Advanced Molecular Diagnostic Systems

1 Dalmore Drive,
Scoresby,
Victoria 3179
AUSTRALIA
T: +61 (0)3 9763-1287
F: +61 (0)3 9763-2817
www.generabiosystems.com

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ASX Announcement – GENERA BIOSYSTEMS LIMITED (ASX: GBI)
QUARTERLY CASH FLOW & BUSINESS UPDATE

Genera Biosystems Limited (‘**Genera’**) is pleased to provide an update to accompany the attached Appendix 4C Quarterly Cash Flow report for the period ended 31 March 2017. The company held cash at end of quarter of $34k versus a $47k balance at 31 March 2016. Cash outflows of $484k during the period and were largely related to the payment of accrued trade creditors at 31 December 2016. Trade and other payables amounted to $611k at 31 December and declined to $292k at 31 March 2017.

Cash receipts from customers for the quarter amounted to $123k, up 62% versus the previous corresponding period (‘pcp’). The company anticipates cash receipts in the June and September quarters versus pcp will be materially stronger as respiratory testing volumes continue to grow year on year and firmer product pricing is achieved alongside a new highly automated instrumentation solution being introduced.

The December quarter is expected to see the new Australian cervical screening regime commenced (December 2017) with significant sales opportunities for Genera’s PapType® HPV test arising from this.

Current Capital Raising

Immediately prior to the end of the March quarter and after discussion with most Series B noteholders a second amendment to the Redemption Date of the Series B notes was made. The amendment provides an extension to the Series B Notes Redemption Date by a further 3 months to 30 June 2017.

The Company has previously announced to ASX that it anticipates undertaking a material capital raising to redeem all existing Series B Convertible Notes alongside the $1.0 million mezzanine loan facility. Proceeds of the capital raising will also be applied to accelerating test menu development and the introduction of a new highly automated instrumentation solution.

It is currently proposed that the capital raising will be conducted via an issuance of Series C Convertible Notes with a maturity date of December 2018 and convertible at $0.30 per Ordinary Share. Based on feedback received from Series B noteholders, Genera anticipates that approximately 40% of the outstanding Series B Notes will either elect for conversion into Ordinary Shares or roll into the proposed Series C issuance.

As discussions with prominent Australian-based funds have proved underwhelming, the Company is now focused on international sources of capital that may better grasp the commercial opportunities

that Genera is pursuing. The company intends to offer the Series C financing to existing Genera Shareholders alongside either an IVD partner and/or US based venture funds.

Genera is targeting the completion of a capital raising late in Q2 CY2017 to coincide with the release of a new highly automated instrumentation solution. In the interim Genera has increased its $1.0m Mezzanine debt facility by $250k to help fund the general working capital requirements of the Company. This facility may be increased to $1.5m if required. The Board has recently approved the CEO, Richard Hannebery, alongside other lenders providing additional financial support under the increased Mezzanine debt facility.

As part of the terms of the Mezzanine debt facility the Company shall issue 416.7 call options at an exercise price of $0.30 per option for every $100.00 advanced by the lenders. The Board will seek shareholder approval for any options to be issued under the terms of the debt facility to Mr Hannebery.

PapType® - Pathology Supply Agreement(s) for 2017

Genera has previously announced that due to a number of factors proposed new material supply agreement(s) with Australian pathology customers were to be deferred for up to 5 to 6 months. Further, as previously noted in Genera's half year report, the new cervical screening regime is now anticipated to commence in December 2017. Genera believes it is well positioned to offer its PapType® HPV test at this time on a new highly automated instrumentation solution.

Genera CEO, Richard Hannebery commented, "The deferral of the new HPV testing regime for approximately 6 months has allowed us valuable time to become 'match-fit' in our offering from the outset. We are now in a strong position to present a highly automated instrumentation solution running our comprehensive simultaneous HPV genotyping PapType® test from commencement of the new HPV testing regime."

Genera's PapType® test is currently listed on the Australian Register of Therapeutic Goods ('ARTG'). Our regulatory team has been advised that listing on the Medicare Benefits Schedule of all qualifying HPV tests under the new regime will be achieved once commercial pathology providers running the tests have sufficient comfort that the performance of the HPV test being used meets the 'Meijer performance guidelines'. Genera has received prior indication from members of its world class scientific advisory board that, based on extensive clinical studies of PapType®, the test should meet these guidelines.

With the release of a new highly automated instrumentation offering alongside future further improved workflow via the incorporation of new enzymes the prospects of pathology laboratories taking up PapType® is expected to be significantly enhanced.

Genera remains confident of a substantial sales ramp of PapType® when the new screening regime is commenced and should it be successful in gaining market traction, the Company will be well-positioned to deliver its maiden operational cash flow positive result over the first full 12 month operating period.

The Company believes the PapType® HPV test is very well placed in the market with the introduction of the new cervical screening regime commencing in December 2017. The new cervical screening algorithm requires simultaneous genotyping of HPV types 16 & 18 that cause 70% of cervical cancer

incidence. Genera's proprietary PapType® HPV test goes beyond this and simultaneously genotypes 14 HPV types responsible for 99.7% of cervical cancer incidence.

Delivery of new PapType® clinical data in US Screening population

Genera's PapType® HPV test has now been involved in a number of independent clinical studies in Australia, the UK and the US involving in excess of 11,000 patient samples in both referