests.³³ In 2012, the US reportedly had 600 molecular laboratories that offered a portfolio of approximately 1000 MDx, the majority of which were LDTs.³⁴ The steady growth in the number of these laboratories across the US has supported growth overall growth in the MDx market.

It has recently been reported that the growth of MDx in the US is in part due to increased rates of transmission of infectious diseases.³⁵ A USA TODAY investigation published in August 2012³⁶ reported that *C. difficile* was far more prevalent than federal reports had previously suggested. It found that hospital records had linked *C. difficile* to more than 30,000 deaths per year in the US.³⁷ Furthermore, the US Agency for Healthcare Research and Quality had stated that the number of hospitalisations from *C. difficile* had grown from 150,000 in 2001 to 346,800 in 2010.³⁸ A continuation of this trend would translate to over 600,000 Americans diagnosed with *C. difficile* in 2017, which reflects the growth in demand specifically for *C. difficile* MDxs.

Genetic Signatures intends to initially target the market opportunity by offering its enteric (incorporating *C. difficile*) and MRSA products to US institutions. These tests would sit under the Hospital Acquired Infections segment of the market (which includes *C. difficile*, MRSA and Vancomycin Resistant Enterococcus) which has been estimated to grow to USD528 million in 2017.³⁹ The addressable market in the US for Genetic Signatures' other products currently in development and designed to detect respiratory, meningitis, tuberculosis and sexual health infections, is estimated by Kalorama to reach USD534 million in 2017.⁴⁰

31 Kalorama MDx Report, page 94

32 Kalorama MDx Report, page 94

33 Kalorama MDx Report, page 95

34 Kalorama MDx Report, page 95

35 Kalorama MDx Report, page 188

36 Kalorama MDx Report, page 188

37 Kalorama MDx Report, page 188

38 Kalorama MDx Report, page 188

39 Kalorama MDx Report, page 190. This is not intended to be a forecast or guarantee of sales. It is merely an indication of the addressable market. The Company does not make any representation regarding what portion of the addressable market it will be able to obtain. There can be no guarantee that the Company will obtain any part of this addressable market.

40 Kalorama MDx Report, page 168. This is not intended to be a forecast or guarantee of sales. It is merely an indication of the addressable market. The Company does not make any representation regarding what portion of the addressable market it will be able to obtain. There can be no guarantee that the Company will obtain any part of this addressable market.

03. Market Overview

(c) Western Europe

The Western European countries of UK, France, Germany, Spain and Italy made up 22% (USD1.2 billion) of, and was the second largest geographic segment of, the global MDx markets in 2012.⁴¹ Similar to the US, infectious disease testing is fuelling the growth of this market. As one would expect, there is also a growing trend among pathology laboratories to move away from traditional techniques, such as culture and microscopy, to molecular techniques utilising real-time (RT) multiplex polymerase chain reaction (PCR). In particular, certain laboratories around the European market have begun to use these RT multiplex PCR assays for enteric pathogen testing as a new standard of care.⁴²

The majority of MDx testing and pathology laboratories in Western Europe are operated under public health care systems, making the market considerably different from the US market where laboratories are run privately.⁴³ As of 2012, there were 1,700 molecular labs in Western Europe and many more in the other countries that make up the European Union (nearly three times as many as the US).⁴⁴ The market in Western Europe, while large, would be characterised as fragmented market, with the pool of 1,700 molecular laboratories spread across multiple countries with differing cultural and regulatory environments.⁴⁵

Genetic Signatures has already begun to target the market opportunity by offering its C. difficile products to EU customers through its EU appointed distributor. The C. difficile and MRSA (in Beta Testing) products are included in the addressable market in Western Europe expected by Kalorama to reach USD185 million in 2017.⁴⁶ Separately, the addressable market for Genetic Signatures' tests currently in Beta Testing and designed to detect (respiratory, meningitis, tuberculosis and sexual health infections) are included in the market which is estimated by Kalorama to grow to USD187 million in 2017.⁴⁷

(d) Rest of the world

The rest of the world (ROW) accounted for 8% of MDx sales in 2012.⁴⁸ The Company believes that the strong growth in the reported incidence of infectious diseases is pushing these marginal markets, just like the large markets, to adopt MDx testing. This will provides Genetic Signatures with expansion opportunities in the future.

Australia, while only a small percentage of the global MDx market, represents a viable growth market for Genetic Signatures products.

The addressable market in Australia for Genetic Signatures' products is estimated by the Company at USD90 million in 2017⁴⁹ and reflects conservative CAGR rates (5%) from the estimated addressable market in 2012, as represented in the overall ROW segment. Notwithstanding this, the addition of further tests currently in Beta Testing, and the expansion in uptake of RT multiplexed PCR assays domestically, is expected by Kalorama to lead to an expansion of the addressable market in Australia.⁵⁰

41 Kalorama MDx Report, page 94

42 Kalorama MDx Report, pages 95 and 169

43 Kalorama MDx Report, pages 95 and 101

44 Kalorama MDx Report, page 95

45 Kalorama MDx Report, page 95

46 Kalorama MDx Report, page 168. This is not intended to be a forecast or guarantee of sales. It is merely an indication of the addressable market. The Company does not make any representation regarding what portion of the addressable market it will be able to obtain. There can be no guarantee that the Company will obtain any part of this addressable market.

47 Kalorama MDx Report, page 168. This is not intended to be a forecast or guarantee of sales. It is merely an indication of the addressable market. The Company does not make any representation regarding what portion of the addressable market it will be able to obtain. There can be no guarantee that the Company will obtain any part of this addressable market.

48 Kalorama MDx Report, page 94

49 Kalorama MDx Report, page 94. This is not intended to be a forecast or guarantee of sales. It is merely an indication of the addressable market. The Company does not make any representation regarding what portion of the addressable market it will be able to obtain. There can be no guarantee that the Company will increase its portion of this addressable market.

50 Kalorama MDx Report, page 94.

03. Market Overview

3.4. Competitive environment

Genetic Signatures operates in the global MDx market, where in 2012, 350 companies operated across a range of product segments including oncology, virology, microbiology, and blood screening.⁵¹ Table 8 below identified that 14 of these companies controlled 85% of the market in 2012, with Roche Diagnostics and Qiagen having 46% and 21% market shares respectively.⁵²

Table 8: Estimated Molecular Test Revenues of Selected IVD Vendors, 2009-2012 (Sales in USD Millions)

Company	Location	2009	2010	2011	2012	CAGR
Roche Diagnostics	Switzerland	1,088	1,094	1,138	1,280	4
Qiagen	Netherlands	475	523	550	610	6
Becton Dickinson	U.S.	330	348	403	425	7
Novartis	U.S.	400	402	410	420	1
Abbot	U.S.	316	385	442	419	7
Gen-Probe/Hologic	U.S.	286	320	363	405	9
Dako/Agilent	Denmark	321	344	360	380	4
Cepheid	U.S.	116	174	277	289	26
Siemens Healthcare	U.S.	217	225	230	250	4
Ventana Medical/Roche	U.S.	44	88	100	128	31
Hologic/Digene	U.S.	37	43	61	95	27
bioMerieux	France	104	96	95	95	-2
Luminex	U.S.	33	36	57	74	22
Seegene	Singapore	11	23	36	50	46
Total		3,778	4,101	4,522	4,920	7

Source: Kalorama IVD Report, page 265

The review of the competitive environment for this Prospectus is specific to current enteric products offered by Genetic Signatures. Of the 14 companies that dominated global MDx test sales in 2012, at least three offered enteric screening products, namely Hologic/Gen-Probe, TibMolBiol (Distributed by Roche Diagnostics in Australia and other countries as per www.tib-molbiol.com), and Luminex.

Table 9 below illustrates the attributes that Genetic Signatures' product for enteric screening has in comparison to competing products based on publicly available information. In particular the table demonstrates the significant issues identified by customers focusing on the requirement for: faster turn-around times; ease of use & automation, multiple screening of pathogens; and open platform integration.

⁵¹ Kalorama MDx Report, page 265

⁵² Kalorama MDx Report, page 265

Table 9: Comparison of attributes of products for enteric screening

	Genetic Signatures Products for Enteric Screening	Competing Products for Enteric Screening							
	Genetic Signatures (EasyScreen™)	Biofire FilmArray	Hologic/Gen-Probe	BD (BD Max)	Tib Molbiol ¹	Fast Track Diagnostics	AusDiag-nosotics	Luminex	Seegene ³
Probe based PCR	●	●	●	●	●	●	●	●	●
Combined extraction and PCR set-up platform provided by supplier of IVD kits ²	●	●	●*	●	●	●	●	●	●
Rapid Time to Result (<5 hours)	●	●	●	●	●	●	●	●**	●
Thorough Coverage of Common Enteric Pathogens (20 or more targets in a run)	●	●	●	●	●	●	●***	●	●
Separate endogenous extraction and inhibition Controls	●	N/A	●	●	●	N/A	●	N/A	●
Open Platform (Extraction and PCR) from multiple suppliers	●	●	●	●	●	●	●****	●	●
Viral, bacterial and Protozoan coverage	●	●	●	●	●	●	●	●	●
Manufactured in Australia	●	●	●	N/A	●	●	●	●	●

● = Yes; ● = No; N/A = Information not available from company website

¹ Distributed in Australia by Roche Diagnostics

² On a single integrated platform

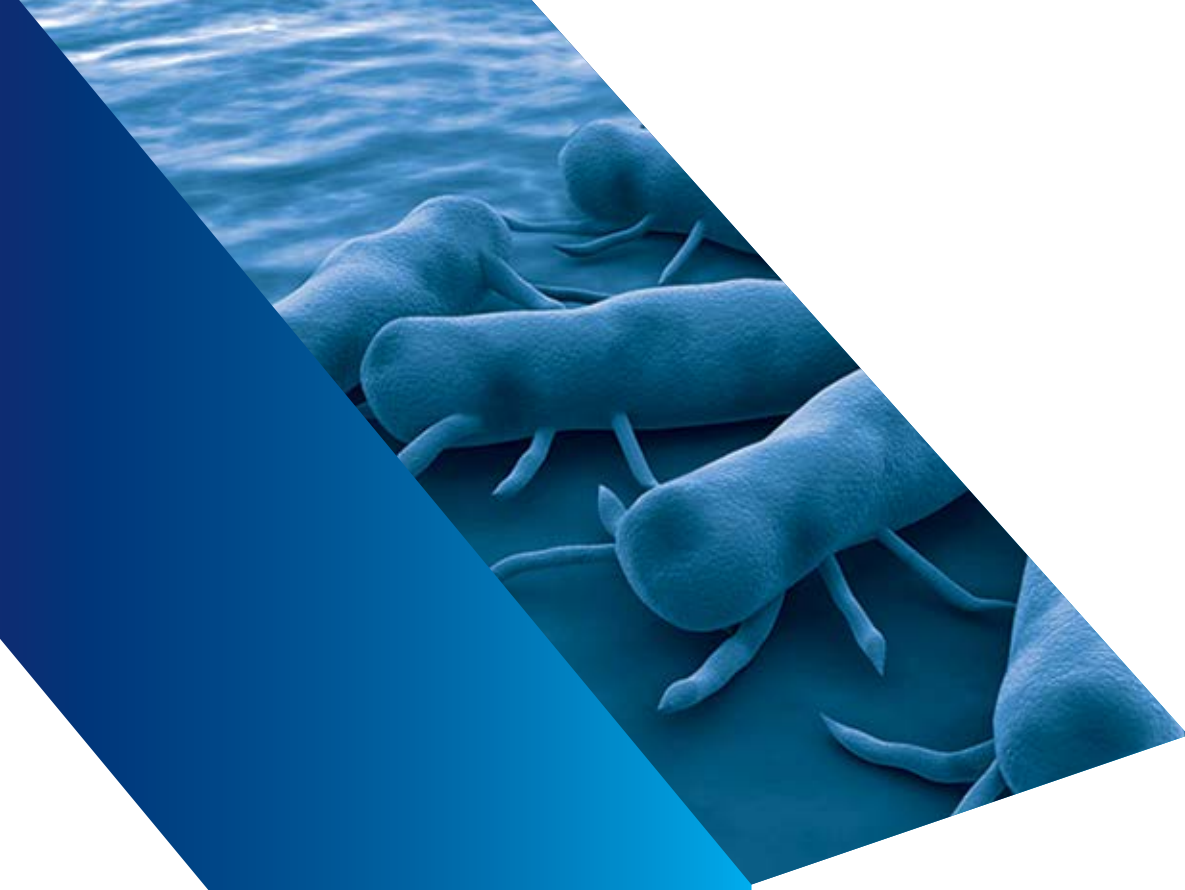
³ Seeplex End point PCR range

* This test is not compatible with Hologic automated instrumentation

** Does not include pre-treatment time

*** Requires the use of multiple assays with redundant targets under current menu

**** May be compatible with some 3rd party 384-well PCR instrumentation



04. Risks

04. Risks

Genetic Signatures is subject to various risk factors. Some of these are specific to its business activities. Others are of a more general nature. Individually, or in combination, these risk factors may affect the future operating and financial performance of Genetic Signatures, its investment returns and the value of an investment in the Shares. Each of the risks set out below could, if they eventuate, have a material adverse impact on Genetic Signatures' business, financial condition and results of operations. Investors should be aware that this Section 4 does not purport to list every risk that may be associated with an investment in Genetic Signatures or the Shares, either now or in the future, and that many of the risks described below are outside the control of Genetic Signatures and its Directors and management. This Section 4 should be read in conjunction with other information disclosed in this Prospectus. There can be no guarantee that Genetic Signatures will achieve its stated objectives or that any forward looking statements or forecasts will eventuate.

Before applying for Shares, investors should satisfy themselves that they have a sufficient understanding of the matters identified in this Section 4 and should consider whether Shares are a suitable investment for them, having regard to their own investment objectives, financial circumstances and particular needs (including financial and tax issues). If investors are unclear in their understanding of any matter or are uncertain as to whether Genetic Signatures is a suitable investment for them, they should seek professional guidance from their solicitor, stockbroker, accountant or other independent and qualified professional adviser before deciding whether to invest.

4.1. Business risks

(a) Competition

The biotechnology and diagnostic industries are highly competitive, and include companies with significantly greater financial, technical, human, research and development, and marketing resources than the Company. There are companies that compete with the Company's efforts to discover, validate and commercialise diagnostic products or product candidates. The Company's competitors may discover and develop products in advance of the Company and/or products that are more effective than those developed by the Company. As a consequence, the Company's current and future technologies and products may become obsolete or uncompetitive, resulting in adverse effects on revenue, margins and profitability.

(b) Product development

The Company has a number of products relating to enteric screening kits that it has commercialised. The Company also has a number of other products in Beta Testing and in earlier stages of development. The products in Beta Testing and earlier stages of development are at a relatively early developmental stage and further substantial development may be necessary. If the Company's products are not ultimately proven to be effective for diagnostic purposes, the Company's business and resulting value may be materially harmed. Although there have been substantial studies performed by third parties on the current products there is no certainty that the new products will have comparable or sufficient levels of efficacy. Until the Beta Testing is completed, there is no certainty and no way of prior validation at this time. There is no certainty that there will be a positive or definitive outcome from the Company's Beta Testing.

(c) Regulatory approvals

Genetic Signatures may fail in seeking regulatory approval in the US in respect of any of its products and/or regulatory approvals in Australian and the EU in respect of its products that are not currently being commercialised. The current CE mark in the European Union and Therapeutic Goods Authority approval in Australia does not guarantee the Company will be successful in selling its products. Nor does it guarantee that the products being sold as research-use-only, LDT and ASR will be successful in delivering substantial revenues.

(d) Inability to recruit and retain key staff

Genetic Signatures currently employs or engages as consultants, a number of key members of its management and scientific team. The loss of any of these people's services could materially and adversely affect Genetic Signatures and may impede the achievement of its research, product development and commercialisation objectives. Further, the successful development of Genetic Signatures will require the services of additional staff. There can be no assurance that the Company will be able to attract appropriately qualified and experienced additional staff and this may adversely affect the Company's prospects for success.

(e) Dependence on suppliers

There can be no certainty that any components that Genetic Signatures requires for manufacturing of its products will be available in the future. If any such component becomes unavailable, failure to find a suitable alternative component will require a re-design to the Company's products that could impact the Company's capacity to manufacture and may involve a larger amount of financial investment, which may in turn have a negative impact on the financial performance of the Company.

04. Risks

(f) Manufacturing/production risks

Genetic Signatures has not yet manufactured its products on a larger scale and therefore cannot guarantee it will be able to meet the needs of its potential Australian, European and US customers. The manufacture of MDx assays is very complex and associated with uncertainties in relation to issues such as impurities and consistency of the product as well as manufacturing capacity and price of large scale manufacturing. Should difficulties or delays occur in the production of the Company's products, the timing of the product development and/or commercialisation as outlined in the Prospectus may be adversely affected, which may in turn have a negative impact on the financial performance of the Company. If, for some reason, a product does not meet suitability or quality assurance standards, the Company will remanufacture the product, which would result in increased costs and may delay the commercialisation process.

(g) Foreign exchange risk

The Company's financial reports are prepared in Australian dollars. However, a proportion of the Company's sales revenue, expenditures and cash flows are generated in, and assets and liabilities are denominated in, Euros and US dollars. Any adverse movements of Euros or US dollars against the Australian dollar as well as other adverse exchange rate fluctuations or volatility could have an adverse effect on the Company's future financial performance and position. The Company does not currently hedge against this foreign exchange risk.

(h) Expenditure program

Genetic Signatures has not entered into contracts for any of the material items covered by the expected expenditure program detailed in Section 1.5, nor does it have binding quotations in relation to some such items. Rather the Directors have determined that following the successful close of the Offer, Genetic Signatures will be well positioned to negotiate the terms for such contracts. The Directors, officers and consultants have extensive experience in the diagnostics industry and have prepared the anticipated expenditure detailed in Section 1.5 based partly on discussions with or indicative quotes obtained from potential suppliers of those services and their own experience of the likely costs for those expenditure items. While the Directors are confident Genetic Signatures will be able to source suitable suppliers, there is a risk that Genetic Signatures may not be able to source those suppliers at the estimated expenditure in Section 1.5.

(i) Sufficiency of funding

Although the Directors believe that, on completion of the Offer, the Company will have sufficient working capital to carry out its stated objectives, there can be no assurance that such objectives can be met without further funding. The Company has limited financial resources and may need to raise additional funds from time to time to finance the complete development and commercialisation of its products and meet its other longer term objectives. The Company may never achieve profitability. The Company's ability to raise additional funds will be subject to, among other things, factors beyond the control of the Company and its Directors, including cyclical factors affecting the economy and the share markets generally. The Directors can give no assurance that future funds can be raised by the Company on favourable terms, if at all.

(j) Changes in Australian Government R&D incentives

The use of funds and the Expenditure Program outlined in this Prospectus includes the anticipated receipt by the Company of tax refunds based on the Company's actual research and development spending by the Company. There is no guarantee that the Australian Federal Government will not change its R&D incentive program – which if changed, would have a material adverse impact on the Company's Expenditure Program and funding required to conduct its proposed activities outlined in this Prospectus.

(k) Product liability

There is no assurance that unforeseen adverse events or manufacturing defects will not arise. Adverse events could expose the Company to product liability claims or litigation, resulting in the removal of the regulatory approval for the relevant products and/or monetary damages being awarded against the Company. In such event, the Company's liability may exceed the Company's insurance coverage.

4.2. Intellectual property risks

(a) Intellectual property rights

There is no guarantee that the Company's patent rights comprise all of the rights that the Company needs to be entitled to freely use and commercialise its products. If third party patents or patent applications contain claims infringed by the Company's technology and these claims are valid, the Company may be unable to obtain licenses to these patents at a reasonable cost, if at all, and may also be unable to develop or obtain alternative technology. If such licenses cannot be obtained at a reasonable cost, the business could be significantly impacted. Further, the enforceability of the patents owned by the Company may be challenged and the Company's patents could be partially or wholly invalidated following challenges by third parties.

(b) Infringement of third party intellectual property

If a third party accuses the Company of infringing its intellectual property rights or if a third party commences litigation against the Company for the infringement of patent or other intellectual property rights, the Company may incur significant costs in defending such action, whether or not it ultimately prevails. Typically, patent litigation in the pharmaceutical and biotechnology industry is expensive. Costs that the Company incurs in defending third party infringement actions would also include diversion of management's and technical personnel's time. In addition, parties making claims against the Company may be able to obtain injunctive or other equitable relief that could prevent the Company from further developing discoveries or commercialising its products. In the event of a successful claim of infringement against the Company, it may be required to pay damages and obtain one or more licenses from the prevailing third party. If it is not able to obtain these licenses at a reasonable cost, if at all, it could encounter delays in product introductions and loss of substantial resources while it attempts to develop alternative products. Defence of any lawsuit or failure to obtain any of these licenses could prevent the Company or its partners from commercialising available products and could cause it to incur substantial expenditure.

(c) Trade secrets

The Company relies on its trade secrets, which include information relating to the manufacture, development and administration of its diagnostic products. The protective measures that the Company employs may not provide adequate protection for its trade secrets. This could erode the Company's competitive advantage and materially harm its business. The Company cannot be certain that others will not independently develop the same or similar technologies on their own or gain access to trade secrets or disclose such technology, or that the Company will be able to meaningfully protect its trade secrets and unpatented know-how and keep them secret.

4.3. Investment and general risks

(a) Concentration of Shareholding

Following completion of the Offer, the Company will have one major Shareholder, Asia Union Investments, which will hold between 40.2% to 43.8% of the Shares.¹ Accordingly, Asia Union Investments will continue to be in a position to exert significant influence over the outcome of matters relating to Genetic Signatures, including the election of Directors and the consideration of material Board decisions. Although the interests of Genetic Signatures, Asia Union Investments and other Shareholders are likely to be consistent in most cases, there may be instances where their respective interests diverge. Asia Union Investments has entered into escrow arrangements in relation to all of its Existing Shares under which half of those Existing Shares will be escrowed for up to 1 year from the Listing Date and the other half will be escrowed for up to 2 years from the Listing Date.

The sale of Shares in the future by the Existing Shareholders (following expiry of the escrow period described in Section 9.4), or the perception that such sales might occur, could adversely affect the market price of the Shares. Also, the concentration of ownership may affect the liquidity of the market for Shares on ASX and contribute to a perception that the ownership structure is not conducive to a corporate control transaction involving Genetic Signatures in the short to medium term.

¹ Based on Maximum Subscription and Minimum Subscription being raised, respectively, and assuming that Asia Union Investments does not subscribe for Shares under the Offer.

04. Risks

(b) Liquidity and realisation risk

There can be no guarantee that an active market in Shares will develop or that the price of Shares will increase. This is particularly the case given that, as a result of the mandatory and voluntary escrow arrangements entered into by the Existing Shareholders and the fact that ESP Shares will also be restricted from trading before they vest, only between approximately 50% to 54% of the Shares will be able to be freely traded at completion of the Offer. With this limited free float, there may be relatively few potential buyers or sellers at any given time. This may increase the volatility of the market price of the Shares. It may also affect the prevailing market price at which Shareholders are able to sell their Shares. This may result in Shareholders receiving a market price for their Shares that is less than the price that Shareholders paid.

(c) Taxation

Changes to the rate of taxes imposed on Genetic Signatures (including in overseas jurisdictions in which Genetic Signatures operates now or in the future) or tax legislation generally may affect Genetic Signatures and its Shareholders. In addition, an interpretation of Australian taxation laws by the Australian Taxation Office that differs to Genetic Signatures' interpretation may lead to an increase in Genetic Signatures' taxation liabilities and reduction in Shareholder returns.

(d) Australian Accounting Standards may change

Australian Accounting Standards are set by the AASB and are outside the control of either Genetic Signatures or its Directors and management. The AASB is due to introduce new or refined Australian Accounting Standards during the period from 2014 to 2018, which may affect future measurement and recognition of key statement of profit and loss and balance sheet items, including revenue and receivables. There is also a risk that interpretations of existing Australian Accounting Standards, including those relating to the measurement and recognition of key statement of profit and loss and balance sheet items, including revenue and receivables, may differ. Changes to Australian Accounting Standards issued by the AASB or changes to the commonly held views on the application of those standards could materially adversely affect the financial performance and position reported in Genetic Signatures' financial statements.

(e) Price of Shares may go up or down

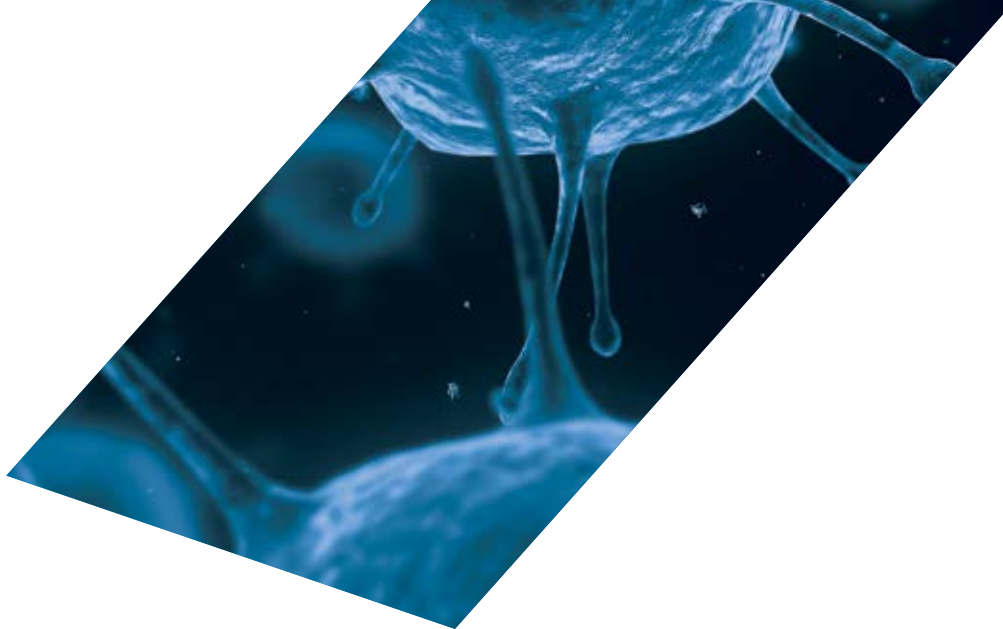
Regardless of the performance of the Company, the day-to-day performance of the share market and general share market conditions may affect the Company and the price at which its shares trade on a share market, such as the ASX. The share market has in the past and may in the future be affected by a number of matters including:

- economic conditions, in general terms and in particular to the industry that a business operates in;
- interest rates;
- market confidence;
- supply and demand for money;
- foreign exchange rates;
- general economic outlook; and
- changes in government policy.

4.4. Concluding comment

The above list of risk factors ought not to be taken as an exhaustive one of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of the Shares offered under this Prospectus. Therefore, the Shares to be issued pursuant to this Prospectus carry no guarantee with respect to the payment of dividends, returns of capital or the market value of those Shares.

Investment in the Company must be regarded as speculative and neither the Company nor any of its Directors or any other party associated with the preparation of this Prospectus guarantees that any specific objectives of the Company will be achieved or that any particular performance of the Company or of the Shares, including those offered by this Prospectus, will be achieved.



Directors and Management

05.

05.

Directors and Management

5.1. Board of Directors

The Board of Directors brings relevant domestic and international experience and skills including established governance, scientific and commercialisation skills in the field of molecular diagnostics. The board comprises:



Nick Samaras

Non-Executive Chairman, BSc(Hons), PhD, MBA, FAIM, FAICD

(Appointed 2008)

Dr Samaras has had over 25 years' business experience in the global Life Sciences industry and is a recognised and respected industry expert. He has held a number of senior executive level positions in management, marketing, sales, and research and development. His roles have included appointments as Managing Director of Applied Biosystems Pty Ltd (now part of Thermo Fisher), and senior roles with Perkin Elmer and AMRAD Corporation (now part of CSL).

Dr Samaras is an experienced executive, non-executive and Board Chairman, having served on the boards of several biotechnology companies including one that was ASX-listed. For the past 10 years Dr Samaras has focused his efforts on enabling a number of US biotechnology companies by facilitating their international market expansion and structured development of commercial revenue channels outside of their traditional onshore markets.

Nick holds a BSc with Honors in Pathology and Immunology from Monash University, and a PhD in Medical Biology from the Department of Medicine at The University of Melbourne. He also holds postgraduate business qualifications which include an MBA from the School of Management at RMIT University, and is a Fellow of the Australian Institute of Company Directors and the Australian Institute of Management.



John Melki

Director and Chief Executive Officer, BSc, PhD

(Appointed 2014)

Dr Melki has led the commercialisation efforts of Genetic Signatures as Chief Executive Officer since 2011. Dr Melki originally joined Genetic Signatures in 2003 where he was responsible for leading the commercialisation of 2 research products (worldwide) and 5 diagnostic products (locally and Europe) in the role of Senior Principal Research Scientist. He has authored 20 peer-reviewed articles and is listed as an inventor on 8 patent applications. Dr Melki received his BSc from the University of New South Wales and his PhD from the University of Sydney, where his thesis was awarded the Peter Bancroft Prize from the Medical School. His primary research focus for the last 20 years has been in the sodium bisulphite conversion of DNA which is at the core of Genetic Signatures' technology.



Robert J Birrell

Director and CFO, CPA, BEc, M.Comm, GAICD

(Appointed 2001)

Mr Birrell has worked in the Biotech, Banking, Communication and Corporate Sectors for over three decades. He has worked for Macquarie Bank and Industrial Equity Limited, including a number of years on secondment to the Executive Chairman of Woolworths Ltd. Mr Birrell spent seven years from 1994 to 2000 as Finance Director then Chief Financial Officer of Austar United Communications Ltd, including during their IPO in 1999. He is a Certified Practising Accountant, holds a Bachelor of Economics from Macquarie University, a Master of Commerce from the University of New South Wales, a PMD from the Harvard Business School and is a Graduate of the Australian Institute of Company Directors.



Mike Aicher

Executive Director – US Operations, BSc, MBA

(Appointed 2014)

Mr Aicher has over 30 years of industry experience, and was CEO and founder of National Genetics Institute (**NGI**) and acquired by Laboratory Corporation of America, Inc. (**LabCorp**) in 2000.

More recently, Mr. Aicher led LabCorp's Western Division and was previously responsible for the Company's Esoteric Business Units, which generated more than \$1 billion in annual revenue. Prior to NGI, Mr. Aicher served in a number of executive leadership roles at Central Diagnostics Laboratory.

He currently serves as a director on boards of Ariosa Diagnostics, Inc. and Omicia, Inc. He is certified by the University of California at Berkeley as a Global Biotechnology Executive and is a recipient of Ernst & Young's "Entrepreneur of the Year" award for emerging technologies. Mr Aicher received a B.S. in Business Administration from the University of Redlands and an M.B.A. in Economics from Columbus University.



Phillip Isaacs

Non-Executive Director, MSc JP

(Appointed 2003)

Mr Isaacs holds an MSc in Biochemistry from the University of Sydney. He has worked as a Clinical Biochemist with the Commonwealth Department of Health and in commercial diagnostics as Managing Director of the Australian subsidiary of Technicon Equipment (the manufacturer of the first AutoAnalyzer using continuous flow analysis for the estimation of biochemicals in the bloodstream). He commenced the operation of Beckman Instruments in Australia and worked as Managing Director and Area Director for the Asia Pacific region, being responsible for both the Diagnostic and Life Science equipment markets. He was Vice President of the Asia Pacific Cytac Corporation which developed and sells the ThinPrep Pap Test and was responsible for the development of the Company in Asia Pacific. He was also the Founding Chairman of the Australian Proteome Analysis Facility (APAF) in Sydney.



Pat Noland

Non-Executive Director, BSc, MBA

(Appointed 2014)

Mr Noland has over 20 years of industry experience, and was Senior Vice President at Laboratory Corporation of America (LabCorp).

Mr Noland is currently CEO and director of StrataDX, an anatomic pathology laboratory based in Lexington, Massachusetts. Mr Noland joined StrataDX in 2011 after Linden Capital Partners acquired a controlling interest in the Company. During his tenure, Mr. Noland altered the Company's strategy to focus on the dermatology market and achieved industry leading growth rates. Prior to his tenure at StrataDX, Mr. Noland spent 17 years at LabCorp. In his last role at LabCorp, he served as Senior Vice President responsible for developing and implementing a new partnerships-focused hospital strategy, designed to expand the available US market. Hospital services contributed approximately \$480 million to Company revenues in 2010. Previously, he held full P&L responsibility for DIANON Systems, LabCorp's premium anatomic pathology brand, as well as a series of other senior leadership roles in strategic assignments. Mr. Noland began his LabCorp career in field sales and sales management in the Atlanta, Georgia market. He holds a master's degree in business administration from Kennesaw State University in Georgia, and a bachelor's of science degree in advertising from the University of Georgia in Athens.

05. Directors and Management

Having a majority of independent directors on a Company's Board is one of the Corporate Governance Principles and Recommendations. A director is independent if he or she is a non-executive director, not a member of management and free of any business or other relationship that could materially interfere with (or be perceived to materially interfere with) the independence of his or her judgement. Nick Samaras, Phillip Isaacs and Pat Noland are independent directors of the Company. The Company will not comply with this Recommendation as it does not have a majority of independent directors.

5.2. Senior management

John Melki
Chief Executive Officer, BSc, PhD

(Appointed 2011)

[Refer Board profile](#)



Doug Millar
Chief Scientific Officer, BSc, PhD

(Appointed 2001)

Dr Millar has been with Genetic Signatures since its foundation in 2001 and is the key inventor on over 30 patents or pending patent applications. He has authored 23 peer reviewed scientific papers in the field of molecular biology and sodium bisulfite conversion of DNA, and has presented at more than 20 international and national scientific meetings.

In 2009 Dr Millar was invited to attend the prestigious MRC Laboratory of Molecular Biology in Cambridge UK by Sir Gregory Winter for where he worked with Dr Philipp Holliger on directed enzyme evolution. Dr. Millar received his PhD in Molecular Genetics from the University of London. He began his career at Wellcome Diagnostics in London where he worked on novel HIV and Hepatitis diagnostics. He is recognized as one of the pioneers of the bisulphite genomic sequencing protocol, which is the gold standard for DNA Methylation and epigenomic analyses, and the core Genetic Signatures' technology.

Robert J Birrell
Chief Financial Officer, CPA, BEc, M.Comm, GAICD

(Appointed 2001)

[Refer Board profile](#)

Mike Aicher
Executive Director – US Operations, BSc, MBA

(Appointed 2014)

[Refer Board profile](#)

Richard Smith

Director – US Technical Operations, PhD, CGMBS

(Appointed conditional on the Company being admitted to the Official List of ASX)

Dr Smith has over 25 years of industry experience, and was Vice President of Operations of National Genetics Institute (**NGI**) and acquired by Laboratory Corporation of America (**LabCorp**) in 2000.

Dr Smith joined NGI in 1995 as operations manager of the nucleic acid extraction and pre-amplification division and also served as director of research and development during the early phases of NGI's growth. Advancing to vice president of operations in 2001, Dr Smith was a major contributor to all of NGI's FDA submissions, some of which resulted in NGI being the first organization to obtain FDA approval for nucleic acid testing for blood and plasma donor screening. Dr Smith was the primary contact for most of the company's major customers and intimately involved in the design and implementation of diagnostic assays, computer systems, as well as operational and quality procedures. Prior to NGI, Dr Smith completed his doctoral studies at the University of California, Los Angeles in the department of molecular biology and molecular genetics focusing on the structure and function of human antibody constant regions as well as the design and production of novel human antibody variants. Immediately following his degree Dr Smith completed a brief post-doctoral fellowship in the biotechnology industry using advanced molecular biology techniques to produce more potent forms of that company's primary therapeutic product.

Susan Keese

General Manager – EU Operations, BSc, MBA

(Appointed 2013)

Ms Keese has over 25 years of international experience in the fields of molecular diagnostic testing, medical devices, biotechnology, life sciences, and analytical instrumentation. She has spent the majority of her career working in Europe. Ms Keese was previously Vice President, Head of Market Development for Molecular Diagnostics with QIAGEN. Prior to QIAGEN, Ms Keese worked for Digene Corporation as VP, General Manager of European Commercial Operations and member of the executive team until Digene was acquired by QIAGEN in 2007. At Digene, she built and led a staff of 65 across 6 legal entities in Europe to create demand, market, sell, and support the Digene Europe/Middle East/African HPV business. Prior to her position as GM, she was Vice President, Global Product & Operations Marketing, based out of both the UK and US. Ms Keese previously worked for Perkin-Elmer Corporation, in both the US and UK, in international marketing and corporate marketing communications management positions for the biotechnology/PCR (polymerase chain reaction), analytical instrument, and semiconductor businesses. Ms Keese has a Certificate in Executive Management from Babson College School of Executive Education, an MBA in Marketing and Management from University of Connecticut, and Bachelor of Science Degree in Biochemistry from Emmanuel College.

05. Directors and Management

5.3. Principal advisers

The Company's principal advisers (in addition to the Board and management) include:

- **Sir Gregory Winter, CBE, FRS, Hon FRCP, FTSE. *Special Adviser***
Sir Gregory Winter is a pioneer of therapeutic monoclonal antibodies. He invented techniques to both humanise and later to fully-humanise antibodies for therapeutic uses.
- **Dr Jim Peacock, AC, FAA, FRS, FTSE, FAIAST. *Special Adviser***
Jim Peacock is the former Chief Scientist of Australia and a past President of the Australian Academy of Science. He was Chief of CSIRO Plant Industry 1978-2003.
- **Prof. William Rawlinson, AM, MBBS, BSc (Med), PhD (Cantab), FRACP, FRCPA, FFSc, FASM, GCM. *Clinical Adviser***
Professor William Rawlinson is Director of Virology, SEALS Microbiology at Prince of Wales Hospital, Sydney.
- **Christopher M Abbott, AM, FCA, PhD (Hon). *Founder and Chairman Emeritus***
Co-founder of Brisbane companies Agen Biomedical and Peplin and of Maple-Brown Abbott Limited.

5.4. Corporate governance

This section explains how the Board will manage the Company's business. The Board is responsible for the overall corporate governance of the Company. The Board monitors the operational and financial position and performance of the Company and oversees its business strategy including approving the strategic goals of the Company. The Board is committed to maximising performance, generating appropriate levels of Shareholder value and financial return, and sustaining the growth and success of the Company. In conducting business with these objectives, the Board is concerned to ensure that the Company is properly managed to protect and enhance Shareholder interests, and that the Company, its Directors, officers and employees operate in an appropriate environment of corporate governance. Accordingly, the Board has created a framework for managing the Company including adopting relevant internal controls, risk management processes and corporate governance policies and practices which it believes are appropriate for the Company's business and which are designed to promote the responsible management and conduct of the Company.

The main policies and practices adopted by the Company are summarised below. In addition, many governance elements are contained in the Constitution. Details of the Company's key policies and the charters for the Board and each of its committees are available at www.geneticsignatures.com.

(a) Board charter

The Board has adopted a written charter to provide a framework for the effective operation of the Board. This charter provides a framework for the effective operation of the Board, addressing matters and responsibilities of the Board such as enhancing Shareholder value, oversight of Genetic Signatures (including its control and accountability systems), contributing to and approving corporate strategy and performance objectives, monitoring the performance of the CEO and other senior executives, and approving and monitoring major capital expenditure, capital management issues and acquisitions and divestitures.

(b) Board committees

The Board may from time to time establish appropriate committees to assist in the discharge of its responsibilities. Standing committees established by the Board are the Audit and Risk Committee and the Nomination and Remuneration Committee.

Other committees may be established by the Board as and when required. Membership of Board committees will be based on the needs of the Company, relevant legislative and other requirements and the skills and experience of individual Directors.

(c) Audit and Risk Committee

The role of the Audit and Risk Committee is to oversee the processes for financial reporting, internal control, financial and non-financial risk management and compliance and external audit; monitoring Genetic Signatures compliance with laws, regulations and its own policies; and evaluating the adequacy of processes and controls established to identify and manage areas of potential risk.

Under its charter, the Audit and Risk committee must have at least three members, a majority of whom must be independent and all of whom must be non-executive Directors. As at the date of this Prospectus, the members of the Audit and Risk Committee are Phillip Isaacs (chairman), Nick Samaras and Robert Birrell.

05. Directors and Management

(d) Nomination and Remuneration Committee

The main functions of the Nomination and Remuneration Committee are to assess and make recommendations to the Board regarding Board composition with a view to ensuring it is able to operate effectively and efficiently, to adequately discharge its responsibilities and duties, and secondly to advise and assist the Board to ensure that Genetic Signatures has fair, responsible and competitive remuneration arrangements and other employee policies and procedures which attract, motivate and retain appropriately skilled persons.

Under its charter, the Nomination and Remuneration committee must have at least three members, a majority of whom (including the chairman) must be independent Directors. As at the date of this Prospectus, the members of the Nomination and Remuneration Committee are Nick Samaras (chairman), Phillip Isaacs and John Melki.

(e) Risk management policy

The identification and proper management of Genetic Signatures' risks are important priorities of the Board. Genetic Signatures has adopted a risk management policy appropriate for its business, which commits the Company to designing and implementing systems and methods appropriate to minimise and control its risk. The Audit and Risk Committee is responsible for monitoring and assessing the effectiveness of Genetic Signatures' risk management systems.

(f) Continuous disclosure policy

Genetic Signatures is committed to observing its disclosure obligations under the ASX Listing Rules and Corporations Act. Genetic Signatures has adopted a policy which establishes procedures which are aimed at ensuring that Directors and management are aware of and fulfil their obligations in relation to the timely disclosure of material price-sensitive information.

(g) Share trading policy

Genetic Signatures has adopted a written policy to take effect from listing on the ASX for dealing in Shares, which is intended to explain the prohibited type of conduct in relation to dealings in Shares under the Corporations Act and to establish a best practice procedure in relation to Directors', management's and employees' dealings in Shares.

Subject to the overriding restriction that persons may not deal in Shares while they are in possession of material price sensitive information, Directors and management will only be permitted to deal in Shares during certain 'window periods', such as following the annual general meeting, the release of Genetic Signatures' full and half year financial results, or the release of a disclosure document offering Shares.

Outside these periods, Directors and management must receive clearance for any proposed dealing. In all instances, buying or selling Shares is not permitted at any time by any person who possesses price-sensitive information.

In addition, the policy prohibits management and employees who are participants in any equity-based remuneration scheme implemented by the Company from entering into hedging arrangements with respect to securities in the Company (being transactions in financial products that operate to limit the economic risk associated with holding securities in the Company) and from include his or her securities in the Company in a margin loan portfolio or otherwise dealing in securities in the Company pursuant to a margin lending arrangement, without first obtaining the Company's consent.

(h) Code of Conduct

The Board recognises the need to observe the highest standards of corporate practice and business conduct, and has adopted a formal code of conduct for employees and officers. The key aspects of this code are to act with honesty, integrity and fairness and in the best interests of Genetic Signatures, act in accordance with all applicable laws, regulations, policies and procedures, and use Genetic Signatures' resources and property properly.

(i) Diversity policy

The Board has adopted a diversity policy which provides a framework for Genetic Signatures to achieve, amongst other things, a diverse and skilled workforce, a workplace culture characterised by inclusive practices and behaviours for the benefit of all staff, improved employment and career development opportunities for women and a work environment that values and utilises the contributions of employees with diverse backgrounds, experiences and perspectives.

(j) Communication with Shareholders

Genetic Signatures is committed to keeping Shareholders informed of all major developments affecting Genetic Signatures which are relevant to Shareholders in accordance with all applicable laws. Information will be communicated to Shareholders through the lodgement of all relevant financial and other information with ASX.

05. Directors and Management

5.5. ASX Recommendations

Genetic Signatures is seeking to list its Shares on the ASX. The ASX Corporate Governance Council has developed and released its Corporate Governance Principles and Recommendations for Australian listed entities (**ASX Recommendations**) in order to promote investor confidence and to assist companies in meeting stakeholder expectations. The ASX Recommendations are not prescriptive, but guidelines. However, under ASX Listing Rules, the Company will be required to provide a statement in its annual report disclosing the extent to which it has followed the recommendations in the reporting period. Where the Company does not follow a recommendation, it must identify the recommendation that has not been followed and give reasons for not following it.

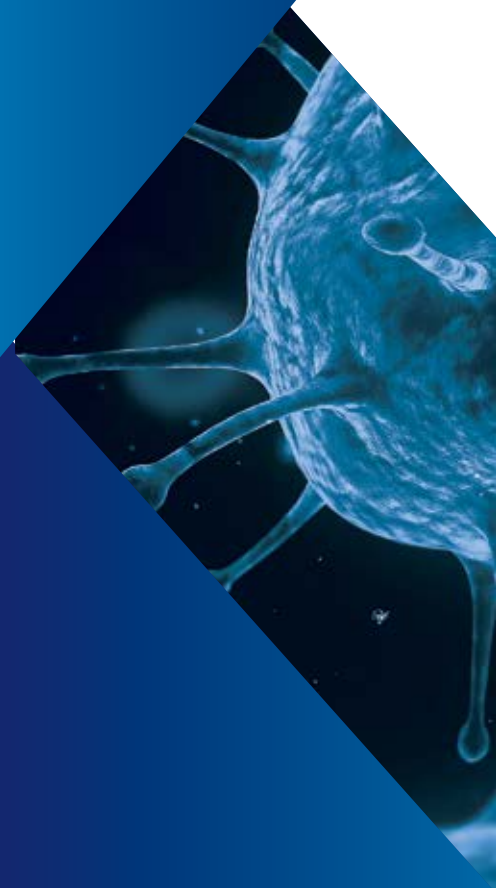
The Company does not comply with ASX Recommendation 2.4, being that the majority of the Board are independent Directors. However, the Company considers that the Board is appropriately structured notwithstanding this ASX Recommendation given the extensive knowledge of each of the directors regarding the Company and its business and their substantial experience and recognition in the MDx industry and other industries relevant to the Company's operations. For these reasons, and the stage of the development of the Company, Genetic Signatures takes the view that it is in the best interests of members that the current directors, with their extensive background and experience, be directors of the Board.

The Company also does not comply with ASX Recommendation 4.1, being that the audit committee be comprised solely of non-executive Directors. The Company has a combined Audit and Risk Committee which comprises 2 non-executive Directors and the CFO. However, the Company considers that the Audit and Risk Committee is appropriately structured notwithstanding this ASX Recommendation given that a majority of the members are independent non-executive Directors and they have the accounting and financial expertise and a sufficient understanding of the industry in which the Company operates to be able to discharge the Audit and Risk Committee's mandate effectively. For these reasons, and the stage of the development of the Company, Genetic Signatures takes the view that it is in the best interests of members that the current members of the Audit and Risk Committee be the members of this Committee.

Otherwise, the Board anticipates that it will not depart from the ASX Recommendations, however, it may do so in the future if it considers that such departure would be reasonable.

Financial Information

06.



06.

Financial Information

6.1. Introduction

This financial information Section summarises the Company's selected financial data from the audited financial statements for the years ended 30 June 2012, 30 June 2013 and 30 June 2014.

The financial information has been prepared in Australian dollars and in accordance with the Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board and the Act.

The information set out in this Section and the Company's financial information should be read together with:

- management's discussion and analysis set out in Section 6.6;
- the risk factors described in Section 4;
- the Investigating Accountant's Report on the historical and pro forma financial information set out in Section 7; and
- the other information contained in this Prospectus.

6.2. Audited financial statements

The historical financial information has been extracted from the financial report of Genetic Signatures for the years ended 30 June 2014 (**FY2014**) and 30 June 2013 (**FY2013**) (including comparative information for the year ended 30 June 2012 (**FY2012**)), which were audited by BDO, each in accordance with the Australian Auditing Standards.

The principal accounting policies adopted in the preparation of the financial statements are set out in Section 11 of this Prospectus. These policies have been consistently applied to the financial period presented, unless otherwise stated.

The historical financial information is presented in an abbreviated form and does not contain all of the disclosures, statements or comparative information required by Australian Accounting Standards applicable to financial reports prepared in accordance with the Corporations Act.

In the financial reports for each of FY2012, FY2013 and FY2014, without qualifying their opinion, the auditors raised an Emphasis of Matter paragraph in relation to the significant doubt around the Company's ability to continue as a going concern. This was due to the Company being reliant on receiving funding from its major shareholder or from a capital raising in order to be in a position to pay its debts as and when they became due. The Directors are confident that with the Minimum Subscription of \$12 million, and from the application of existing funds, the Company will have sufficient working capital to meet its debts as they arise and to continue trading as a going concern for several years into the future.

6.3. Historical statement of profit or loss and other comprehensive income

The table below sets out the summary of the Company's historical statement of profit and loss and other comprehensive income for FY2012, FY2013 and FY2014.

Table 10: Historical statement of profit or loss and other comprehensive income

	FY2012 Audited \$	FY2013 Audited \$	FY2014 Audited \$
Revenue	219,596	256,977	684,277
Other Income	15,297	23,600	15,587
Changes in inventories and raw materials used	(79,022)	(104,630)	(356,012)
Employee benefits expense	(1,147,572)	(1,286,194)	(978,075)
Directors' and consultancy fees	(138,968)	(201,120)	(376,615)
Depreciation and amortisation expenses	(94,893)	(56,020)	(103,880)
Finance costs	(67,791)	(305,972)	(289,296)
Rental expenses relating to operating leases	(73,226)	(86,028)	(85,545)
Scientific consumables	(248,627)	(293,359)	(250,686)
Travel and accommodation	(24,667)	(62,986)	(58,090)
Patents expense	(197,011)	(248,155)	(219,891)
Other expenses	(149,563)	(179,504)	(318,486)
Loss before tax	(1,986,447)	(2,543,391)	(2,336,712)
Income tax benefit	439,456	528,990	608,225
Loss for the year	(1,546,991)	(2,014,401)	(1,728,487)

06. Financial Information

The following notes relate to the above table:

(a) Revenue

Genetic Signatures' historic revenue related to the research and commercialisation of identifying individual genetic signatures and the sale of associated products into the diagnostic and research marketplaces.

Genetic Signatures launched its suite of reagent products in Australia under the *EasyScreen*™ brand in Australia in 2010, and the Company presently has 5 hospitals utilising *EasyScreen*™ in its routine detection practice. The Company employs a business-to-business revenue model in Australia and contracts directly with hospital and pathology labs. Genetic Signatures generates revenue when customers order specific *EasyScreen*™ tests to be used on patient samples. The amount of revenue generated is determined by the volume of tests ordered. The Company is paid directly by customers, and is not reliant on insurance reimbursement and related payments from third parties including patients.

The Company generated \$0.68 million revenues in the FY14 financial year with the majority of income (\$0.52 million) derived from the sale of *EasyScreen*™ diagnostic kits in Australia.

(b) Scientific consumables

Scientific consumables represent the cost of scientific equipment and consumables such as primers, test tubes, etc., purchased in the process of research and the development and commercialisation of products.

(c) Employment benefit expenses

Genetic Signatures employs 11 fulltime equivalent staff in research and development, operations, sales and marketing and administration.

(d) General administrative overheads

Administration expenses include corporate overheads, management and consultants and advisers board, legal and patent portfolio costs. They have increased as the Company has expanded its research activities into different products such as the *EasyScreen*™ brand. Identifying and implementing strategic relationships with offshore distributors and potential corporate partners and bringing those relationships to fruition has influenced the increase in corporate overheads and legal costs.

The Company expects these expenses will continue at similar levels in the short term, however, there will be a requirement to expand the corporate infrastructure with additional personnel, new reporting systems and costs required to support the public Company and to increase the commercial sales of products including implementing strategic relationships with offshore distributors.

(e) Finance costs

These costs have increased in order to finance the current capital structure via the issue of convertible notes to the Company's main financier. As the convertible notes were converted into ordinary shares of the Company in March 2014, finance costs are expected to be minimal following the raising of capital pursuant to this Prospectus.

(f) Income tax benefit

As Genetic Signatures incurs significant research and development expenditure, the Company is able to access the Australian Government research and development tax incentive grants which have ranged from approximately \$450,000 to \$600,000 between FY2012 and FY2014.

6.4. Historical statement of cash flows

Set out in the table below is a summary of the Company's historical statements of cash flows for FY12, FY13 and FY14.

Table 11: Historical statement of cash flows

	FY2012 Audited \$	FY2013 Audited \$	FY2014 Audited \$
Cash flows from operating activities			
Receipts from customers	259,428	283,773	709,154
Payments to suppliers and employees	(1,530,650)	(1,920,417)	(2,608,178)
Research and Development tax concession received	640,567	437,096	528,727
Interest received	15,297	12,639	15,560
Net cash used in operating activities	(615,358)	(1,186,909)	(1,354,737)
Cash flows from investing activities			
Payments for property, plant and equipment	(61,773)	(69,377)	(380,831)
Net cash used in investing activities	(61,773)	(69,377)	(380,831)
Cash flows from financing activities			
Proceeds from issue of convertible notes	750,000	1,000,000	500,000
Proceeds from issue of shares, net of costs	–	–	2,748,002
Proceeds from conversion of share options	–	–	192,800
Net cash provided by financing activities	750,000	1,000,000	3,440,802
Net (decrease)/increase in cash and cash equivalents	72,869	(256,286)	1,705,234
Cash and cash equivalents at the beginning of the financial year	330,890	403,759	147,473
Cash and cash equivalents at the end of the financial year	403,759	147,473	1,852,707

The following notes relate to the above table:

(a) Cash flow from operating activities

Historically, cash flows from operating activities have been negative due to the significant payment to suppliers and employees, sales, and general administrative expenses as the Company develops and commercialises its products for sale for both the domestic and offshore markets.

(b) Cash flow from investing activities

Human Genetic Signatures' major investing activities have been for the purchase of plant and equipment, specifically in relation to scientific equipment.

(c) Cash flow from financing activities

Financing activities in FY2014 include \$2.7 million raised from issued Shares, \$500,000 from the issue of convertible notes and \$192,800 received from the conversion of employees share options.

At 30 June 2014, the Company had cash and cash equivalents of \$1.85 million.

The convertible notes were converted to 10,387,336 ordinary shares in March 2014.

06. Financial Information

6.5. Historical and pro forma statement of financial position

The pro forma statement of financial position set out below has been prepared to illustrate the effects of the pro forma adjustments set out below, as if they had occurred on 30 June 2014.

The pro forma statement of financial position as at 30 June 2014 reflects the financial effect of the pro forma transactions.

Table 12: Pro forma statement of financial position

		Minimum Subscription		Maximum Subscription	
	Audited \$	Adjustments \$	Pro forma \$	Adjustments \$	Pro forma \$
As at 30 June 2014					
Current Assets					
Cash and cash equivalents	1,852,707	10,781,000	12,633,707	13,568,000	15,420,707
Trade and other receivables	124,575	–	124,575	–	124,575
Current tax assets	607,122	–	607,122	–	607,122
Total Current Assets	2,584,404	10,781,000	13,365,404	13,568,000	16,152,404
Non-Current Assets					
Property, plant and equipment	395,310	–	395,310	–	395,310
Total Non-Current Assets	395,310	–	395,310	–	395,310
Total Assets	2,979,714	10,781,000	13,760,714	13,568,000	16,547,714
Current Liabilities					
Trade and other creditors	186,848	–	186,848	–	186,848
Provisions	181,946	–	181,946	–	181,946
Total Current Liabilities	368,794	–	368,794	–	368,794
Non-Current Liabilities					
Provisions	1,681	–	1,681	–	1,681
Total Non-Current Liabilities	1,681	–	1,681	–	1,681
Total Liabilities	370,475	–	370,475	–	370,475
Net Assets	2,609,239	10,781,000	13,390,239	13,568,000	16,177,239
Equity					
Issued Capital	25,545,553	11,069,073	36,614,626	13,846,137	39,391,690
Accumulated losses	(22,936,314),31)	(288,073)	(23,224,387)	(278,137)	(23,214,451)
Total Equity	2,609,239	10,781,000	13,390,239	13,568,000	16,177,239

06. Financial Information

The following transactions and events contemplated in this Prospectus, referred to as the pro forma adjustments, which are to take place on or before the completion of the Offer, are presented as if they together with the Offer had occurred on or before 30 June 2014 and are set out below.

(a) Subscription amount

The Minimum Subscription is the issue of 30,000,000 new fully paid ordinary shares at \$0.40 each amounting to \$12 million. Cash expenses associated with the Offer (including offer management, advisory, legal, accounting and administrative fees as well as printing, and other expenses) are estimated to be \$1.22 million (exclusive of GST).

The Maximum Subscription is the issue of a further 7,500,000 Shares at \$0.40 each to raise a further \$3 million, bringing the total amount raised to \$15 million. Costs associated with raising the \$15 million are estimated at \$1.43 million (exclusive of GST).

(b) Pro forma cash and cash equivalents

The pro forma cash and cash equivalents as at 30 June 2014 includes the proceeds from both the minimum \$12 million and \$15 million capital raising scenarios after costs of the Offer, as set out below:

Table 13: Cash and Cash Equivalents

	Pro forma Minimum Subscription	Pro forma Maximum Subscription
Cash and cash equivalents at 30 June 2014	1,852,707	1,852,707
Proceeds from the shares issued under the Offer	12,000,000	15,000,000
Payment of the Offer costs	(1,219,000)	(1,432,000)
	\$12,633,707	\$15,420,707

(c) Pro forma share capital

The pro forma share capital as at 30 June 2014 reflects both the minimum \$12 million and \$15 million capital raising scenarios after deducting the costs of the Offer that are directly attributable to equity (the majority of which relate to offer management fees), as set out below:

Table 14: Share Capital

	Pro forma Minimum Subscription	Pro forma Maximum Subscription
Cash Share Capital at 30 June 2014	25,545,553	25,545,553
Proceeds from the shares issued under the Offer	12,000,000	15,000,000
Offer costs that are directly attributable to equity	(930,927)	(1,153,863)
	\$36,614,626	\$39,391,690

(d) ESP Shares

The 4,680,000 ESP Shares issued under the ESP (refer Section 9.8(d)) on or around the Listing Date have not been accounted for in the pro forma statement of financial position in accordance with Australian Accounting Standards as they are considered treasury shares given the limited recourse loans attached to their issue. This issue of the ESP Shares will only be recorded in equity upon settlement of the limited recourse loans by the holders, should this occur.

The ESP Share issue described above gives rise to a share based payment arrangement as the substantive effect of the structure is that of a share option, as holders have the option of whether to settle the loans attach to the shares depending on the Share price. This means that the fair value of the ESP Shares issued will be determined using an option pricing model and the amount being accounted for as a share based payment expense over the vesting period.

06. Financial Information

6.6. Management's discussion and analysis of the historical financial information

Genetic Signatures is a specialist molecular diagnostics company focussed on the development and commercialisation of proprietary platform technology, 3Base™, for the use in the detection of genetic variations within humans, predominantly into the diagnostic and research marketplace such as hospitals.

Genetic Signatures' historic operating results comprise revenue related to the research and commercialisation of identifying individual genetic signatures and the sale of associated products into the diagnostic and research marketplaces, expenses relating to scientific consumables, patent costs, employee benefits expense and general administrative costs.

Given the continued development of its products, the Company's operations have historically been very carefully managed within its available financing facilities from its principal financier, Asia Union Investments. Historically, cash has been raised through the issue of convertible notes to its principal shareholder and equity to sophisticated investors. As noted in Sections 6.3(e) and 6.4(c), all convertible notes (which accrued interest at 10% per annum) were converted into ordinary shares during the 2014 financial year.

The Company currently operates with a \$3 million cost base and a cash burn rate of \$150,000 per month, the majority of which relates to employee and executive salaries, scientific consumables and patent costs. It is hoped that with the continued success from the sale of *EasyScreen*™ diagnostic kits both in domestically and abroad, the Company will be cash neutral within 24 months.

The Company's balance sheet (or statement of financial position) at 30 June 2014 is debt free and dominated by cash at bank and the R&D tax receivable (which is subsequently received within three months of the year-end). The Company's liabilities are minimal and comprise normal day-to-day operating trade and other creditors and employee entitlements such as annual and long service leave.

Given the Company's history of losses, patent and trademark costs have been expensed as incurred, as have any costs in relation to research and development, hence there are no intangible assets currently sitting on the Company's balance sheet.

The Company included a contingent liability in the notes to its financial statements for FY14 relating to a potential requirement to repay a commercial ready grant given to it by the Australian Government Department of Industry. The grant totals \$1,580,000 and is required to be repaid if certain conditions are not met at any time on or before 31 December 2014. The conditions were met at the reporting date for the FY14 financial statements and therefore no liability for repayment of the grant was recognised in those statements. The conditions continue to be met at the Prospectus Date and will continue to be met up to, and including, 31 December 2014. After that date, the Company will not be required to repay the grant in any circumstances and accordingly will cease to be subject to this contingent liability.

6.7. Capitalisation and indebtedness

The below table sets out:

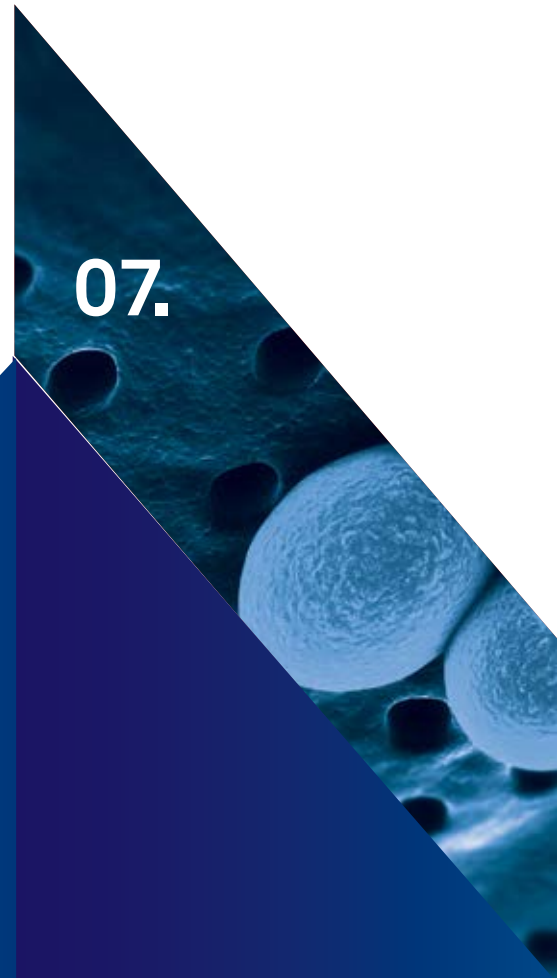
- cash, short term debt and total capitalisation of the Company as at 30 June 2014; and
- cash, short term debt, long term debt and total capitalisation of the Company as adjusted after giving effect to the impact of the Offer if the transaction had occurred on 30 June 2014.

Table 15: Capitalisation and Indebtedness

As at 30 June 2014	Actual \$	Pro forma Minimum Subscription	Pro forma Maximum Subscription
Cash	(1,852,707)	12,633,707	15,420,707
Current and long term debt	–	–	–
Total indebtedness	(1,852,707)	(12,633,707)	(15,420,707)
Issued capital	25,545,553	36,614,626	39,391,690
Accumulated losses	(22,936,314)	(23,224,387)	(23,214,451)
Total equity	2,609,239	13,390,239	16,177,239
Total capitalisation and indebtedness	756,532	756,532	756,532

Investigating Accountant's Report

07.



Investigating Accountant's Report



Tel: +61 2 9251 4100
Fax: +61 2 9240 9821
www.bdo.com.au

Level 11, 1 Margaret St
Sydney NSW 2000

Australia

The Directors
Genetic Signatures Limited
Level 7
207 Kent Street
SYDNEY NSW 2000

7 November 2014

Dear Directors

INVESTIGATING ACCOUNTANT'S REPORT

INTRODUCTION

BDO East Coast Partnership ("BDO") has been engaged by Genetic Signatures Limited ("Genetic Signatures") to prepare this Investigating Accountant's Report ("Report") in relation to certain financial information of Genetic Signatures for inclusion in a prospectus proposed to be issued on or about 3 November 2014 ("Prospectus"). The Prospectus is being issued in relation to an offer of shares in Genetic Signatures.

Unless stated otherwise in this Report, expressions defined in the Prospectus have the same meaning in this Report.

This Report has been prepared for inclusion in the Prospectus. We disclaim any assumption of responsibility for any reliance on this Report or on the financial information to which it relates for any purpose other than that for which it was prepared.

FINANCIAL INFORMATION

This Report relates to the following financial information of Genetic Signatures as set out in Section 6 of the Prospectus:

- The audited Statement of Profit or Loss and Other Comprehensive Income for the years ended 30 June 2014 and 30 June 2013 (including comparative information for the year ended 30 June 2012);
- The audited Statement of Cash Flow for the years ended 30 June 2014 and 30 June 2013 (including comparative information for the year ended 30 June 2012);
- The Consolidated Statement of Financial Position as at 30 June 2014 and 30 June 2013 (including comparative information for the year ended 30 June 2012);
(Hereafter the 'Historical Financial Information'.)
- The Pro Forma Consolidated Statement of Financial Position as at 30 June 2014;
(Hereafter the 'Pro Forma Financial Information'.)
(Collectively the 'Financial Information'.)

BDO East Coast Partnership ABN 83 236 985 726 is a member of a national association of independent entities which are all members of BDO (Australia) Ltd ABN 77 050 110 275, an Australian company limited by guarantee. BDO East Coast Partnership and BDO (Australia) Ltd are members of BDO International Ltd, a UK company limited by guarantee, and form part of the international BDO network of independent member firms. Liability limited by a scheme approved under Professional Standards Legislation (other than for the acts or omissions of financial services licensees) in each State or Territory other than Tasmania.



Scope of Review of the Historical Financial Information

You have requested BDO to review the Historical Financial Information included in the Prospectus.

The Historical Financial Information has been prepared in accordance with the stated basis of preparation, being the recognition and measurement principles contained in the Australian Accounting Standards and the company's adopted accounting policies. The Historical Financial Information has been extracted from the financial report of Genetic Signatures for the years ended 30 June 2014 and 30 June 2013 (including comparative information for the year ended 30 June 2012), which were audited by BDO in accordance with the Australian Auditing Standards. BDO issued unqualified audit opinions on the financial statements but did raise an Emphasis of Matter paragraph in relation material uncertainties with respect to the going concern assumption. The Historical Financial Information is presented in the Prospectus in an abbreviated form, insofar as it does not include all of the presentation and disclosures required by Australian Accounting Standards and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the Corporations Act 2001.

Scope of Review of the Pro Forma Financial Information

You have requested BDO to review the Pro Forma Financial Information included in the Prospectus.

The Pro Forma Financial Information has been derived from the Historical Financial Information of Genetic Signatures, after adjusting for the completion of the offer, as described in Section 6 of the Prospectus. The stated basis of preparation is the recognition and measurement principles contained in Australian Accounting Standards applied to the Historical Financial Information and the events or transactions to which the pro forma adjustments relate, as if those events or transactions had occurred as at 30 June 2014. Due to its nature, the Pro Forma Financial Information does not represent Genetic Signature's actual or prospective financial position.

Directors' Responsibility

The directors of Genetic Signatures are responsible for the preparation of the Financial Information, including the selection and determination of pro forma adjustments made to the Historical Financial Information and included in the Pro Forma Financial Information. This includes responsibility for such internal controls as the directors determine are necessary to enable the preparation of Financial Information that is free from material misstatement, whether due to fraud or error.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Financial Information based on the procedures performed and the evidence we have obtained. We have conducted our engagement in accordance with the Standard on Assurance Engagement ASAE 3450 *Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information*.

A review consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Our engagement did not involve updating or re-issuing any previously issued audit or review report on any financial information used as a source of the Financial Information.



Review statement on the Financial Information

Historical Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Historical Financial Information, as described in Section 6 of the Prospectus and comprising:

- The audited Statement of Profit and Loss and Other Comprehensive Income for the years ended 30 June 2014 and 30 June 2013 (including comparative information for the year ended 30 June 2012);
- The audited Statement of Cash Flow for the years ended 30 June 2014 and 30 June 2013 (including comparative information for the year ended 30 June 2012);
- The audited Statement of Financial Position as at 30 June 2014,

is not presented fairly, in all material respects, in accordance with the stated basis of preparation as described in Section 6 of the Prospectus.

Pro Forma Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Pro Forma Financial Information, as described in Section 6 of the Prospectus and comprising the Pro Forma Statement of Financial Position as at 30 June 2014 is not presented fairly, in all material respects, in accordance with the stated basis of preparation as described in Section 6 of the Prospectus.

SUBSEQUENT EVENTS

Apart from the matters dealt with in this Report, and having regard to the scope of this Report and the information provided by the Directors, to the best of our knowledge and belief no material transaction or event outside of the ordinary business of Genetic Signatures not described in the Prospectus, has come to our attention that would require comment on, or adjustment to, the information referred to in our Report or that would cause such information to be misleading or deceptive.

INDEPENDENCE

BDO is a member of BDO International Ltd. BDO does not have any interest in the outcome of the Prospectus other than in connection with the preparation of this Report and participation in due diligence procedures, for which professional fees will be received. From time to time, BDO provides Genetic Signatures with certain other professional services for which normal professional fees are received.

GENERAL ADVICE WARNING

This Report has been prepared, and included in the Prospectus, to provide investors with general information only and does not take into account the objectives, financial situation or needs of any specific investor. It is not intended to be a substitute for professional advice and potential investors should not make specific investment decisions in reliance on the information contained in this Report. Before acting or relying on any information, potential investors should consider whether it is appropriate for their objectives, financial situation or needs.

Without modifying our conclusions, we draw attention to section 1 of the Prospectus, which describes the purpose of the Financial Information, being for inclusion in the Prospectus. As a result, the Financial Information may not be suitable for use for another purpose.



BDO has consented to the inclusion of this Report in the Prospectus in the form and context in which it is included. At the date of this Report this consent has not been withdrawn. However, BDO has not authorised the issue of the Prospectus. Accordingly, BDO makes no representation regarding, and takes no responsibility for, any other statements or material in or omissions from the Prospectus.

Yours faithfully

BDO East Coast Partnership

A handwritten signature in black ink, appearing to read 'J Bresolin', written over a faint, stylized 'BDO' watermark.

John Bresolin
Partner



08.

Intellectual Property Report

08. Intellectual Property Report

Allens

Patent & Trade Mark Attorneys
Deutsche Bank Place
Corner Hunter and Phillip Streets
Sydney NSW 2000 Australia
T +61 2 9230 4000
F +61 2 9230 5333
www.allens.com.au

GPO Box 50
Sydney NSW 2001 Australia
DX 105 Sydney

ABN 59 727 365 753

Allens > Linklaters

31 October 2014

The Directors
Genetic Signatures Limited
Level 7
207 Kent Street
Sydney NSW 2000

Dear Sirs

Intellectual Property Report

1 Background and Scope

Allens Patent & Trade Mark Attorneys (**Allens**) has been instructed by Genetic Signatures Limited (**Genetic Signatures**) (formally Human Genetic Signatures Pty Ltd) to prepare this Report for inclusion in a Prospectus to be issued by Genetic Signatures. Allens has been instructed to provide the details and status of patent and trade mark matters in the intellectual property portfolio referred to in this report.

The report is current as at 1 October 2014. Allens is not aware of any material changes expected to occur to the status of the matters outlined below, except where indicated.

2 Overview of Intellectual Property (IP) Protection

Intellectual Property (**IP**) includes patents, registered designs, trade marks, copyright, plant breeders' rights, and know how or trade secrets.

This Report deals only with IP in the form of patent applications, patents and registered trade marks.

2.1 Patents

(a) What is a patent?

A patent is a monopoly granted by a government for a period of up to 20 years. A patent provides an enforceable legal right to prevent others from exploiting an invention being a product, device, system, substance, process or method in the country of grant.

For an invention to be patentable, it must be novel, involve an inventive step (not obvious) and useful at the time of filing the initial patent application for that invention. At 18 months from the initial patent application, the detailed description of the invention is published.

In order to secure patent protection, a patent application is filed with the Patent Office in each country of interest, the application is considered under the patent laws of that country, and a patent will issue if the application meets the patentability criteria of that country.

After a patent expires or lapses, anyone can then use the invention.

Our Ref TYDS:205107954
tyds A0130468017v3 205107954 31.10.2014

Our associated law firm Allens operates in alliance with Linklaters LLP.

Genetic Signatures Limited

Allens & Linklaters

(b) Patent validity

The grant of a patent does not guarantee validity and a patent may be challenged by third parties at a Patent Office by re-examination in some countries or through the courts by revocation proceedings.

The grant of a valid patent does not mean that the invention may be exploited in a given country without infringing third party IP rights in that country.

(c) Patent infringement

The owner of a patent has the exclusive right to prevent others from making, selling, importing or otherwise using the patented invention for the life of the patent.

Patent infringement occurs when someone makes, hires, uses, imports or sells the patented invention, or a product made by a patented method, or offers to do these things, within the country covered by the patent without the permission of the owner of the patent.

(d) Renewal fees

Patent applications and patents are subject to payment of renewal fees over the life of the patent in order to maintain patent rights. If the renewal fees are not paid then the application or patent may lapse.

Allens has determined from its records that at the time of this Report there are no overdue renewal fees payable in respect to the patent portfolio.

2.2 International Conventions

Australia is a signatory to a number of international conventions which relate to intellectual property. Many of these conventions are administered by the World Intellectual Property Organisation (WIPO), which is an agency of the United Nations. Some of the more important conventions are listed below.

(a) Paris Convention

The substantive provisions of the Paris Convention fall into three main categories: national treatment, right of priority, common rules.

Under the provisions on national treatment, the Convention provides that, as regards the protection of industrial property, each Contracting State must grant the same protection to nationals of other Contracting States that it grants to its own nationals. Nationals of non-Contracting States are also entitled to national treatment under the Convention if they are domiciled or have a real and effective industrial or commercial establishment in a Contracting State.

The Convention provides for the right of priority in the case of patents (and utility models where they exist), marks and industrial designs. This right means that, on the basis of a regular first application filed in one of the Contracting States, the applicant may, within a certain period of time (12 months for patents and utility models; 6 months for industrial designs and marks), apply for protection in any of the other Contracting States. These subsequent applications will be regarded as if they had been filed on the same day as the first application. In other words, they will have priority (hence the expression "right of priority") over applications filed by others during said period of time for the same invention, utility model, mark or industrial design. Moreover, these subsequent applications, being based on the first application, will not be affected by any event that takes place in the interval, such as the publication of an invention or the sale of articles bearing a mark or incorporating an industrial design. One of the great practical advantages of this provision is that applicants seeking protection in several countries are not required to present all of their applications at the same time but have 6 or 12 months to decide in which countries they wish to seek protection, and to organize with due care the steps necessary for securing protection.

Genetic Signatures Limited

Allens & Linklaters

The Convention lays down a few common rules that all Contracting States must follow. The most important are:

(i) Patents

Patents granted in different Contracting States for the same invention are independent of each other: the granting of a patent in one Contracting State does not oblige other Contracting States to grant a patent; a patent cannot be refused, annulled or terminated in any Contracting State on the ground that it has been refused or annulled or has terminated in any other Contracting State.

The inventor has the right to be named as such in the patent.

(ii) Marks.

The Paris Convention does not regulate the conditions for the filing and registration of marks which are determined in each Contracting State by domestic law. Consequently, no application for the registration of a mark filed by a national of a Contracting State may be refused, nor may a registration be invalidated, on the ground that filing, registration or renewal has not been effected in the country of origin. The registration of a mark obtained in one Contracting State is independent of its possible registration in any other country, including the country of origin; consequently, the lapse or annulment of the registration of a mark in one Contracting State will not affect the validity of the registration in other Contracting States.

Where a mark has been duly registered in the country of origin, it must, on request, be accepted for filing and protected in its original form in the other Contracting States. Nevertheless, registration may be refused in well-defined cases, such as where the mark would infringe the acquired rights of third parties; where it is devoid of distinctive character; where it is contrary to morality or public order; or where it is of such a nature as to be liable to deceive the public.

If, in any Contracting State, the use of a registered mark is compulsory, the registration cannot be cancelled for non-use until after a reasonable period, and then only if the owner cannot justify this inaction.

Each Contracting State must refuse registration and prohibit the use of marks that constitute a reproduction, imitation or translation, liable to create confusion, of a mark used for identical and similar goods and considered by the competent authority of that State to be well known in that State and to already belong to a person entitled to the benefits of the Convention.

(iii) Industrial Designs.

Industrial designs must be protected in each Contracting State, and protection may not be forfeited on the ground that articles incorporating the design are not manufactured in that State.

(b) Patent Cooperation Treaty (PCT)

The Patent Cooperation Treaty enables applicants to seek patent protection for an invention simultaneously in each of a large number of countries by filing an 'international' patent application.

Such an application may be filed by anyone who is a national or resident of a PCT contracting state.

The filing of a PCT application automatically designates all PCT contracting states. The effect of the international application in each designated state is the same as if a national patent application had been filed with the national patent office in that state.

The practical advantage of using the PCT is that the effective filing date and associated fees for each of the designated countries can be deferred by a further 18 or 19 months (country dependent) from the initial 12 month priority deadline available under the Paris Convention.

An application is in the "international phase" from that date on which the PCT application is filed until such time that national applications (or in the case of the European Patent Convention, regional

Genetic Signatures Limited

Allens & Linklaters

applications) are filed. Once the national and/or regional applications are filed, the application is in the 'national phase'.

(i) International Search Report

The PCT is subjected to an 'international search'. The international search is carried out by one of the major patent offices and results in an international search report (ISR) which includes a listing of published documents that may affect patentability of the invention claimed in the international application.

(ii) Written opinion/international preliminary report on patentability (IPRP)

In addition to the ISR, a preliminary and non-binding, written opinion on whether the invention appears to meet patentability criteria in light of the search report results is issued.

The ISR and written opinion are communicated to the applicant who, after evaluating their content, may decide to withdraw the application, if for example, the content of the report and opinion suggest that the granting of patents is unlikely. Alternatively, the applicant may decide to amend the claims in the application to address any issues raised in the opinion.

The applicant may respond to the written opinion by filing a request for "international preliminary examination". The response may include amendments to the application, for example, in order to more clearly distinguish the invention from the disclosures made in documents identified in the search report. The result of the preliminary examination is an "international preliminary report on patentability" (IPRP) which contains, a preliminary and non-binding opinion on the patentability of the claimed invention.

The international search and written opinion is intended to provide a preliminary and non-binding opinion only on patentability of the claimed invention, and is not intended to indicate whether commercial exploitation of the applicant's invention may infringe the rights of others.

(c) European Patent Convention (EPC)

The European Patent Convention (EPC) provides a legal framework for granting of European patents via a single harmonized procedure before the European Patent Office. A single patent application is filed at the European Patent Office in one language, the invention is searched and examined, and a patent is ultimately granted. The European patent is then validated and maintained in one or more EP states of interest.

The EPC covers: Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Liechtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta, The Netherlands, Norway, Poland, Portugal, Romania, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

(d) National patents

There is no such thing as a 'global or world patent'. In order to obtain protection for an invention in Australia and overseas, a national patent application must be filed in each jurisdiction of interest.

Most national patent offices will conduct their own comprehensive search and examination to determine whether the application meets the national requirements for patentability. Such search and examination may result in objections being raised. If an objection raised by a national patent office cannot be overcome by amendment to the claims and/or by argument, the application will be refused.

Genetic Signatures Limited

Allens & Linklaters

The grant of a patent in one country does not guarantee the grant of a patent for the same invention in another country. Similarly, a challenge to the validity of a patent must generally be made in the country of interest. It is only on the grant of a patent in a given country that the patentee will have enforceable rights in that country for the invention defined in the claims of the granted patent.

(e) Overview of the patenting process

The patenting process involves a number of steps. The typical first step is to file a provisional patent application. A provisional patent application establishes a first 'priority date' for the invention described in the application and provides a period of 12 months within which the invention may be further developed before filing a complete patent application. A provisional patent application is not examined, lapses after a period of 12 months, and is only published if it is the subject of a priority claim in a complete application.

In order to maintain the priority date established by the provisional patent application, a complete application must be filed before the end of the 12 month period. Where patent protection is required in number of countries, the complete application may be a PCT application pursuant to the Patent Cooperation Treaty described above. The PCT application defers the national application filing deadline in countries which are a signatory to the PCT for a further 18 or 19 months.

After the international phase of the PCT application which involves the international search and written opinion as described above, the 'national phase' (or 'regional phase' in the case of the EPC), is entered in the countries of interest. Once the national phase is entered, each application proceeds to examination before the respective national patent office to determine whether the application meets the national requirements for patentability.

In some situations, a PCT application is not filed and complete applications are filed before the end of the 12 month period directly in the countries of interest under the Paris Convention as described above.

2.3 Trade Marks

(a) What is a trade mark?

A trade mark is a sign used to distinguish the goods and services of one trader from those of another.

A registered trade mark is a right that is granted in a given country or region for a sign such as letter, number, word, phrase, sound, smell, shape, logo, picture and/or aspect of packaging. A registered trade mark is legally enforceable and gives the owner exclusive rights to commercially use, licence or sell the trade mark for the goods and services in the country or region in which it is registered.

A trade mark can be used prior to seeking registration. In some countries, the first person to register the trade mark has the legal rights to the trade mark in that country, even if it has been previously used by another party.

Rights in an unregistered trade mark only arise where a substantial reputation has been developed in the relevant trade mark by use of the trade mark in a given geographical area.

(b) Trade mark renewal

A trade mark is registered initially for 10 years and, if continued to be used for the goods or services in the country of the registration, can be maintained indefinitely by payment of periodic renewal fees (usually every 10 years) in the country of registration.

Genetic Signatures Limited

Allens & Linklaters

(c) Trade mark infringement

To establish trade mark infringement it is necessary to establish that the potentially infringing trade mark is being used on the same or similar goods or services for which the trade mark is registered and the alleged infringer's brand or trade mark is sufficiently similar to the registered trade mark to cause confusion in the market place regarding the origin of the product.

(d) Madrid Protocol

An application for international registration (an "international application") may be filed by a national of a country which is party to the Madrid Agreement or the Madrid Protocol. The one application, based on a home country registration, can be filed designating one or more countries of the Madrid Agreement.

International registration has several advantages for the owner of the trade mark. After registering the mark in the home country, or filing an application for registration, there is only the need to file one international application, in one language, and pay one fee instead of filing separately in the trade mark offices of the various contracting parties in different languages and paying a separate fee in each office.

A further important advantage is that changes subsequent to registration, such as a change in the name or address of the holder, or a change (total or partial) in ownership or a limitation of the list of goods and services may be recorded with effect for several designated contracting parties through a single simple procedural step and the payment of a single fee. Moreover, there is only one expiry date and only one registration to renew.

(e) Overview of trade mark process

An application to register a trade mark is filed at a national trade mark office providing a copy of the trade mark together with a description of the goods and or services for which the trade mark will be used. These goods or services fall into one or more International Classes (1 to 45).

The application is examined to ensure that the trade mark sought is adapted to distinguish the goods or services, is not the same or similar to other trade marks registered for the same of similar goods or services. If the trade mark meets the registration criteria, the application will be allowed, published and open to opposition by third parties, then registered for an initial 10 years.

Foreign trade mark applications may be filed within 6 months to claim priority from the first application, or filed at any time as the business or commercialization efforts expand to other countries or regions.

3 Genetic Signatures Patent Portfolio

Annexure 1 to this Report provides details of the patents and patent applications relevant to the Genetic Signatures patent portfolio. Allens Patent & Trade Mark Attorneys has acted for Genetic Signatures Limited (formally Human Genetic Signatures Pty Ltd) in prosecuting and securing patents rights for its innovation.

As shown in Annexure 1, there are patent families for nine inventions in the name of Human Genetic Signatures Pty Ltd and owned by Genetic Signatures Limited.

3.1 Treatment of Nucleic Acid

This patent family claims priority from United States patent application no 10/428310 filed on 2 May 2003 and is derived from International patent application no PCT/AU2004/000549.

Genetic Signatures Limited

Allens & Linklaters

The invention is directed to a method for treating methylated nucleic acid comprising: providing an alkali environment to a nucleic acid sample; reacting the nucleic acid sample with a bisulphite reagent and incubating the reaction so as to form a treated nucleic acid sample where methylated nucleotides in the nucleic acid sample remain unchanged while unmethylated nucleotides are converted to another form; diluting the treated nucleic acid sample so as to reduce salt concentration to a level which will not substantially interfere with a nucleic acid precipitating step; precipitating the diluted treated nucleic acid to substantially remove any unwanted reagents or diluents from the treated nucleic acid sample; and carrying out de-sulphonation of the precipitated treated nucleic acid at a temperature from 70°C to 95°C by adjusting the precipitated treated nucleic acid to a pH of between 10 and less than 12.5 to remove sulphonate groups present on the treated nucleic acid and obtain a nucleic acid sample substantially free of sulphonate groups.

Patents have been granted in Australia, China, Europe (Germany, France, United Kingdom), Japan and the United States of America. The patents will expire on 29 April 2024.

3.2 Nucleic Acid Detection Assay

This patent family claims priority from Australian provisional patent application no 2003904832 filed on 4 September 2003 and is derived from International patent application no PCT/AU2004/001196.

The invention is directed to a method for determining the methylation status of a potential methylation site in genomic DNA comprising treating genomic DNA with a modifying agent which modifies cytosine bases but does not modify 5-methyl-cytosine bases under conditions to form a modified DNA template containing a potential methylation site; providing a first clamp containing a first capture sequence complementary to a region flanking one side of the potential methylation site in the modified DNA template; providing a second clamp containing a second capture sequence complementary to a region flanking the other side of the potential methylation site in the modified DNA template; allowing the first clamp and the second clamp to hybridise to the modified DNA template; ligating the hybridised first and second clamps to form a probe spanning the potential methylation site in the modified DNA template; digesting the DNA template; and detecting the probe and determining the methylation status of the potential methylation site in the modified genomic DNA.

Patents have been granted in Australia, Canada, China, Europe (Germany, France, United Kingdom), Japan and the United States of America. The patents will expire on 03 September 2024.

3.3 Amplification Blocker Comprising Intercalating Nucleic Acids (INA) Containing Intercalating Pseudonucleotides (IPN)

This patent family claims priority from Australian provisional patent application no 2004905213 filed on 10 September 2004 and is derived from International patent application no PCT/AU2005/001374.

The invention is directed to a method for detecting the methylation status of a target region of a nucleic acid molecule comprising: treating the nucleic acid molecule with an agent which modifies cytosine bases but does not modify 5-methyl-cytosine bases under conditions to form a modified nucleic acid template; providing a first amplification blocker comprising an intercalating nucleic acid (INA) containing two or more internal intercalating pseudonucleotides (IPNs) to an amplification reaction, the first blocker being complementary to the unmethylated target region on a first strand of the modified nucleic acid template; providing a second amplification blocker comprising an INA containing two or more IPNs to the amplification reaction, the second blocker being complementary to a region on the complementary second strand downstream of the first strand of the modified nucleic acid template; providing a first primer complementary to nucleic acid region upstream from the target region on the first strand of the modified nucleic acid template; providing a second primer complementary to nucleic acid region downstream from the second blocker region on the

Genetic Signatures Limited

Allens < Linklaters

complementary second strand of the first strand of the modified nucleic acid template; and carrying out an amplification reaction, wherein if the target region is methylated there will be an amplification product and if the target region is unmethylated there will be no amplification product.

Patents have been granted in Australia, China, Europe (Denmark, Germany, France, United Kingdom), Japan and the United States of America. The patent application in Canada has been allowed. The patents will expire on 09 September 2025.

3.4 Methods for Simplifying Microbial Nucleic Acids by Chemical Modification of Cytosines

This patent family claims priority from Australian provisional patent application no 2004906915 filed on 3 December 2004 and is derived from International patent application no PCT/AU2005/001840.

The invention is directed to a method for detecting a microorganism comprising: reducing the complexity of a microbial genome or a microbial nucleic acid by generating a derivative form of the microbial genome or a derivative form of the microbial nucleic acid in which the positions naturally occupied by cytosines are occupied by uracils in the derivative form of the microbial genome or derivative form of the microbial nucleic acid by treating the microbial genome or a microbial nucleic acid with an agent selected from bisulphite, acetate or citrate that modifies cytosine to uracil; wherein the derivative form of the microbial genome or derivative form of the microbial nucleic acid contains a nucleic acid being specific for a microorganism having the microbial genome or the microbial nucleic acid, and detecting the microbial-specific nucleic acid, wherein detection of the microbial-specific nucleic acid is indicative of the presence of a microorganism having the microbial genome or the microbial nucleic acid.

Patents have been granted in Australia, Canada, China, Europe (Denmark, Germany, France, Ireland, Spain, United Kingdom), India, Indonesia, Israel, Japan Korea, Malaysia, Mexico, New Zealand, Singapore, South Africa and the United States of America. A patent application is pending in Brazil. The patents will expire on 05 December 2025.

3.5 Isothermal Strand Displacement Amplification Using Primers Containing A Non-Regular Base

This patent family claims priority from United States provisional patent application no 60/685697 filed on 26 May 2005 and is derived from International patent application no PCT/AU2006/000698.

The invention relates to a method for isothermal DNA amplification comprising: providing to the DNA to be amplified an amplification mix comprising: a first primer being at least partially complementary to a region of DNA having a CpG dinucleotide, the first primer containing at least one deoxyinosine and does not include a ribonucleotide, a second primer being at least partially complementary to a region of DNA having a CpG dinucleotide, the first primer containing at least one deoxyinosine and does not include a ribonucleotide, an exonuclease deficient DNA polymerase, an enzyme capable of strand displacement, an enzyme that recognises a deoxyinosine in double-stranded DNA and causes a nick in one DNA strand at or near the deoxyinosine; and amplifying the DNA substantially without thermal cycling, wherein deoxyinosine substitutes the position of guanine in a CpG dinucleotide of the DNA.

Patents have been granted in Australia, Canada, China, Europe (Germany, France, United Kingdom) and the United States of America. The patents will expire on 25 May 2026.

Genetic Signatures Limited

Allens & Linklaters

3.6 Assay for a Health State

This patent family claims priority from United States provisional patent application no 60/717148 filed on 14 September 2005 and is derived from International patent application no PCT/AU2006/001349.

The invention relates to an assay for determining a health state of a subject comprising: treating a sample from a subject with an agent that modifies unmethylated cytosine to form derivative viral nucleic acid from viral nucleic acid in the sample and derivative genomic nucleic acid from genomic nucleic acid in the sample; providing primers capable of allowing amplification of a desired virus-specific nucleic acid molecule from the derivative viral nucleic acid; providing primers capable of allowing amplification of a target genomic nucleic acid molecule from the derivative genomic nucleic acid; carrying out an amplification reaction on the treated sample; and assaying for presence of amplified desired viral-specific nucleic acid and amplified target genomic nucleic acid products, wherein the presence of amplified desired viral-specific nucleic acid and the presence of an amplified target genomic product is indicative of a health state of the subject.

Patents have been granted in Australia, Canada, China, Europe (Denmark, Germany, France, United Kingdom), Japan and the United States of America. A patent application is pending in Canada. The patents will expire on 14 September 2026.

3.7 Enzymes for Amplification and Copying Bisulphite Modified Nucleic Acids

This patent family claims priority from Australian provisional patent application no 2007906490 filed on 27 November 2007 and is derived from International patent application no PCT/AU2008/001751.

The invention relates to a method for copying or amplifying bisulphite treated nucleic acid comprising: bisulphite treating a nucleic acid; and copying or amplifying the bisulphite treated nucleic acid using enzyme Pol A DNA polymerase variant 5D4 wherein 5D4 copies or amplifies bisulfite modified nucleic acid more effectively with less or no errors compared to Taq polymerase.

Patents have been granted in Australia, Europe (Germany, France, United Kingdom), Japan and the United States of America. A patent application is pending in Canada. The patents will expire on 27 November 2028.

3.8 Bisulphite Treatment of RNA

This patent family claims priority from Australian provisional patent application no 2007906651 filed on 5 December 2007 and is derived from International patent application no PCT/AU2008/001796.

The invention relates to a method for bisulphite treating RNA comprising: reacting RNA with a bisulphite reagent at 50-90°C for 5-60 minutes so as to form treated RNA with minimal or no degradation of the RNA; and recovering the treated RNA.

A patent has issued in Australia and the patent will expire on 5 December 2027.

3.9 Molecular Detection Assay

This patent family is derived from International patent application no PCT/AU2011/001156 filed on 7 September 2011.

The invention relates to a molecular detection assay comprising: treating a biological sample directly with a bisulphite agent under conditions that allow cell disruption and nucleic acid treatment; removing the bisulphite agent from the treated sample; and detecting a target nucleic acid in the treated sample.

Genetic Signatures Limited

Allens < Linklaters

Patent applications are pending in Australia, Brazil, Canada, China, Egypt, Europe, India, Indonesia, Israel, Japan Korea, Malaysia, Mexico, New Zealand, Singapore, South Africa, United Arab Emirates and the United States of America. Patents granted for the invention will expire on 07 September 2031.

4 Signatures Trade Mark Portfolio

Annexure 2 to this Report provides details of the trade marks relevant to the Genetic Signatures trade mark portfolio. Allens Patent & Trade Mark Attorneys has acted for Genetic Signatures Limited (formally Human Genetic Signatures Pty Ltd) in prosecuting and securing its trade mark rights.

As shown in Annexure 2, there are two registered trade marks in the name of Human Genetic Signatures Pty Ltd and owned by Genetic Signatures Limited.

4.1 METHYLEASY

A trade mark application for classes 1 and 5 was first filed in Australia on 8 January 2004 and was registered on 7 September 2004. This registration has been renewed until 8 January 2024.

The trade mark is also registered in China, European Union, Japan, Korea, Singapore and the United States of America.

4.2 3BASE

A trade mark application for classes 1 and 5 was first filed in Australia on 14 August 2008 and registered on 26 March 2009. This registration has been renewed until 14 August 2018.

The trade mark is also registered in China and the United States of America.

5 Limitations and Disclaimers

5.1 Search Limitations

Prior art (or 'novelty') searches conducted by various patent offices to determine whether a patent should be granted are limited to the time periods and the geographical areas covered. Thus, databases used in searching may not include older published documents and may not cover certain jurisdictions. Moreover, searches cannot locate documents which have not been published at the time of conducting the search. In most countries, publication of a patent application does not occur until 18 months from the earliest priority date. Delays between official publication and the implementation of information onto the relevant databases can also occur.

All searches are limited to the accuracy and scope of the databases searched together with the search criteria adopted. Accordingly, whilst the searches conducted by various patent offices provide a reasonable indicator of patentability prospects, these and other factors make it not possible to guarantee that every relevant prior art record has been identified and considered. Accordingly, any conclusions drawn regarding the validity of claims in a patent based on patent office searches should be regarded as indicative rather than conclusive in nature.

No search can be considered as entirely conclusive or exhaustive as some forms of prior art such as public use, oral disclosures, prior commercial exploitation and prior publication in non-patent literature, cannot be searched systematically.

The commercialization or secret use of an invention that is subject of a patent application can affect the patentability of the invention and the validity of any patent granted on the invention. Such commercialization or secret use is unlikely to be identified by documentary searches of publicly accessible databases.

Genetic Signatures Limited

Allens & Linklaters

The views expressed in relation to relevance of prior art cited in various patent office searching and examination reports are based on the relevant patent document classification attributed in such reports.

Searching may not disclose other matters relevant to validity including, for example, matters relevant to obviousness or inventive step.

Examination and search reports in one country are not binding in other countries.

5.2 Duty of Disclosure

In some jurisdictions there is a duty to disclose certain information, such as examination reports from other patent offices or prior art known to the applicant or its agents, to the relevant patent office while an application is pending. Failure to disclose this information in accordance with these obligations may adversely affect the validity or enforceability of the relevant patent.

5.3 Grant of Patent Provides No Guarantee of Validity

Grant of a patent by a national patent office provides an indication rather than a guarantee of its validity. In most jurisdictions, a patent application is subject to substantive examination prior to grant. Although this process confers an initial presumption of validity, in most countries that 'presumption' carries no binding legal weight and a patent may be challenged at any time after grant by way of revocation proceedings undertaken in a court of competent jurisdiction. In some countries a granted patent may be subjected to re-examination by the relevant patent office, particularly if relevant prior art is identified that was not considered during the initial examination of the application.

5.4 Grant of Patent Provides No Guarantee of Non-Infringement

Grant of a patent provides no guarantee that the patentee is entitled to commercially exploit the patented invention. For example, the working of an invention, even if validity patented, may nevertheless infringe an earlier patent or other intellectual property rights in the country of exploitation.

5.5 Entitlement to Priority

In order for an invention disclosed in a patent to be entitled to the priority date of a corresponding provisional application, there must have been (for Australia under the current patent law) a 'real and reasonably clear disclosure' of such material in the provisional application. Similar provisions apply in other jurisdictions. Subject matter not so disclosed is not entitled to the claim to priority which may affect patentability of an invention or validity of any patent that may be granted in respect of the invention.

5.6 Scope of Claims May Vary During Examination

It may be possible, and it is often necessary, during examination of a patent application to define the invention more specifically by amendment of the claims to distinguish the invention over relevant prior art or to meet national claiming requirements. Accordingly, there may be variations in the claims between countries reflecting in part different national examination procedures and threshold patentability requirements. Such amendments may affect the scope and hence the commercial significance of the resultant patent protection.

5.7 Enforcement of Patent Rights

Upon grant of a patent, the patentee may initiate infringement proceedings against an alleged infringer of the patent. In many jurisdictions, damages for infringement may be awarded for infringements occurring from the date of publication of the patent specification, provided certain criteria are met.

Genetic Signatures Limited

Allens < Linklaters

5.8 Changes to Patent Law

From time to time the statutory basis governing patents in particular jurisdictions may be amended by the relevant authority, typically the government of that jurisdiction. In addition, the practical effect of the statute may evolve by development of case law, that is, by the interpretation of the statute by the relevant courts. The Australian government recently enacted changes to the *Patents Act 1990*. The government's stated intention in introducing those legislative changes was to 'raise the bar' on patentability requirements. The changes will apply to all Australian applications for which a request for examination is filed after 15 April 2013. The changes will not apply to any Australian patent application for which a request for examination was filed before 15 April 2013, nor will they apply to any granted patent arising from such an application. Genetic Signatures took action prior to 15 April 2013 to ensure that, as far as was practical, the 'pre-15 April 2013 legislation' rather than the new legislation is applicable to its Australian patent applications that have been filed as of that date.

5.9 Reliance on Information

The preparation of this Report has included access to and reliance on information contained in publically available databases relevant to the patents and patent applications in Annexure 1 and the trade marks in Annexure 2. Allens is not responsible for the accuracy of information available in public databases and cannot guarantee the accuracy of those databases.

6 Allens' Interest

Allens is engaged by Genetic Signatures for professional patent and trade mark services. Allens has been and continues to be involved in the preparation, filing, and prosecution of patent applications and maintaining granted patents, including those set out in Annexure 1. Allens has been involved in the preparation, filing, and prosecution of trade mark applications and maintaining registered trade marks, including those set out in Annexure 2.

7 Consent

Consent for the inclusion of this Report in a Prospectus to be issued by Genetic Signatures, in the form in which it now appears, has been granted by Allens and has not been revoked as at the date of this Report.

Yours sincerely



Dr Trevor Davies

Partner

Allens Patent & Trade Mark Attorneys

Trevor.Davies@allens.com.au

T +61 2 9230 4007

Genetic Signatures Limited

Allens & Linklaters

Annexure 1 – Genetic Signatures Patent Portfolio

All patents and patent applications are in the name of Human Genetic Signatures Pty Ltd and are owned by Genetic Signatures Limited.

1. Treatment of Nucleic Acid

Country	Priority Date	Filing Date	Number	Status
Australia	02/04/2003	02/04/2004	2004234019	Granted
China	02/04/2003	02/04/2004	200480011970.6	Granted
France (EP)	02/04/2003	02/04/2004	1620452	Granted
Germany (EP)	02/04/2003	02/04/2004	602004021690.9	Granted
United Kingdom (EP)	02/04/2003	02/04/2004	1620452	Granted
Japan	02/04/2003	02/04/2004	4740113	Granted
United States of America	02/04/2003	02/04/2003	7288373	Granted
United States of America	02/04/2003	02/04/2004	8168777	Granted

2. Nucleic Acid Detection Assay

Country	Priority Date	Filing Date	Number	Status
Australia	04/09/2003	03/09/2004	2004270756	Granted
Canada	04/09/2003	03/09/2004	2537810	Granted
China	04/09/2003	03/09/2004	20048002900	Granted
Germany	04/09/2003	03/09/2004	602004018801.8	Granted
France	04/09/2003	03/09/2004	1668148	Granted
United Kingdom	04/09/2003	03/09/2004	1668148	Granted
Japan	04/09/2003	03/09/2004	4714148	Granted
United States of America	04/09/2003	03/09/2004	7846693	Granted

Genetic Signatures Limited

Allens & Linklaters

3. Amplification Blocker Comprising Intercalating Nucleic Acids (INA) Containing Intercalating Pseudonucleotides (IPN)

Country	Priority Date	Filing Date	Number	Status
Australia	10/09/2004	9/09/2005	2005282225	Granted
Canada	10/09/2004	9/09/2005	2580145	Allowed
China	10/09/2004	9/09/2005	200580038260.7	Granted
Denmark (EP)	10/09/2004	9/09/2005	1794173	Granted
France (EP)	10/09/2004	9/09/2005	1794173	Granted
Germany (EP)	10/09/2004	9/09/2005	602005022740.7	Granted
United Kingdom (EP)	10/09/2004	9/09/2005	1794173	Granted
Japan	10/09/2004	9/09/2005	4980219	Granted
United States of America	10/09/2004	9/09/2005	7803580	Granted

4. Methods for Simplifying Microbial Nucleic Acids by Chemical Modification of Cytosines

Country	Priority Date	Filing Date	Number	Status
Australia	03/12/2004	05/12/2005	2005312354	Granted
Brazil	03/12/2004	05/12/2005	035644	Pending
Canada	03/12/2004	05/12/2005	2589668	Granted
China	03/12/2004	05/12/2005	200580047630.3	Granted
Denmark (EP)	03/12/2004	05/12/2005	1828411	Granted
France (EP)	03/12/2004	05/12/2005	1828411	Granted
Germany (EP)	03/12/2004	05/12/2005	602005036919.8	Granted
Ireland (EP)	03/12/2004	05/12/2005	1828411	Granted
Spain (EP)	03/12/2004	05/12/2005	1828411	Granted
United Kingdom (EP)	03/12/2004	05/12/2005	1828411	Granted
India	03/12/2004	05/12/2005	246868	Granted
Indonesia	03/12/2004	05/12/2005	W00200702024	Granted
Israel	03/12/2004	05/12/2005	183622	Granted

Genetic Signatures Limited

Allens & Linklaters

Country	Priority Date	Filing Date	Number	Status
Japan	03/12/2004	05/12/2005	5116481	Granted
Korea	03/12/2004	05/12/2005	10-1293713	Granted
Malaysia	03/12/2004	05/12/2005	MY-142997-A	Granted
Mexico	03/12/2004	05/12/2005	293484	Granted
New Zealand	03/12/2004	05/12/2005	555620	Granted
Singapore	03/12/2004	05/12/2005	132883	Granted
South Africa	03/12/2004	05/12/2005	2007/06142	Granted
United States of America	03/12/2004	05/12/2005	7833942	Granted
United States of America	03/12/2004	28/10/2010	8598088	Granted

5. Isothermal Strand Displacement Amplification Using Primers Containing A Non-Regular Base

Country	Priority Date	Filing Date	Number	Status
Australia	26/05/2005	25/05/2006	2006251866	Granted
Canada	26/05/2005	25/05/2006	2609218	Pending
China	26/05/2005	25/05/2006	2006800183256	Granted
France (EP)	26/05/2005	25/05/2006	1883707	Granted
Germany (EP)	26/05/2005	25/05/2006	602006040998.2	Granted
United Kingdom (EP)	26/05/2005	25/05/2006	1883707	Granted
United States of America	26/05/2005	25/05/2006	8431347	Granted

Genetic Signatures Limited

Allens & Linklaters

6. Assay for a Health State

Country	Priority Date	Filing Date	Number	Status
Australia	14/09/2005	14/09/2006	2006292033	Granted
Canada	14/09/2005	14/09/2006	2621932	Pending
China	14/09/2005	14/09/2006	200680038845.3	Granted
France (EP)	14/09/2005	14/09/2006	1943353	Granted
Germany (EP)	14/09/2005	14/09/2006	602006025581.0	Granted
United Kingdom (EP)	14/09/2005	14/09/2006	1943353	Granted
Japan	14/09/2005	14/09/2006	5164845	Granted
United States of America	14/09/2005	14/09/2006	8343738	Granted

7. Enzymes for Amplification and Copying Bisulphite Modified Nucleic Acids

Country	Priority Date	Filing Date	Number	Status
Australia	27/11/2007	27/11/2008	2008329549	Granted
Canada	27/11/2007	27/11/2008	2706740	Pending
France (EP)	27/11/2007	27/11/2008	2215250	Granted
Germany (EP)	27/11/2007	27/11/2008	602008022601.8	Granted
United Kingdom (EP)	27/11/2007	27/11/2008	2215250	Granted
Japan	27/11/2007	27/11/2008	5431351	Granted
United States of America	27/11/2007	27/11/2008	8685675	Granted

8. Bisulphite Treatment of RNA

Country	Priority Date	Filing Date	Number	Status
Australia	05/12/2007	05/12/2007	2008331435	Granted

Genetic Signatures Limited

Allens & Linklaters

9. Molecular Detection Assay

Country	Priority Date	Filing Date	Number	Status
Australia	07/09/2011	07/09/2011	2011376698	Allowed
Brazil	07/09/2011	07/09/2011	1120140052530	Pending
Canada	07/09/2011	07/09/2011	2848144	Pending
China	07/09/2011	07/09/2011	201180073300.7	Pending
Egypt	07/09/2011	07/09/2011	PCT 344/2014	Pending
Europe	07/09/2011	07/09/2011	11871849.3	Pending
India	07/09/2011	07/09/2011	426/MUMNP2014	Pending
Indonesia	07/09/2011	07/09/2011	P00201401902	Pending
Israel	07/09/2011	07/09/2011	231406	Pending
Japan	07/09/2011	07/09/2011	2014-528793	Pending
Korea	07/09/2011	07/09/2011	10-2014-7008008	Pending
Malaysia	07/09/2011	07/09/2011	PI 2014700434	Pending
Mexico	07/09/2011	07/09/2011	MXa2014002695	Pending
New Zealand	07/09/2011	07/09/2011	622418	Pending
Singapore	07/09/2011	07/09/2011	11201400217W	Pending
South Africa	07/09/2011	07/09/2011	2014/02503	Pending
United Arab Emirates	07/09/2011	07/09/2011	219/2014	Pending
United States of America	07/09/2011	07/09/2011	14/342093	Pending

Genetic Signatures Limited



Annexure 2 – Genetic Signatures Trade Mark Portfolio

METHYLEASY

Country	Registration No	Class	Registered until
Australia	984342	1, 5	8 January 2024
European Union (all EU countries)	003911724	1, 5	7 July 2024
China	846463	1	8 July 2024
China	846463	5	8 July 2024
Japan	846463	1, 5	8 July 2024
Republic of Korea	846463	1, 5	8 July 2024
Singapore	T0507113Z	1	8 July 2024
Singapore	T0507114H	5	8 July 2024
USA	3066198	1, 5	7 March 2016

Registered in the name of Human Genetic Signature Pty Ltd and owned by Genetic Signatures Limited

Goods

Class 1: Chemical solutions and preparations including reagents for scientific research and use in connection with the treatment and analysis of biological materials including nucleic acid molecules such as DNA and RNA; chemical solutions and preparations including reagents for scientific research in connection with cell populations and cell types including stem cells, genetic disorders, diseases and age-related conditions in animals and humans; analytical and diagnostic test kits for scientific use, in particular comprised of reagents and processing chemicals.

Class 5: Chemical solutions and preparations including reagents for medical research and clinical testing in connection with the treatment and analysis of biological materials including nucleic acid molecules such as DNA and RNA; chemical solutions and preparations including reagents for medical research and clinical testing in connection with cell populations and cell types including stem cells, prediction and detection of genetic disorders, diseases and age-related conditions in animals and humans; analytical and diagnostic test kits for medical and clinical use, in particular comprised of reagents and processing chemicals.

Genetic Signatures Limited

Allens < Linklaters

3BASE

Country	Registration No	Class	Registered until
Australia	1257004	1, 5	14 August 2018
China	7216099	5	13 April 2022
China	7216277	1	20 September 2020
USA	3882088	1, 5	30 November 2020

Registered in the name of Human Genetic Signature Pty Ltd and owned by Genetic Signatures Limited

Goods:

Class 1: Chemicals for use in industry and science; chemical solutions and preparations for scientific and environmental research; kits for scientific research, namely, kits comprising nucleic acid molecules and reagents for research relating to animals and microorganisms; reagents for research purposes, namely, molecular detection reagents; chemical preparations for scientific purposes, namely, for microorganism detection

Class 5: Diagnostic preparations for medical and veterinary use; diagnostic preparations for medical and veterinary use, namely, kits comprising nucleic acid molecules and reagents for use in the detection and diagnosis of disease and microorganisms



09. Additional Information

09.

Additional Information

9.1. Corporate background

Genetic Signatures is public company and is subject to tax at the Australian corporate tax rate (currently 30%). Genetic Signatures was incorporated as a proprietary company on 15 February 2001 and converted to a public company on 16 October 2014.

9.2. Corporate structure

As of the date of this Prospectus, the Company has no subsidiaries or interests in other entities.

9.3. Shareholders

The details of the ownership of Shares as at the Prospectus Date and of the expected ownership of the Shares at the completion of the Offer is shown in the tables below:

Table 16: Shareholdings at Prospectus Date

Shareholder	Shares	%
Existing Shareholders:		
Asia Union Investments	36,868,131	74.5%
Other Existing Shareholders	12,645,859	25.5%
Shares held under ESP	0	0.0%
Total	49,513,990	100.0%

Table 17: Expected shareholdings at completion of the Offer

Shareholder	Based on Minimum Subscription being raised		Based on Maximum Subscription being raised	
	Shares	%	Shares	%
Existing Shareholders:				
Asia Union Investments	36,868,131	43.8%	36,868,131	40.2%
Other Existing Shareholders	12,645,859	15.0%	12,645,859	13.8%
Shares held under ESP	4,680,000	5.6%	4,680,000	5.1%
New Shares to be issued under Offer	30,000,000	35.6%	37,500,000	40.9%
Total	84,193,990	100.0%	91,693,990	100.0%

The above table assumes that no Existing Shareholder will subscribe for additional Shares under the Offer. If an Existing Shareholder were to do so, the Existing Shareholder's percentage shareholding in the Company will be higher than as set out above.

With the exception of Asia Union Investments:

- none of the Existing Shareholders will hold or have voting power in 5% or more of the Shares on the completion of the Offer; and
- the Directors do not expect any Shareholder to control the Company on the completion of the Offer.

09. Additional Information

9.4. Restricted securities and escrow arrangements

(a) Mandatory escrow

In accordance with the ASX Listing Rules, the Directors expect that ASX will classify up to 3,572,854 Shares held by the Existing Shareholders as restricted securities for a period of 24 months from the date of official quotation of Shares on ASX.

Chapter 9 of the ASX Listing Rules precludes holders of restricted securities from disposing of those securities or an interest in those securities or agreeing to dispose of those securities or an interest in those securities for the relevant restriction periods. The holder of such securities will be precluded from granting a security interest over those securities. However, ASX may consent to those Shares being sold under a takeover bid or under a merger by way of a scheme of arrangement under the Corporations Act.

The ASX may review these restrictions during its consideration of the Company's application for admission to the Official List of the ASX. The ASX may also, at its discretion, waive or vary the requirements in accordance with the Listing Rules, in the event that an affected holder and the Company apply for a review of any escrow restrictions. Final details of any such restriction or escrow arrangements will be disclosed prior to commencement of official quotation of the Company's Shares.

(b) Voluntary escrow

Further, Asia Union Investments has agreed to enter into a restriction agreement with the Company which restricts it from dealing with 34,236,690 other Existing Shares held by it (being Shares that are not subject to mandatory escrow).

The form of the restriction agreement in each case is based on appendix 9A of the ASX Listing Rules (although this voluntary escrow is not required by the ASX Listing Rules).

These restrictions will terminate in respect of 18,434,065 of the Shares on the first anniversary of the Listing Date and in respect of the remaining 15,802,625 Shares on the second anniversary of the Listing Date. However, these restrictions may be released early to enable Asia Union Investments to accept an offer under a takeover bid in relation to its Shares provided holders of not less than 50% of the Shares not subject to the restrictions then on issue have accepted the takeover bid or to enable the Shares of Asia Union Investments to be transferred or cancelled as part of a merger by scheme of arrangement under Part 5.1 of the Corporations Act. Additionally, Asia Union Investments is entitled to transfer any or all of the existing Shares to a complying superannuation fund of which it is a member.

The Directors are entitled to waive the restrictions at any time. The undertakings given by Asia Union Investments may give the Company a "relevant interest" in these shares for the purposes of the Corporations Act. The Company has applied to ASIC for a modification so that the Company does not acquire a "relevant interest" in those Shares as a result of these undertakings.

9.5. Rights attaching to Shares

The Constitution of the Company was adopted on 5 September 2014. The key rights and liabilities of the share provisions of the Constitution are set out below.

The Shares offered under this Prospectus are fully paid ordinary Shares in the capital of the Company and will rank equally with each other, and with the existing issued Shares. There will be no liability on the part of Shareholders for any calls.

Detailed provisions relating to the rights attaching to the Shares are set out in the Company's constitution and the Corporations Act. A copy of the constitution can be inspected during office hours at the registered office of the Company.

A summary of the rights attaching to the Offer Shares under the constitution and the Corporations Act are summarised below:

Each Share confers on its holder:

- the right to vote at a general meeting of Shareholders (whether present in person or by any representative, proxy or attorney) on a show of hands (one vote per Shareholder) and on a poll (one vote per Share on which there is no money due and payable) subject to the rights and restrictions on voting which may attach to or be imposed on Shares (at present there are none);
- the right to receive dividends, according to the amount paid up on the Share;
- the right to receive, in kind, the whole or any part of the Company's property in a winding up, subject to priority given to holders of Shares that have not been classified by ASX as "restricted securities" and the rights of a liquidator to distribute surplus assets of the Company (with the consent of members by special resolution); and
- subject to the Corporations Act and the Listing Rules, all Shares are fully transferable.

The rights attaching to Shares may be varied with the approval of Shareholders in general meeting by special resolution.

09. Additional Information

9.6. No options

The Company has no options currently on issue and no options will be issued under or in connection with the Offer.

9.7. Material contracts

The Directors consider that the material contracts summarised below and elsewhere in this Prospectus are the contracts which an investor would reasonably regard as material and which investors and their professional advisers would reasonably expect to find described in this Prospectus for the purpose of making an informed assessment of the Offer.

(a) Lead Manager mandate

The Company entered into a mandate with the Lead Manager on 4 June 2014 under which it engaged the Lead Manager to undertake a range of initiatives to transform the Company into one suitable for listing and to manage the Offer.

For the services, the Company must pay the Lead Manager a fee of 6% of the total amount raised under the Offer. The Company is also required to pay a fixed retainer of \$105,000 to the Lead Manager however this retainer is rebateable against the other fee. These fees are exclusive of GST.

The Company has agreed to reimburse the Lead Manager for reasonable out of pocket expenses incurred in the conduct of its engagement.

Subject to certain exclusions, the Company has agreed to keep the Lead Manager and certain affiliated parties indemnified against losses suffered by them in connection with the Offer.

The mandate may be terminated with or without cause by the Company or by the Lead Manager by written notice at any time.

(b) Reagent Rental Agreement

The Company has entered into a reagent rental agreement with Westmead Hospital pursuant to which the Company has supplied the Hospital with an automated sample preparation and PCR set-up system, in return for which the Hospital has committed to purchase *EasyScreen™* reagents for enteric pathogen screening. The supply of the automation system is conditional on the Hospital's 3 year commitment to purchase the reagents, expiring 1 March 2016. The Company is responsible for service and repair during the Term, which includes periodic maintenance every 6 months.

The products are for use by the hospital for research and development purposes only and the Hospital must not resell, offer for sale or otherwise deal in the products or use the products for any purpose other than research and development without the Company's written permission.

(c) Italian Distribution Agreement

The Company has engaged Astra Formedic Srl (**Astra**) under a distribution agreement entered into by the parties on 29 April 2014. Under the agreement, the Company grants Astra the exclusive right to distribute specified products manufactured by the Company and the non-exclusive right to distribute specified equipment, accessories, spare parts and accessories to any customer located in Italy, Vatican and San Marino Republic.

The initial term of the agreement is a period of 3 years commencing on 29 April 2014. Following the conclusion of the initial term the agreement automatically renews on a one year term rolling basis unless the Company or Astra chooses to terminate the agreement by providing written notice at least 60 days in advance of the expiration of the current term.

The Company has the right to terminate the agreement immediately by written notice upon Astra becoming insolvent. The Company may terminate the agreement by written notice to Astra upon the occurrence of an event of default that is not remedied by the specified period. The Company will also have the right to terminate the agreement with 30 days written notice if either the Company or Astra has a change of control in ownership. In the case of a change in control of Astra, the change in control must involve the acquisition of the business assets or equity of Astra or otherwise give control of Astra to a competitor of the Company for this provision to be in effect.

(d) Israeli Distribution Agreement

The Company has engaged Advansys Technologies for Life Limited (**Advansys**) under a distribution agreement entered into by the parties on 7 October 2014. Under the agreement, the Company grants Advansys the co-exclusive right to distribute specified products manufactured by the Company and the non-exclusive right to distribute the Company's specified equipment, accessories, spare parts and accessories to any customer located in Israel. The Company reserves the right to appoint other distributors in Israel if the Distributor fails to meet agreed minimum annual purchase requirements.

The initial term of the agreement is a period of 1 year commencing on 7 October 2014. Following the conclusion of the initial term the agreement automatically renews on a one year term rolling basis unless the Company or Advansys chooses to terminate the agreement by providing written notice at least 60 days in advance of the expiration of the current term.

09. Additional Information

The Company has the right to terminate the agreement immediately by written notice upon Advansys becoming insolvent. The Company may terminate the agreement by written notice to Advansys upon the occurrence of an event of default that is not remedied by the specified period, which includes a failure by the Distributor to meet agreed minimum annual purchase requirements. The Company will also have the right to terminate the agreement with 30 days written notice if either the Company or Advansys has a change of control in ownership. In the case of a change in control of Advansys, the change in control must involve the acquisition of the business assets or equity of Advansys or otherwise give control of Advansys to a competitor of the Company for this provision to be in effect.

(e) Aicher Consultancy Agreement

The Company has engaged Aicher Inc, a company owned and controlled by Mike Aicher, to provide the services of Mike Aicher to act as Executive Director – US Operations reporting to the CEO and the Board. The consultancy agreement commenced on 15 April 2014 and continues for 1 year or until such later date the parties agree that the relevant services are completed.

The services to be provided by Aicher Inc. under the agreement include:

- work with the CEO and Board to address the North American market opportunities, including business planning, formation and regulatory strategies and initial implementation;
- develop relevant strategies for approval by the CEO and Board for major activities and needs specific to the North American market, that is, pricing, key opinion leader relationships, major accounts, regulatory approval, technical and customer support, marketing, North America specific industry meetings, competitor analysis;
- manage and coordinate key opinion leader trials and implementation of the Company's products with support from the team in Australia;
- conduct due diligence on the best fit sales channel entry into the North America market which may include director sales representation or via third party sales and support distributors;
- identify needs and build appropriate project teams to match skill set required to fulfil business objectives;
- advise on North America regulatory requirements, with input from external experts;
- ensure key relationships with external stakeholders are established and fostered in order to optimise performance, awareness and reputation of the Company on commercial products; and
- develop relevant external communication and marketing opportunities as required.

In return for the services:

- the Company must pay Aicher Inc. a fee of USD\$10,000 per calendar month subject to an annual review by the Board;
- the Company must reimburse Aicher Inc. for reasonable costs and expenses incurred in providing the services; and
- the Company must offer Mike Aicher the opportunity to participate in the Company's ESP (see Section 9.8(d) for further details), subject to any necessary Shareholder approvals.

The agreement may be terminated:

- immediately by the Company upon any unlawful or illegal activity or breach of any term of the Agreement by Aicher Inc. or Mike Aicher; or
- on 30 days written notice by either party.

The Consultant must not induce or attempt to induce any employee of the Company to terminate his or her employment with the Company during the term of the agreement and for 12 months after the termination of the Agreement.

9.8. Interests and benefits

This Section 9.8 sets out the nature and extent of the interests and fees of certain persons involved in the Offer. Other than as set out below or elsewhere in this Prospectus, no:

- Director or proposed Director;
- person named in this Prospectus who has performed a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus;
- promoter of Genetic Signatures; or
- underwriter to the Offer or financial services licensee named in the Prospectus as a financial services licensee involved in the Offer,

holds at the time of lodgement of this Prospectus with ASIC, or has held in the two years before lodgement of this Prospectus with ASIC, an interest in:

- the formation or promotion of Genetic Signatures;
- property acquired or proposed to be acquired by Genetic Signatures in connection with its formation or promotion, or in connection with the Offer; or
- the Offer,

and no amount (whether in cash, Shares or otherwise) has been paid or agreed to be paid, nor has any benefit been given or agreed to be given, to any such persons for services in connection with the formation or promotion of Genetic Signatures or the Offer or to any Director or proposed Director to induce them to become, or qualify as, a Director.

(a) Interests of advisers

Genetic Signatures has engaged the following professional advisers:

- Lodge Corporate Pty Ltd has acted as Lead Manager to the Offer. Genetic Signatures has paid or agreed to pay Lodge Corporate Pty Ltd the fees described in Section 9.7(a) for these services.
- Watson Mangioni Lawyers Pty Limited has acted as Australian legal adviser to the Company in relation to the Offer. The Company has paid, or agreed to pay, approximately \$145,000 (excluding disbursements and GST) for these services up until the Prospectus Date. Further amounts may be paid to Watson Mangioni Lawyers Pty Limited in accordance with its normal time-based charges.
- BDO East Coast Partnership has acted as Investigating Accountant and has prepared the Investigating Accountant's Report and has performed work in relation to financial due diligence enquiries. The Company has paid, or agreed to pay, approximately \$30,000 (excluding disbursements and GST) for the above services up until the Prospectus Date. Further amounts may be paid to BDO East Coast Partnership in accordance with its normal time-based charges.
- Allens Patent & Trade Mark Attorneys has acted as patent and trade mark attorney to the Company and has prepared the Intellectual Property Report. The Company has paid, or agreed to pay, approximately \$15,000 (excluding disbursements and GST) for the above services up until the Prospectus Date. Further amounts may be paid to Allens Patent & Trade Mark Attorneys in accordance with its normal time-based charges.

These amounts, and other expenses of the Offer, will be paid by Genetic Signatures out of funds raised under the Offer or available cash. Further information on the use of proceeds and payment of expenses of the Offer is set out in Section 1.5.

09. Additional Information

(b) Director interests and remuneration

(i) Executive Directors

CEO

The Company has entered into an employment contract with John Melki to govern his employment with the Company. Dr Melki is employed in the position of CEO of Genetic Signatures. Refer to Section 9.8(c)(i) for further details.

CFO

The Company has entered into an employment contract with Robert Birrell to govern his employment with the Company. Robert is employed in the position of CFO of Genetic Signatures. Refer to Section 9.8(c)(ii) for further details.

Executive Director – US Operations

The Company has entered into a consultancy agreement with Aicher Inc, a company owned and controlled by Mike Aicher, to provide the services of Mike Aicher to act as Executive Director – US Operations. Refer to Section 9.7(e) for further details.

(ii) Non-executive Directors

Under the Constitution, the Board decides the total amount paid to each Director as remuneration for their services as a Director of Genetic Signatures. However, under the ASX Listing Rules, the total amount of fees paid to all Directors for their services (excluding, for these purposes, the salary of any executive Director) must not exceed in aggregate in any financial year the amount fixed by Genetic Signatures in general meeting.

This amount has been fixed by Genetic Signatures at \$250,000. Any change to that aggregate annual sum needs to be approved by Shareholders. The ASX Listing Rules require that the remuneration of Directors must not include a commission on, or a percentage of, operating revenue.

The Company has also obtained advice about remuneration levels for directors of listed companies and, based on that advice, has set the following annual non-executive Directors' fees:

- Chairman: \$60,000 (excluding 9.5% superannuation);
- other non-executive Directors: \$40,000 (excluding 9.5% superannuation) for Australian residents or USD40,000 (for non-Australian residents); and
- further fees for acting as member of a Board committee: Nil

If a non-executive Director performs services, which are outside the scope of the ordinary duties of a Director or makes any special exertion in connection with the affairs of the Company, the Board may resolve to pay extra remuneration to that Director.

The remuneration of any executive Director is determined by the Board after recommendations are received from the Nomination and Remuneration Committee.

(iii) Director protection deeds

Genetic Signatures has entered into a director protection deed with each Director. Under these deeds, Genetic Signatures has agreed to provide to each Director access to the books and records of Genetic Signatures while they are a Director and for a period of seven years from when they cease to be a Director and Genetic Signatures has also agreed to indemnify, to the extent permitted by the Corporations Act, each Director in respect of certain liabilities which the Director may incur as a result of, or by reason of (whether solely or in part), being or acting as Director.

Pursuant to the Constitution, Genetic Signatures may arrange and maintain directors' and officers' insurance for its Directors to the extent permitted by law. Under the director protection deeds, Genetic Signatures has agreed to obtain and maintain such insurance during each Director's period of office and for the period of seven years after the Director ceases to be a Director.

09. Additional Information

(iv) Directors' shareholding

Directors are not required under the Constitution to hold any Shares. On completion of the Offer, the number of Shares held by Directors are expected to be as follows:

Name	Shares
Nick Samaras	1,005,000 Shares (including 480,000 ESP Shares)
John Melki	1,075,000 Shares (including 900,000 ESP Shares)
Robert Birrell	1,510,888 Shares (including 600,000 ESP Shares)
Mike Aicher	480,000 Shares (including 480,000 ESP Shares)
Phillip Isaacs	890,213 Shares (including 250,000 ESP Shares)
Pat Noland	160,000 Shares (including 160,000 ESP Shares)
Total	5,121,101 Shares (including 2,870,000 ESP Shares)

Directors (and their controlled entities) are entitled to participate in the Offer of Shares. Assuming they do, the relevant interests of the Directors will change (and the extent of the change will depend on the number of Shares acquired).

Final Directors' security holdings will be notified to the ASX on Listing. Directors may hold their interests in securities shown above directly, or indirectly through holdings by companies or trusts.

(c) Management's interests and remuneration

(i) CEO

The Company has entered into an employment contract with John Melki to document his employment with the Company. John is the CEO of the Company. John will receive an annual fixed remuneration of \$250,000 (exclusive of superannuation). John is also eligible for a short term incentive bonus equivalent to 25% of his base salary on an annual basis. This bonus is paid at the discretion of the Board.

John will also be eligible to participate in the ESP. For further details about the ESP, refer to Section 9.8(d). Genetic Signatures intends to grant \$360,000 worth of ESP Shares under the ESP to John at or around the Listing Date. The ESP Shares granted will vest over a 4 year period. The key terms and conditions applicable to the ESP Shares are set out in Section 9.8(d).

John may terminate his employment contract by giving three months' notice in writing. The Company may terminate by giving three months' notice in writing or by making a payment in lieu of notice. In the event of serious misconduct or other specific circumstances warranting summary dismissal, the Company may terminate John's employment contract immediately without notice.

Upon the termination of John's employment contract, he will be subject to a restraint of trade period of, in respect of working for or being involved with a competitor of the Company, six months, and in respect of other matters such as solicitation, six months following expiry of the notice period. Enforceability of such restraint of trade is subject to all usual legal requirements.

(ii) CFO

The Company has entered into an employment contract with Robert Birrell to document his employment with the Company. Robert is the CFO of the Company. Robert will receive an annual fixed remuneration of \$200,000 (exclusive of superannuation). Robert is also eligible for a short term incentive bonus equivalent to 25% of his base salary on an annual basis. This bonus is paid at the discretion of the Board.

09. Additional Information

Robert will also be eligible to participate in the ESP. For further details about the ESP, refer to Section 9.8(d). Genetic Signatures intends to grant \$240,000 worth of ESP Shares under the ESP to Robert at or around the Listing Date. The ESP Shares granted will vest over a 4 year period. The key terms and conditions applicable to the ESP Shares are set out in Section 9.8(d).

Robert may terminate his employment contract by giving three months' notice in writing. The Company may terminate by giving three months' notice in writing or by making a payment in lieu of notice. In the event of serious misconduct or other specific circumstances warranting summary dismissal, the Company may terminate Robert's employment contract immediately without notice.

Upon the termination of Robert's employment contract, he will be subject to a restraint of trade period of, in respect of working for or being involved with a competitor of the Company, six months, and in respect of other matters such as solicitation, six months following expiry of the notice period. Enforceability of such restraint of trade is subject to all usual legal requirements.

(iii) CSO

The Company has entered into an employment contract with Doug Millar to document his employment with the Company. Doug is the CSO of the Company. Doug will receive an annual fixed remuneration of \$200,000 (exclusive of superannuation). Doug is also eligible for a short term incentive bonus equivalent to 25% of his base salary on an annual basis. This bonus is paid at the discretion of the Board.

Doug will also be eligible to participate in the ESP. For further details about the ESP, refer to Section 9.8(d). Genetic Signatures intends to grant \$320,000 worth of ESP Shares under the ESP to Doug at or around the Listing Date. The ESP Shares granted will vest over a 4 year period. The key terms and conditions applicable to the ESP Shares are set out in Section 9.8(d).

Doug may terminate his employment contract by giving three months' notice in writing. The Company may terminate by giving three months' notice in writing or by making a payment in lieu of notice. In the event of serious misconduct or other specific circumstances warranting summary dismissal, the Company may terminate Doug's employment contract immediately without notice.

Upon the termination of Doug's employment contract, he will be subject to a restraint of trade period of, in respect of working for or being involved with a competitor of the Company, six months, and in respect of other matters such as solicitation, six months following expiry of the notice period. Enforceability of such restraint of trade is subject to all usual legal requirements.

(iv) Other employees

Each other employee of the Company is employed under an individual employment agreement. These establish total compensation including a base salary, superannuation contribution, short and long term incentive arrangements; variable notice and termination provisions of one to three months; intellectual property ownership and assignment conditions, confidentiality provisions; and leave entitlements, as a minimum, as per the National Employment Standards.

Either the Company or the executive may terminate the relevant employee's employment by providing at least one month's notice in writing before the proposed date of termination or in the Company's case, payment in lieu of notice.

(d) Employee incentive arrangements

The Company has established an Executive Share Ownership Plan (**ESP**) to assist in the attraction, motivation and retention of management and employees of Genetic Signatures.

The Company may offer additional incentive schemes to the management and employees over time.

(i) Employee Share Ownership Plan

Under the ESP, Eligible Employees selected by the Board or the committee which has been delegated power by the Board to administer the ESP may be offered Shares which vest over a 4 year period.

The following is a summary of the key terms of the ESP:

- the Board may invite Eligible Employees to apply for fully paid ordinary shares under the plan from time to time (**ESP Shares**);
- invitations to apply for ESP Shares offered to Eligible Employees on or about the time of this Offer are to be issued at an issue price equal to the Offer Price under this Prospectus and are subject to the Company being admitted to the Official List of ASX. Later invitations are to be made on the basis of the market price per Share defined as the volume weighted average price at which the Shares have traded during the 30 days immediately preceding the date of the invitation;
- invitations to apply for ESP Shares under the ESP will be made on a basis determined by the Board (including as to the conditionality on the achievement of any key performance indicators) and notified to Eligible Employees in the invitation, or if no such determination is made by the Board, on the basis that ESP Shares will be subject to a 4 year vesting period, with:

09. Additional Information

- › 25% of ESP Shares applied for vesting on the date that is the first anniversary of the issue date of the ESP Shares; and
- › 1/36th of the remaining number of ESP Shares vesting on the last day of each calendar month commencing in the following calendar month.
- Eligible Employees who accept an invitation (**ESP Participants**) may be offered an interest free loan from the Company to finance the whole of the purchase of the ESP Shares they are invited to apply for (**ESP Loan**). ESP Loans will have a term of 4 years and become repayable in full on the earlier of:
 - › the fourth anniversary of the issue date of the Employee Offer Shares; and
 - › if the ESP Participant ceases to be an Eligible Employee, either:
 - › the date 30 days after the date of cessation, if the Eligible Employee is a good leaver (as defined in the ESP); or
 - › that date of cessation, if the Eligible Employee is a bad leaver (as defined in the ESP).
- if the ESP Participant does not repay the outstanding ESP Loan, or it notifies the Company that it cannot, then such number of ESP Shares that equal by value (using the price at which the ESP Shares were issued as adjusted for the effects of any corporate reconstruction between the date of the invitation and the date of the buy-back) the outstanding amount of the ESP Loan will become the subject of a buy-back notice from the Company which the ESP Participant must accept. The buy-back of such number of ESP Shares will be considered full and final satisfaction of the ESP Loan and the Company will not have any further recourse against the ESP Participant;
- any dividends received by the ESP Participant whilst the whole or part of the ESP Loan remains outstanding must be applied to the repayment of the ESP Loan. In addition, an ESP Participant may make pre-payments at any time;
- the maximum number of ESP Shares for which invitations may be issued under the ESP, together with the number of ESP Shares still to be issued in respect of already accepted invitations and that have already been issued in response to invitations in the previous 5 years (but disregarding ESP Shares that are or were issued following invitations to non-residents; that did not require a disclosure document under the Corporations Act; or that were issued under a disclosure document under the Corporations Act) must not exceed 5% of the total number of ordinary shares on issue in the Company, at the time the invitations are made;
- in the event of a corporate reconstruction, the Board will adjust, subject to the Listing Rules (if applicable), any one or more of the maximum number of Shares that may be issued under the ESP (if applicable), the subscription price, the buy-back price and the number of ESP Shares to be vested at any future vesting date (if applicable), as it deems appropriate so that the benefits conferred on ESP Participants after a corporate reconstruction are the same as the benefits enjoyed by the ESP Participants before the corporate reconstruction. On conferring the benefit of any corporate reconstruction, any fractional entitlements to Shares will be rounded down to the nearest whole Share;
- ESP Participants will continue to have the right to participate in dividends paid by the Company despite some or all of their ESP Shares not having vested yet or being subject to an ESP Loan. If an ESP Loan has been made to the ESP Participant, then any dividend due must first be applied to reducing any outstanding ESP Loan amount applicable to the ESP Shares on which the dividend is paid;
- ESP Shares which have not vested and/or are subject to repayment of the ESP Loan will be restricted (escrowed) from trading;
- the Company may buy back at the issue price any ESP Shares which:
 - › have not vested, or are incapable of vesting at any time (including as a result of the ESP Participant failing to meet any key performance indicators on which vesting of ESP Shares is conditional); or
 - › remain in escrow and/or are the subject of an ESP Loan, on the occurrence of:
 - › the ESP Participant ceasing to be an Eligible Employees (unless the Board, in its sole and absolute discretion determines otherwise, subject to any conditions that it may apply, including the repayment of any outstanding ESP Loan); or
 - › the expiration of the term of the ESP Loan;
- any bonus securities issued in relation to ESP Shares which remain unvested or are subject to an ESP Loan which becomes repayable in full will be the subject of a buy-back by the Company for no consideration;
- on the death or permanent disability of an ESP Participant, all ESP Shares held by the ESP Participant or their estate will immediately vest subject to the repayment of any outstanding ESP Loan by the curator, executor or nominated beneficiary(ies) (as the case may be) within 30 days of their appointment (or such longer period as the Company in its discretion may allow). Failing such repayment, the Company will buy-back all ESP Shares in respect of which there is an outstanding ESP Loan;

09. Additional Information

- the rules of the ESP and any amendment to the rules of the ESP must be in accordance with the Listing Rules and the Corporations Act;
- if, while the Shares are traded on the ASX or any other stock exchange, there is any inconsistency between the terms of the ESP and the Listing Rules, the Listing Rules will prevail; and
- the ESP is governed by the laws of the State of New South Wales, Australia.

(ii) ESP Shares to be issued to Directors

Each of the Directors will be issued ESP Shares under the ESP on the terms generally described above in Section 9.8(d)(i) and as follows:

Grant date	On or around the Listing Date
Number	Nick Samaras – 480,000 John Melki – 900,000 Robert Birrell – 600,000 Mike Aicher – 480,000 Phillip Isaacs – 250,000 Pat Noland – 160,000
Issue price	\$0.40 each (being the same as the Offer Price)
Loans	The total amount of the issue price will be loaned as an ESP Loan
Vesting conditions	All ESP Shares will be subject to a 4 year vesting period, with: <ul style="list-style-type: none">• 25% of ESP Shares applied for vesting on the date that is the first anniversary of the issue date of the ESP Shares; and• 1/36th of the remaining number of ESP Shares vesting on the last day of each calendar month commencing in the following calendar month

(iii) ESP Shares to be issued to other selected executives under the ESP

The Company proposes to issue, on or around the Listing Date, a further 1,810,000 Shares to selected executives (other than the Directors) under the ESP. It is intended that the proposed issues of ESP Shares to the selected executives will be in accordance with terms generally described above in Sections 9.8(d)(i) and 9.8(d)(ii).

9.9. Contract summaries

Summaries of contracts set out in this Prospectus (including the summaries in Sections 9.4, 9.7 and 9.8) are included for the information of potential investors but do not purport to be complete and are qualified by the text of the contracts themselves.

9.10. Taxation

The Company will be taxed as an Australian tax resident public Company for the purpose of Australian income tax law. The tax payable by you in relation to any investment in the Shares issued under this Prospectus depends on your individual circumstances. You should consult a professional tax adviser about the consequences for you in acquiring, holding or selling the Shares.

9.11. Legal proceedings

So far as the Directors are aware as at the date of this Prospectus, there is no current or threatened civil litigation or other legal, administrative or regulatory proceedings of a material nature in which the Company is directly or indirectly involved or which are likely to have a material adverse effect on the business or financial position of Genetic Signatures.

9.12. Share certificates and participation in CHES

The Company will be admitted to participate in the Clearing House Electronic Sub-register System (CHES) in accordance with the ASX Listing Rules and the ASX Settlement Operating Rules. On admission to CHES, the Company will operate an electronic issuer-sponsored sub-register and an electronic CHES sub-register. The two sub-registers will make up the Company's principal register of securities.

The Company will not issue share certificates to shareholders. Instead, shareholders who elect to hold their Shares on the issuer sponsored sub-register will be provided with a holding statement by the Company which sets out the number of Shares allotted to each shareholder under this Prospectus. For shareholders who elect to hold their Shares on the CHES sub-register, the Company will, on allotment, issue an advice to shareholders that sets out the number of Shares allotted to the shareholder under this Prospectus and at the end of the month following the allotment, CHES (acting on behalf of the Company) will provide each shareholder with a holding statement that confirms the number of Shares allotted to it.

A holding statement (whether issued by CHES or the Company) will also provide details of a Shareholder's holder identification number (in the case of a holding on the CHES sub-register) or a shareholder reference number (in the case of a holding on the issuer sponsored sub-register). Following distribution of these initial holding statements to all Shareholders, a holding statement will only routinely be provided to Shareholders at the end of any subsequent month during which the Shareholder's holding of Shares changes.

9.13. Consents

Each of the parties referred to below (each a **Consenting Party**), to the maximum extent permitted by law, expressly disclaims all liabilities in respect of, makes no representations regarding and takes no responsibility for any statements in or omissions from this Prospectus, other than the reference to its name in the form and context in which it is named and a statement or report included in this Prospectus with its consent as specified below.

Each of the Consenting Parties has given and has not, before the lodgement of the Prospectus with ASIC, withdrawn its written consent to be named in this Prospectus in the form and context in which it is named. None of the Consenting Parties referred to below has made any statement that is included in this Prospectus or any statement on which a statement is made in this Prospectus is based, other than as specified below:

- Watson Mangioni Lawyers Pty Limited;
- BDO East Coast Partnership;
- Allens Patent & Trade Mark Attorneys;
- Lodge Corporate Pty Ltd;
- Boardroom Pty Limited;
- Kalorama Information, LLC.;
- St Vincent's Hospital (SydPath);
- Dr Damien Stark;
- Sir Gregory Winter;
- Dr Jim Peacock;
- Prof. William Rawlinson;
- Christopher M Abbott; and
- Asia Union Investments Pty. Limited.

09. Additional Information

BDO East Coast Partnership has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to the inclusion in this Prospectus of statements by it, including its Investigating Accountant's Report in Section 7 and the statements specifically attributed to it in the text of, or by a footnote in, this Prospectus, in the form and context in which they are included (and all other references to that report and those statements) in this Prospectus.

Allens Patent & Trade Mark Attorneys has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to the inclusion in this Prospectus of statements by it, including its Intellectual Property Report in Section 8 and the statements specifically attributed to it in the text of, or by a footnote in, this Prospectus, in the form and context in which they are included (and all other references to that report and those statements) in this Prospectus.

Kalorama Information, LLC. has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to the inclusion in this Prospectus of statements, tables and charts by it, including the Kalorama MDx Report in Section 3 and the statements, tables and charts specifically attributed to it in the text of, or by a footnote in, this Prospectus, in the form and context in which they are included (and all other references to that report and those statements, tables and charts) in this Prospectus.

St Vincent's Hospital (SydPath) has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to the inclusion in this Prospectus of statements by it, including its evaluation study in Section 2.3(b) and the statements specifically attributed to it in the text of, or by a footnote in, this Prospectus, in the form and context in which they are included (and all other references to that evaluation study and those statements) in this Prospectus.

Dr Damien Stark has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, his written consent to the inclusion in this Prospectus of statements by him in this Prospectus, in the form and context in which they are included (and all other references to those statements) in this Prospectus.

Asia Union Investments Pty. Limited has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to the inclusion in this Prospectus of statements by it in this Prospectus, in the form and context in which they are included (and all other references to those statements) in this Prospectus.

No entity or person referred to in this Section 9.13 has made any statement that is included in this Prospectus or any statement on which a statement made in this Prospectus is based, except as stated above. Each of the persons and entities referred to in this Section 9.13 has not authorised or caused the issue of this Prospectus and does not make any offer of Shares.

9.14. Photographs and diagrams

Photographs and diagrams used in this Prospectus that do not have descriptions are for illustration only and should not be interpreted to mean that any person shown in them endorses this Prospectus or its contents or that the assets shown in them are owned by the Company. Diagrams used in this Prospectus are illustrative only and may not be drawn to scale. Unless otherwise stated, all data contained in charts, graphs and tables is based on information available at the Prospectus Date.

9.15. Expenses of the Offer

The total expenses of the Offer payable by the Company are estimated at approximately \$1,219,000 (assuming the Minimum Subscription) to \$1,432,000 (assuming the Maximum Subscription). These expenses include financial, offer management, legal, accounting and advisory fees, ASX listing fees, shareholder communications, and printing and other costs.

9.16. Governing law

This Prospectus and the contracts that arise from the acceptance of the Applications are governed by the laws applicable in New South Wales and each Applicant under the Offer submits to the exclusive jurisdiction of the courts of New South Wales.

9.17. Statement of Directors

The issue of this Prospectus has been authorised by each Director. Each Director has consented to lodgement of this Prospectus and issue of this Prospectus and has not withdrawn that consent.

**3Base™
Technology**

10.

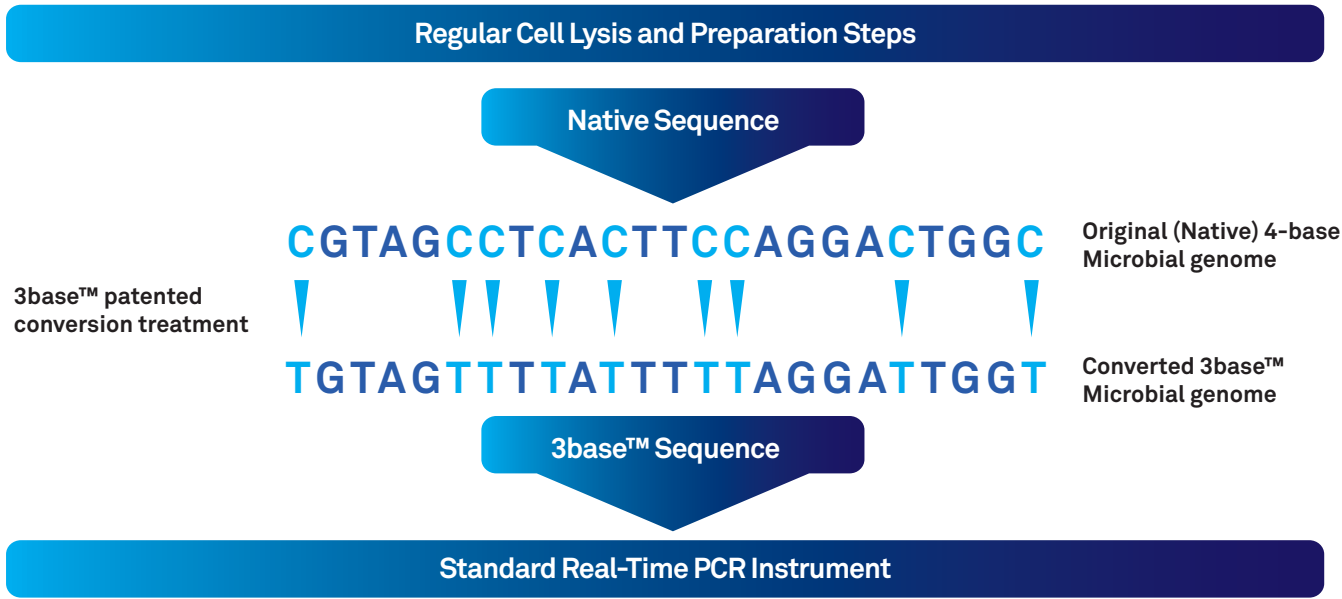


10. 3Base™ Technology

Genetic Signatures' platform technology is based on the 3base™ conversion of nucleic acids. Essentially the original 4-base genome (comprising A, C, G and T bases) is converted to a 3-base genome (A, G and T) via a patent chemical method. The method is incorporated into standard laboratory methods and does not require any extra processing steps.

Overview of 3base™

Basic Technical functionality: Moving from 4base to 3base™



Molecular tests that are designed to detect 3base™ genomes now target sequences that have reduced complexity as compared to the original sequence. This platform technology has applications in testing for infectious diseases and also in the detection of chronic diseases, including cancers.

Core advantages of 3Base™ over existing molecular testing techniques:

The advantages of 3base™ technology are best demonstrated through comparing the primers required to detect all of the different sub-types of an organism (e.g influenza) for both 4-base and 3-base genomes.

Table 18: Conversion to 3base™ Improves Subtype Similarity and Reduces Variation – Enabling Analysis via PCR

e.g. Non-Converted Influenza Sequences

Influenza A virus H5N1 TGTGTGTCCA GGGATAATTG
Influenza A virus H7N3 TGTATATGTA GGGACAATTG
Influenza A virus H5N8 TGTGTTTGTA GAGACAATTG
Influenza A virus H5N3 TGTATATGTA GGGACAATTG
Influenza A virus H5N2 TGTGTTTGCA GAGATAATTG
Influenza A virus H6N6 TGCATTTCGA GGGACAATTG
Influenza A virus H2N9 TCCACTTCGA GGGATAATTG
Influenza A virus H6N5 TCGTTTCC GAGATAATTG

Consensus TGYRYDTGYM GRGAYAAATG
768 Possible combinations
55% Homology

3base™ Converted Influenza Sequences

Influenza A virus H5N1 TGTGTGTTTA GGGATAATTG
Influenza A virus H7N3 TGTATATGTA GGGATAATTG
Influenza A virus H5N8 TGTGTTTGTA GAGATAATTG
Influenza A virus H5N3 TGTATATGTA GGGATAATTG
Influenza A virus H5N2 TGTGTTTGTA GAGATAATTG
Influenza A virus H6N6 TGTATTGTA GGGATAATTG
Influenza A virus H2N9 TCACTTGT GGGATAATTG
Influenza A virus H6N5 TGTGTTGTT GAGATAATTG

Consensus TGTRTDTGTW GRGATAATTG
24 Possible combinations
80% Homology

10. 3Base™ Technology

As can be seen in the figure above, the consensus sequence required to detect all sub-types of influenza when detecting naturally occurring 4-base nucleic acid is comprised of **768 combinations**. The corresponding consensus sequence to detect all sub-types of influenza when detecting **3base™** sequences is only comprised of **24 combinations**.

Therefore the use of 3base™ to detect all sub-types of influenza results in a 32-fold reduction in the complexity of the primers required to screen patient samples. The improved subtype similarity and reduced variation allows for a increased efficiency of multiplex real-time PCR amplification by enabling conditions in which primers and probes work optimally at similar temperatures, as shown in Table 18. PCR amplification kinetics work most efficiently when the melting temperature (T_m) of the primers are matched and the T_m of the probe is approximately 10°C higher. As illustrated in Table 19, these temperature profiles are more easily attained when working with 3base™ sequences.

Table 19: The regular and 3base™ DNA sequence for 2 primers and 2 probes is shown. The primers and probes for the 3base™ have a more similar melting temperature (T_m) improving the efficiency of multiplex real-time PCR.

Conventional Sequence			T _m	3base™ Sequence			T _m
Primer 1	GTACACACCGCCCGTCGCTCCTACC		77°C	Primer 1	GTATATATTGTTTGTGTTTTTATT		52°C
Primer 2	GAAGGAGAAGTCGTAACAAG		56°C	Primer 2	GAAGGAGAAGTTGTAATAAG		50°C
Probe 1	TGAATAAAGAGGTGAAATTCTAGG		59°C	Probe 1	TGAATAAAGAGGTGAAATTTTAGG		59°C
Probe 2	GAAGGGCCGCGAGCCCCCGCGC		87°C	Probe 2	GAAGGGTTGTGAGTTTTTGTGT		62°C

The 3base™ technology is universally applicable to all specimen types, compatible with both DNA and RNA. It has also been optimized to works well with difficult to lyse organisms such as cysts, spores, Mycobacteria etc.



Significant Accounting Policies

11.

11. Significant Accounting Policies

The principal accounting policies adopted in the preparation of the financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

Basis of preparation

These general purpose financial statements have been prepared in accordance with Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("AASB") and the Corporations Act 2001, as appropriate for for-profit oriented entities. These financial statements also comply with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IASB").

The financial report has been prepared on an accrual basis and is based on historical costs, modified, where applicable by the measurement at fair value of selected non-current assets, financial assets and financial liabilities.

The preparation of the financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 1(u).

(a) Income tax

The income tax expense/(benefit) for the year comprises current income tax expense/(benefit), research and development claim and deferred tax expenses/(benefit).

Current income tax expenses charged to the profit or loss is the tax payable on taxable income calculated using applicable income tax rates enacted, or substantially enacted, as at the end of the reporting period together with the research and development claim submitted for the reporting period. Current tax liabilities/assets are therefore measured at the amounts expected to be paid to /recovered from the relevant taxation authority.

Deferred income tax expense reflects movements in deferred tax asset and deferred tax liability balances during the year as well as unused tax losses.

Deferred tax assets and liabilities are calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability settled, based on tax rates enacted or substantively enacted at reporting date. Their measurement also reflects the manner in which management expects to recover or settle the carrying amount of the related asset or liability.

Deferred tax assets relating to temporary differences and unused tax losses are recognised only to the extent that it is probable that future taxable profit will be available against which the benefits of the deferred tax asset can be utilised.

Where temporary differences exist in relation to investment in subsidiaries, branches, associates, and joint ventures, deferred tax assets and liabilities are not recognised where the timing of the reversal of the temporary difference can be controlled and it is not probable that the reversal will occur in the foreseeable future.

Current tax assets and liabilities are offset where a legally enforceable right of set-off exists and it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur. Deferred tax assets and liabilities are offset where a legally enforceable right of set-off exists, the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur in future periods in which significant amounts of deferred tax assets or liabilities are expected to be recovered or settled.

Amounts received or receivable in relation to R&D tax offsets are credited against the asset to which the R&D relates or to tax expense if no asset exists. The amount is recognised only when it is probable that it will be received and can be reliably measured.

(b) Property, plant and equipment

Each class of plant and equipment is carried at cost or fair value as indicated less, where applicable, any accumulated depreciation and impairment losses.

Plant and equipment are measured on the cost basis less depreciation and impairment losses.

The carrying amount of plant and equipment is reviewed annually by directors of the Company to ensure it is not in excess of the recoverable amount from those assets. The recoverable amount is assessed on the basis of the expected net cash flows which will be received from the assets employed and subsequent to disposal. The expected net cash flows have been discounted to their present values in determining recoverable amounts.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. All other repairs and maintenance expenses are charged to the income statements during the financial period in which they are incurred.

11. Significant Accounting Policies

Depreciation

The depreciable amount of all fixed assets is depreciated on a straight line basis over their estimated useful lives to the Company commencing from the time the asset is held ready for use.

The depreciation rates used for each class of depreciable asset are:

Class of fixed asset	Depreciation rate
Plant and equipment	2.5 – 13.5 years

The assets residual values and useful lives are reviewed, and adjusted if appropriate at each reporting date.

Gains and losses on disposal are determined by Company proceeds with the carrying amount. These gains or losses are included in the statement of comprehensive income.

(c) Goods and Services Tax

Revenues, expenses and assets are recognised net of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO).

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included within other receivables or payables in the statements of financial position.

Cash flows are presented on a gross basis, except for the GST component of investing and financing activities which are recoverable from or payable to ATO are disclosed as operating cash flows.

(d) Financial instruments

Initial recognition and measurement

Financial assets and financial liabilities are recognised when the entity becomes a party to the contractual provisions to the instrument. For financial assets, this is equivalent to the date that the Company commits itself to either the purchase or the sale of the asset (i.e. trade date accounting is adopted).

Financial instruments are initially measured at fair value plus transaction costs except where the instrument is not classified at fair value through profit or loss. Transaction costs related to instruments classified at fair value through profit or loss are expensed to profit or loss immediately. Financial instruments are classified and measured as set out below.

Classification and subsequent measurement

Financial instruments are subsequently measured at fair value, amortised cost using the effective interest rate method or cost. Fair value represents the amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties. Where available, quoted prices in an active market are used to determine fair value. In other circumstances, valuation techniques are adopted.

Amortised cost is calculated as:

- the amount at which the financial asset or financial liability is measured at initial recognition;
- less principal repayments;
- plus or minus the cumulative amortisation of the difference, if any, between the amount initially recognised and the maturity amount calculated using the effective interest method; and
- less any reduction for impairment.

The effective interest method is used to allocate interest income or interest expense over the relevant period and is equivalent to the rate that exactly discounts estimated future cash payments or receipts (including fees, transaction costs and other premiums or discounts) through the expected life (or when this cannot be reliably predicted, the contractual term) of the financial instrument to the net carrying amount of the financial asset or financial liability. Revisions to expected future net cash flows will necessitate an adjustment to the carrying value with a consequential recognition of an income or expense in profit or loss.

(i) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are subsequently measured at amortised cost.

Loans and receivables are included in current assets, except for those which are not expected to mature within 12 months after the end of the reporting period, which will be classified as non-current assets.

11. Significant Accounting Policies

(ii) Financial liabilities

Non-derivative financial liabilities (excluding financial guarantees) are subsequently measured at amortised cost.

Fair Value

Fair value is determined based on current bid prices for all quoted investments. Valuation techniques are applied to determine the fair value for all unlisted securities, including recent arm's length transactions, reference to similar instruments and option pricing models.

Impairment

At the end of each reporting period, the Company assesses whether there is objective evidence that a financial instrument has been impaired. In the case of available-for-sale financial instruments, a prolonged decline in the value of the instrument is considered to determine whether an impairment has arisen. Impairment losses are recognised in the statement of comprehensive income.

The Directors have the power to amend and reissue these financial statements.

Derecognition

Financial assets are derecognised where the contractual rights to receipt of cash flows expires or the asset is transferred to another party whereby the Company no longer has any significant continuing involvement in the risks and benefits associated with the asset. Financial liabilities are derecognised where the related obligations are either discharged, cancelled or expired. The difference between the carrying value of the financial liability, which is extinguished or transferred to another party and the fair value of consideration paid, including the transfer of non-cash assets or liabilities assumed, is recognised in profit or loss.

(e) Revenue

Revenue from the sale of goods is recognised when control of the goods has passed to the buyer, the amount of revenue can be measured reliably and it is probable that it will be received by the Company.

Interest revenue is recognised on a proportional basis taking into account the interest rates applicable to the financial assets.

All revenue is stated net of the amount of goods and services tax (GST).

(f) Trade and other payables

Accounts payable represent the principal amounts outstanding at the reporting date plus, where applicable, any accrued interest.

(g) Impairment

At each reporting date, the Company assesses whether there is any indication that an asset may be impaired. The assessment will include the consideration of external and internal sources of information including dividends from subsidiaries, associates or jointly controlled entities deemed to be out of pre-acquisition profits. If such an indication exists, an impairment test is carried out on the asset by comparing the recoverable amount of the asset, being the higher of the asset's fair value less costs to sell and value in use, to the asset's carrying value. Any excess of the asset's carrying value over its recoverable amount is expensed to the statement of comprehensive income.

Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

(h) Intangibles

Patents and trademarks

Given the stage of the Company's development, the cost of patents and trademarks is expensed as incurred.

(i) Cash and cash equivalents

For the purposes of the statement of cash flows, cash includes cash on hand and at call deposits with banks or financial institutions and net of bank overdrafts.

(j) Scientific equipment and consumables

The cost of scientific equipment and consumables purchased is expensed to the statement of profit and loss and other comprehensive income as it is consumed.

(k) Trade and other receivables

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any provision for impairment. Trade receivables are generally due for settlement within 30 days.

11. Significant Accounting Policies

Collectability of trade receivables is reviewed on an ongoing basis. Debts which are known to be uncollectable are written off by reducing the carrying amount directly. A provision for impairment of trade receivables is raised when there is objective evidence that the Company will not be able to collect all amounts due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation and default or delinquency in payments (more than 60 days overdue) are considered indicators that the trade receivable may be impaired. The amount of the impairment allowance is the difference between the assets' carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

Other receivables are recognised at amortised cost, less any provision for impairment.

(l) Borrowings

Borrowings are initially recognised at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost. Any difference between the proceeds and the redemption amount is recognized as profit or loss over the period of the borrowings using the effective interest rate method.

The carrying amount of convertible notes classified as borrowings is subject to re-estimation at each reporting date. In the event the Company revises its estimates of payments or receipts, the carrying amount of the borrowings is adjusted to reflect actual and revised estimated cash flows. The Company recalculates the carrying amount by computing the present value of estimated future cash flows at the convertible notes originally effective interest rate. The adjustment is recognized in profit or loss as income or expense.

The component of the convertible notes that exhibits characteristics of a liability is recognised as a liability in the statement of financial position, net of transaction costs.

On the issue of the convertible notes the fair value of the liability component is determined using a market rate for an equivalent non-convertible bond and this amount is carried as a non-current liability on the amortised cost basis until extinguished on conversion or redemption. The increase in the liability due to the passage of time is recognised as a finance cost. The remainder of the proceeds is allocated to the conversion option that is recognised and included in shareholders' equity as a convertible note reserve, net of transaction costs. The carrying amount of the conversion option is not remeasured in the subsequent years. The corresponding interest on convertible notes is expensed to profit or loss.

(m) Finance costs

Finance costs attributable to qualifying assets are capitalised as part of the asset. All other finance costs are expensed in the period in which they are incurred, including interest on convertible notes.

(n) Employee benefits

Provision is made for the Company's liability for employee benefits arising from services rendered by employees to the reporting date. Employee benefits that are expected to be settled within one year have been measured at the amounts expected to be paid when the liability is settled, plus related on-costs. Employee benefits payable later than one year have been measured at the present value of the estimated future cash outflows to be made for those benefits.

(o) Provisions

Provisions are recognised when the entity has a legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

(p) Leases

Lease payments for operating leases, where substantially all the risks and benefits remain with the lessor, are charged as expense in the period in which they are incurred.

(q) Share-based payments

Equity-settled share-based payments with employees and others providing similar services are measured at fair value of the equity instrument at the grant date.

The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Company's estimate of equity instruments that will eventually vest.

At each reporting date, the Company revised its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in profit or loss over the remaining vesting period, with corresponding adjustment to the employee option reserve.

Equity-settled share-based transactions with other parties are measured at the fair value of the goods and services received, except where the fair value cannot be estimated reliably, in which case they are measured at the fair value of the equity instruments granted, measured at the date the entity obtains the goods or the counterparty renders the service.

11. Significant Accounting Policies

(r) New accounting standards and interpretations issued but not yet effective

The Australian Accounting Standards Board has issued new and amended accounting standards and interpretations that have mandatory application dates for future reporting periods and which the Company has decided not to early adopt. A discussion of those future requirements and their impact on the Company is as follows:

AASB 9 Financial Instruments, 2009-11 Amendments to Australian Accounting Standards arising from AASB 9, 2010-7 Amendments to Australian Accounting Standards arising from AASB 9 and 2012-6 Amendments to Australian Accounting Standards arising from AASB 9.

This standard and its consequential amendments are applicable to annual reporting periods beginning on or after 1 January 2017 and completes phase I of the IASB's project to replace IAS 39 (being the international equivalent to AASB 139 "Financial Instruments: Recognition and Measurement"). This standard introduces new classification and measurement models for financial assets, using a single approach to determine whether a financial asset is measured at amortised cost or fair value. The accounting for financial liabilities continues to be classified and measured in accordance with AASB 139, with one exception, being that the portion of a change of fair value relating to the entity's own credit risk is to be presented in other comprehensive income unless it would create an accounting mismatch. The Company will adopt this standard from 1 July 2017 but the impact of its adoption is yet to be assessed by the Company.

(s) Critical Accounting Estimates and Judgements

The Directors evaluate estimates and judgements incorporated into the financial report based on historical knowledge and best available current information. Estimates assume a reasonable expectation of future events and are based on current trends and economic data, obtained both externally and within the Company.

Key estimates – valuation of convertible notes

There have been certain assumptions made under the initial valuation of the convertible loan note, these include:

- Discount rate; and
- Various redemption scenarios.

The Directors have applied the most appropriate of these variables in relation to the entity to calculate the initial valuation.

Key estimates – valuation of share options (share-based payments)

At each reporting date, the entity revises its estimate of the number of options that are expected to become exercisable. The employee benefit expense recognised each period takes into account the most recent estimate. The impact of the revision to the original estimates is recognised in profit or loss with a corresponding adjustment to equity. The fair value is measured at grant date and recognised over the period during which the employee becomes unconditionally entitled to the options or rights.

Judgements – research and development claim

Judgement is required in determining the amount of income tax revenue relating to the research and development claim. There are certain transactions and calculations undertaken during the ordinary course of business for which the ultimate tax determination may be subject to change. The Company calculates its research and development claim based on the Company's understanding of the tax law. Where the final outcome of these matters is different from the amounts that were initially recorded, such differences will impact the profit or loss in the year in which such determination is made.

Glossary

12.



12.

Glossary

\$ or A\$	Australian dollars
ABN	Australian Business Number
AEDT	Australian Eastern Daylight Time
Applicant	A person who submits an Application
Application(s)	An application made to subscribe for Shares offered under this Prospectus
Application Form	The application form attached to or accompanying this Prospectus (including the electronic form provided by an online application facility)
Application Monies or Application Amount	The amount accompanying an Application Form submitted by an investor
ARTG	Australian Register of Therapeutic Goods
Asia Union Investments	Asia Union Investments Pty. Limited (ACN 008 479 721)
ASIC	Australian Securities and Investment Commission
ASX Settlement Operating Rules	The rules of ASX Settlement and Transfer Corporation Pty Ltd
ASX	Australian Securities Exchange
ASX Listing Rules	The listing rules of ASX
ASR	Analyte specific reagent
Australian Accounting Standards	Australian Accounting Standards and other authoritative pronouncements issued by the Australian Accounting Standards Board
Beta Testing	The limited release of a proposed commercial assay to a testing laboratory for their evaluation and feedback. Feedback includes performance and workflow evaluations. The Company reserves the right to modify the assay based on feedback, and the results obtained are not to be used to report patient results.
Board or Board of Directors	The board of directors of the Company
CEO	Chief executive officer
CFO	Chief financial officer
Chairman	Chairman of the Board of Directors
CHES	Clearing House Electronic Sub-register System, operated in accordance with the Corporations Act
Closing Date	The date by which Applications must be lodged for the Offer, being 12 December 2014 (unless extended)
Company	Genetic Signatures Limited (ACN 095 913 205)
Constitution	The constitution of the Company
Corporations Act	<i>Corporations Act 2001</i> (Cth)
Director	A member of the Board
DNA	Deoxyribonucleic acid
Eligible Employee	A person who is employed or engaged by or holds an office with the Company (whether on a full or part-time basis)
Enteric	Relating to or occurring in the intestines
ESP	The Employee Share Ownership Plan referred to in Section 9.8(d)(i)
ESP Share	A Share issued under the ESP
EU	European Union
Existing Shareholders	The Shareholders of the Company as at the Prospectus Date
Existing Shares	The Shares held by the Existing Shareholders as at the Prospectus Date
FDA	Food and Drug Administration (US)

12. Glossary

Investigating Accountant	BDO East Coast Partnership
IPO	Initial public offering
IVD	in vitro diagnostic medical devices
Kalorama	Kalorama Information, LLC.
Kalorama IVD Report	Kalorama, <i>The Worldwide Market for In Vitro Diagnostic (IVD) tests</i> , 9th Edition, 13 August 2014
Kalorama MDx Report	Kalorama, <i>World Market for Molecular Diagnostics (Infectious Disease, Oncology, Blood Screening, Pre-Natal and Other Areas)</i> , 5th. Edition, 1 September 2013
LDT	Laboratory developed test
Lead Manager	Lodge Corporate Pty Ltd (ACN 125 323 168)
Listing Date	The date on which the Company is admitted to the Official List of ASX and quotation of the Shares commences
m	Millions
Market Capitalisation	Total market value of the Company on ASX on the listing date
Maximum Subscription	Applications for 37.5 million Shares
MDx	Molecular diagnostics
Methylation or DNA Methylation	A biochemical process where a methyl chemical group is added to a DNA nucleotide, most commonly the Cytosine nucleotide
Minimum Subscription	Applications for 30 million Shares
MRSA	Methicillin-resistant Staphylococcus aureus, an infection is caused by a strain of staph bacteria that's become resistant to the antibiotics commonly used to treat ordinary staph infections
Offer	The Offer under this Prospectus of Shares for issue by the Company
Offer Period	The period from the date on which the Offer opens until the Closing Date
Offer Price	\$0.40 per Share
Offer Shares	The 37,500,000 Shares being offered under this Prospectus
PCR	Polymerase Chain Reaction
Prospectus	This document (including the electronic form of this Prospectus) and any supplementary or replacement Prospectus in relation to this document
Prospectus Date	The date on which a copy of this Prospectus is lodged with ASIC, being 7 November 2014
Real-Time PCR	Real-time Polymerase Chain Reaction (PCR) is the ability to monitor the progress of the PCR as it occurs (i.e., in real time)
RNA	Ribonucleic acid
ROW	Rest of world
Share	A fully paid ordinary share in the capital of the Company
Shareholder	A holder of Shares
Share Registry	Boardroom Pty Limited (ACN 003 209 836)
SRN	Securityholder Reference Number
TFN	Tax File Number
US	United States of America
USD	US dollars

Genetic Signatures Limited

ACN 095 913 205

General Offer Application Form

This is an Application Form for Shares in Genetic Signatures Limited (**Company**) on the terms set out in the Prospectus dated 7 November 2014. Defined terms in the Prospectus have the same meaning in this Application Form. You may apply for a minimum of 5,000 Shares and multiples of 100 Shares thereafter. This Application Form and your cheque or bank draft must be received by **5.00pm (AEST) on 12 December 2014**.

This Application Form is important. If you are in doubt as to how to deal with this Application Form, please contact your accountant, lawyer, stockbroker or other professional adviser. The Prospectus dated 7 November 2014 and contains information relevant to a decision to invest in the Shares of the Company and you should read the entire Prospectus carefully before applying for Shares.

The Share Registry's Privacy Policy (**Privacy Policy**) also sets out important information relating to the collection, use and disclosure of all personal information that you provide to the Company. Please ensure that you and all relevant individuals have read the Privacy Policy carefully before submitting this Application Form. The Privacy Policy can be found on the website <http://www.boardroomlimited.com.au/Privacy.html>

To meet the requirements of the *Corporations Act 2001* (Cth), this Application Form must not be distributed to another person unless included in, or accompanied by the Prospectus dated 7 November 2014. A person who gives another person access to this Application Form must, at the same time and by the same means, give the other person access to the Prospectus. The Company will send you a free paper copy of the Prospectus if you have received an electronic prospectus and you ask for a paper copy before the Prospectus expires on 7 December 2015.

PLEASE FOLLOW THE INSTRUCTIONS TO COMPLETE THIS APPLICATION FORM (SEE REVERSE) AND PRINT CLEARLY IN CAPITAL LETTERS USING BLACK OR BLUE PEN.

A Number of Shares you are applying for <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> <div style="text-align: center; margin-top: 5px;">Minimum of 5,000 Shares to be applied for and thereafter in multiples of 100 Shares</div>	B Total amount payable <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> <div style="text-align: center; margin-top: 5px;">x \$0.40 per Share =</div>
C Write the name(s) you wish to register the Securities in (see reverse for instructions) Applicant #1 <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Name of Applicant #2 or <Account Designation> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Name of Applicant #3 or <Account Designation> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	
D Write your postal address here Number/Street <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Suburb/Town <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>State <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div></div><div>Postcode <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div></div></div>	
E CHESS participant – Holder Identification Number (HIN) <div style="display: flex; align-items: center; margin-top: 5px;"><div style="border: 1px solid black; width: 20px; height: 20px; text-align: center; line-height: 20px;">X</div><div style="border: 1px solid black; height: 20px; width: 100%; margin-left: 5px;"></div></div> <div style="margin-top: 10px;"><i>Important please note if the name and address details above in sections C and D do not match exactly with your registration details held at CHESS, any Securities issued as a result of your Application will be held on the Issuer Sponsored subregister.</i></div>	
F Enter your Tax File Number(s), ABN, or exemption category Applicant #1 <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Applicant #2 <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Applicant #3 <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	
G Cheque payment details – PIN CHEQUE(S) HERE <div style="display: flex; justify-content: space-between; margin-top: 5px;"><div>Name of drawer of cheque</div><div>Cheque no.</div><div>BSB no.</div><div>Account no.</div><div>Cheque Amount A\$</div></div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"><div style="border: 1px solid black; width: 30%; height: 20px;"></div><div style="border: 1px solid black; width: 15%; height: 20px;"></div><div style="border: 1px solid black; width: 15%; height: 20px;"></div><div style="border: 1px solid black; width: 15%; height: 20px;"></div><div style="border: 1px solid black; width: 25%; height: 20px;"></div></div>	
H Contact telephone number (daytime/work/mobile) <div style="display: flex; margin-top: 5px;"><div style="border: 1px solid black; width: 100px; height: 20px; margin-right: 10px;"></div><div style="border: 1px solid black; width: 200px; height: 20px;"></div></div>	I Email address <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>

Declaration By submitting this Application Form with your Application Amount, I/we declare that I/we:

- ✓ have read the prospectus in full;
- ✓ have read the Privacy Policy (available at the address listed below) in full;
- ✓ have received a copy of the electronic Prospectus or a print out of it;
- ✓ have this Application Form in accordance with the Prospectus and the instructions on the reverse of the Application Form and declare that all details and statements made by me/us are complete and accurate;
- ✓ agree and consent to the Company collecting, holding, using and disclosing my/our personal information in accordance with the Privacy Policy (available at the address listed below);
- ✓ where I/we have been provided information about another individual, warrant that I/we have obtained that individual's consent to the transfer of their information to the Company and have provided that individual with a copy of, or details as to where to obtain, the Privacy Policy;
- ✓ acknowledge that once the Company accepts my/our Application Form, I/we may not withdraw it;
- ✓ apply for the number of Shares that I/we apply for (or a lower number allocated in a manner allowed under the Prospectus);
- ✓ acknowledge that my/our application may be rejected by the Company in consultation with the Lead Manager in its absolute discretion;
- ✓ authorise the Lead Manager and the Company and their respective officers and agents to do anything on my/our behalf necessary (including the completion and execution of documents) to enable the Securities to be allocated to me/us;
- ✓ am/are over 18 years of age;
- ✓ agree to be bound by the constitution of the Company;
- ✓ acknowledge that neither the Company nor any person or entity guarantees any particular rate of return on the Securities, nor do they guarantee the repayment of capital;
- ✓ represent, warrant and agree that I/we am/are not in the United States or a US Person and am/are not acting for the account or benefit of a US Person; and
- ✓ represent, warrant and agree that I/we have not received this Prospectus outside Australia and am/are not acting on behalf of a person resident outside Australia unless the Securities may be offered in my/our jurisdiction without contravention of the security laws of the jurisdiction or any need to register the Prospectus, the Securities or the Offer.

Guide to the General Offer Application Form

YOU SHOULD READ THE PROSPECTUS CAREFULLY BEFORE COMPLETING THIS APPLICATION FORM.

Please complete all relevant sections of the appropriate Application Form using BLOCK LETTERS. These instructions are cross-referenced to each section of the Application Form.

Instructions

- A** If applying for Shares insert the **number** of Share for which you wish to subscribe at Item **A** (not less than 5,000 Shares and then in multiples of 100 Shares). Multiply by A\$0.40 to calculate the total Application Amount for Shares and enter the **A\$amount** at Item **B**.
- C** Write your **full name**. Initials are not acceptable for first names.
- D** Enter your **postal address** for all correspondence. All communications to you from the Company will be mailed to the person(s) and address as shown. For joint Applicants, only one address can be entered.
- E** If you are sponsored in CHESS by a stockbroker or other CHESS participant you may enter your CHESS HIN if you would like the allocation to be directed to your HIN. **NB: your registration details provided must match your CHESS account exactly.**
- F** Enter your Australian **tax file number** (TFN) or ABN or exemption category, if you are an Australian resident. Where applicable, please enter the TFN/ABN of each joint Applicant. Collection of TFN's is authorised by taxation laws. Quotation of your TFN is not compulsory and will not affect your Application Form.
- G** Complete **cheque details** as requested. Make your cheque payable to "Genetic Signatures Limited – Share Issue Account". Cross it and mark it 'Note negotiable'. Cheques must be in Australian currency, and cheques must be drawn on an Australian bank.
- H** Enter your **contact details** so we may contact you regarding your Application Form or Application Monies.
- I** Enter your **email address** so we may contact you regarding your Application Form or Application Amount or other correspondence.

Correct Form of Registrable Title

Note that ONLY legal entities can hold the Shares. The Application must be in the name of a natural person(s), companies or other legal entities acceptable to the Company. At least one full given name and surname is required for each natural person. Examples of the correct form of registrable title are set out below.

Type of Investor	Correct Form of Registrable Title	Incorrect Form of Registrable Title
Individual	Mr John David Smith	J D Smith
Company	ABC Pty Ltd	ABC P/L or ABC Co
Joint Holdings	Mr John David Smith & Mrs Mary Jane Smith	John David & Mary Jane Smith
Trusts	Mr John David Smith <J D Smith Family A/C>	John Smith Family Trust
Deceased Estates	Mr Michael Peter Smith <Est Lte John Smith A/C>	John Smith (deceased)
Partnerships	Mr John David Smith & Mr Ian Lee Smith	John Smith & Son
Clubs/Unincorporated Bodies	Mr John David Smith <Smith Investment A/C>	Smith Investment Club
Superannuation Funds	John Smith Pty Limited <J Smith Super Fund A/C>	John Smith Superannuation Fund

Lodgment

Mail your completed Application Form with your cheque(s) or bank draft attached to one of the following addresses:

Mailing address:

Genetic Signatures Limited
C/-Boardroom Pty Limited
GPO Box 3993
SYDNEY NSW 2001

Delivery address:

Genetic Signatures Limited
C/-Boardroom Pty Limited
Level 7, 207 Kent Street
SYDNEY NSW 2000

The Offer closes at 5.00pm (AEST) 12 December 2014

It is not necessary to sign or otherwise execute the Application Form.

If you have any questions as to how to complete the Application Form, please contact Boardroom Pty Limited on 1300 737 760 within Australia and + 61 2 9290 9600 outside Australia.

Privacy Statement

Boardroom Pty Limited advises that Chapter 2C of the Corporations Act 2001 (Cth) requires information about you as a shareholder (including your name, address and details of the shares you hold) to be included in the public register of the entity in which you hold shares. Information is collected to administer your share holding and if some or all of the information is not collected then it might not be possible to administer your share holding. Your personal information may be disclosed to the entity in which you hold shares. You can obtain access to your personal information by contacting us at the address or telephone number shown on the Application Form.

Our privacy policy is available on our website (<http://www.boardroomlimited.com.au/Privacy.html>).

The Corporations Act requires some of this information to be included in the Company's Shareholder and Option holder register, which will be accessible by the public. The Company will collect, use, hold, and disclose your personal information in accordance with the Privacy Policy. For more detail on how the Company collects, stores, uses and discloses your information, please refer to our Privacy Policy. Alternatively contact the Company and the Company will send you a copy. It is recommended that you obtain a copy of the Privacy Policy and read it carefully.

Genetic Signatures Limited

ACN 095 913 205

General Offer Application Form

This is an Application Form for Shares in Genetic Signatures Limited (**Company**) on the terms set out in the Prospectus dated 7 November 2014. Defined terms in the Prospectus have the same meaning in this Application Form. You may apply for a minimum of 5,000 Shares and multiples of 100 Shares thereafter. This Application Form and your cheque or bank draft must be received by **5.00pm (AEST) on 12 December 2014**.

This Application Form is important. If you are in doubt as to how to deal with this Application Form, please contact your accountant, lawyer, stockbroker or other professional adviser. The Prospectus dated 7 November 2014 and contains information relevant to a decision to invest in the Shares of the Company and you should read the entire Prospectus carefully before applying for Shares.

The Share Registry's Privacy Policy (**Privacy Policy**) also sets out important information relating to the collection, use and disclosure of all personal information that you provide to the Company. Please ensure that you and all relevant individuals have read the Privacy Policy carefully before submitting this Application Form. The Privacy Policy can be found on the website <http://www.boardroomlimited.com.au/Privacy.html>

To meet the requirements of the *Corporations Act 2001* (Cth), this Application Form must not be distributed to another person unless included in, or accompanied by the Prospectus dated 7 November 2014. A person who gives another person access to this Application Form must, at the same time and by the same means, give the other person access to the Prospectus. The Company will send you a free paper copy of the Prospectus if you have received an electronic prospectus and you ask for a paper copy before the Prospectus expires on 7 December 2015.

PLEASE FOLLOW THE INSTRUCTIONS TO COMPLETE THIS APPLICATION FORM (SEE REVERSE) AND PRINT CLEARLY IN CAPITAL LETTERS USING BLACK OR BLUE PEN.

A Number of Shares you are applying for <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> <div style="text-align: center; margin-top: 5px;">Minimum of 5,000 Shares to be applied for and thereafter in multiples of 100 Shares</div>	B Total amount payable <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> <div style="text-align: center; margin-top: 5px;">x \$0.40 per Share =</div>
C Write the name(s) you wish to register the Securities in (see reverse for instructions) Applicant #1 <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Name of Applicant #2 or <Account Designation> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Name of Applicant #3 or <Account Designation> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	
D Write your postal address here Number/Street <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Suburb/Town <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> State <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Postcode <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	
E CHESS participant – Holder Identification Number (HIN) <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	
F Enter your Tax File Number(s), ABN, or exemption category Applicant #1 <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Applicant #2 <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> Applicant #3 <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	
G Cheque payment details – PIN CHEQUE(S) HERE <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	
H Contact telephone number (daytime/work/mobile) <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	
I Email address <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	

Declaration By submitting this Application Form with your Application Amount, I/we declare that I/we:

- ✓ have read the prospectus in full;
 - ✓ have read the Privacy Policy (available at the address listed below) in full;
 - ✓ have received a copy of the electronic Prospectus or a print out of it;
 - ✓ have this Application Form in accordance with the Prospectus and the instructions on the reverse of the Application Form and declare that all details and statements made by me/us are complete and accurate;

- ✓ agree and consent to the Company collecting, holding, using and disclosing my/our personal information in accordance with the Privacy Policy (available at the address listed below);
 - ✓ where I/we have been provided information about another individual, warrant that I/we have obtained that individual's consent to the transfer of their information to the Company and have provided that individual with a copy of, or details as to where to obtain, the Privacy Policy;
 - ✓ acknowledge that once the Company accepts my/our Application Form, I/we may not withdraw it;

- ✓ apply for the number of Shares that I/we apply for (or a lower number allocated in a manner allowed under the Prospectus);
 - ✓ acknowledge that my/our application may be rejected by the Company in consultation with the Lead Manager in its absolute discretion;
 - ✓ authorise the Lead Manager and the Company and their respective officers and agents to do anything on my/our behalf necessary (including the completion and execution of documents) to enable the Securities to be allocated to me/us;

- ✓ am/are over 18 years of age;
 - ✓ agree to be bound by the constitution of the Company;
 - ✓ acknowledge that neither the Company nor any person or entity guarantees any particular rate of return on the Securities, , nor do they guarantee the repayment of capital;
 - ✓ represent, warrant and agree that I/we am/are not in the United States or a US Person and am/are not acting for the account or benefit of a US Person; and

- ✓ represent, warrant and agree that I/we have not received this Prospectus outside Australia and am/are not acting on behalf of a person resident outside Australia unless the Securities may be offered in my/our jurisdiction without contravention of the security laws of the jurisdiction or any need to register the Prospectus, the Securities or the Offer.

Guide to the General Offer Application Form

YOU SHOULD READ THE PROSPECTUS CAREFULLY BEFORE COMPLETING THIS APPLICATION FORM.

Please complete all relevant sections of the appropriate Application Form using BLOCK LETTERS. These instructions are cross-referenced to each section of the Application Form.

Instructions

- A** If applying for Shares insert the ***number*** of Share for which you wish to subscribe at Item **A** (not less than 5,000 Shares and then in multiples of 100 Shares). Multiply by A\$0.40 to calculate the total Application Amount for Shares and enter the ***A\$amount*** at Item **B**.

C Write your ***full name***. Initials are not acceptable for first names.

D Enter your ***postal address*** for all correspondence. All communications to you from the Company will be mailed to the person(s) and address as shown. For joint Applicants, only one address can be entered.

E If you are sponsored in CHESS by a stockbroker or other CHESS participant you may enter your CHESS HIN if you would like the allocation to be directed to your HIN. **NB: your registration details provided must match your CHESS account exactly.**
- F** Enter your Australian ***tax file number*** (TFN) or ABN or exemption category, if you are an Australian resident. Where applicable, please enter the TFN/ABN of each joint Applicant. Collection of TFN's is authorised by taxation laws. Quotation of your TFN is not compulsory and will not affect your Application Form.

G Complete ***cheque details*** as requested. Make your cheque payable to "Genetic Signatures Limited – Share Issue Account". Cross it and mark it 'Note negotiable'. Cheques must be in Australian currency, and cheques must be drawn on an Australian bank.

H Enter your ***contact details*** so we may contact you regarding your Application Form or Application Monies.

I Enter your ***email address*** so we may contact you regarding your Application Form or Application Amount or other correspondence.

Correct Form of Registrable Title

Note that ONLY legal entities can hold the Shares. The Application must be in the name of a natural person(s), companies or other legal entities acceptable to the Company. At least one full given name and surname is required for each natural person. Examples of the correct form of registrable title are set out below.

Type of Investor	Correct Form of Registrable Title	Incorrect Form of Registrable Title
Individual	Mr John David Smith	J D Smith
Company	ABC Pty Ltd	ABC P/L or ABC Co
Joint Holdings	Mr John David Smith & Mrs Mary Jane Smith	John David & Mary Jane Smith
Trusts	Mr John David Smith <J D Smith Family A/C>	John Smith Family Trust
Deceased Estates	Mr Michael Peter Smith <Est Lte John Smith A/C>	John Smith (deceased)
Partnerships	Mr John David Smith & Mr Ian Lee Smith	John Smith & Son
Clubs/Unincorporated Bodies	Mr John David Smith <Smith Investment A/C>	Smith Investment Club
Superannuation Funds	John Smith Pty Limited <J Smith Super Fund A/C>	John Smith Superannuation Fund

Lodgment

Mail your completed Application Form with your cheque(s) or bank draft attached to one of the following addresses:

Mailing address:	Delivery address:
Genetic Signatures Limited	Genetic Signatures Limited
C/-Boardroom Pty Limited	C/-Boardroom Pty Limited
GPO Box 3993	Level 7, 207 Kent Street
SYDNEY NSW 2001	SYDNEY NSW 2000

The Offer closes at 5.00pm (AEST) 12 December 2014

It is not necessary to sign or otherwise execute the Application Form.

If you have any questions as to how to complete the Application Form, please contact Boardroom Pty Limited on 1300 737 760 within Australia and + 61 2 9290 9600 outside Australia.

Privacy Statement

Boardroom Pty Limited advises that Chapter 2C of the Corporations Act 2001 (Cth) requires information about you as a shareholder (including your name, address and details of the shares you hold) to be included in the public register of the entity in which you hold shares. Information is collected to administer your share holding and if some or all of the information is not collected then it might not be possible to administer your share holding. Your personal information may be disclosed to the entity in which you hold shares. You can obtain access to your personal information by contacting us at the address or telephone number shown on the Application Form.

Our privacy policy is available on our website (<http://www.boardroomlimited.com.au/Privacy.html>).

The Corporations Act requires some of this information to be included in the Company's Shareholder and Option holder register, which will be accessible by the public. The Company will collect, use, hold, and disclose your personal information in accordance with the Privacy Policy. For more detail on how the Company collects, stores, uses and discloses your information, please refer to our Privacy Policy. Alternatively contact the Company and the Company will send you a copy. It is recommended that you obtain a copy of the Privacy Policy and read it carefully.

Corporate Directory

Company	Genetic Signatures Limited Level 7 207 Kent Street Sydney NSW 2000
Directors of the Company	Nick Samaras (Chairman) John Melki (CEO) Robert Birrell (Director and CFO) Mike Aicher (Executive Director – US Operations) Phillip Isaacs (Non-Executive Director) Pat Noland (Non-Executive Director)
Company Secretary	Robert Birrell
Lead Manager to the Offer	Lodge Corporate Pty Ltd Level 5, 60 Collins Street Melbourne VIC 3000 T: +61 3 9200 7000 F: +61 3 9200 7077 W: www.lodgepartners.com.au
Solicitors to the Offer	Watson Mangioni Lawyers Pty Limited Level 13, 50 Carrington Street Sydney NSW 2000
Investigating Accountant to the Offer	BDO East Coast Partnership Level 11 1 Margaret Street Sydney NSW 2000
Patent Attorney	Allens Patent & Trade Mark Attorneys Deutsche Bank Place Corner Hunter and Phillip Streets Sydney NSW 2000
Share Registry	Boardroom Pty Limited Level 7 207 Kent Street Sydney NSW 2000 T: 1300 737 760 (within Australia) T: +61 2 9290 9600 (from overseas)

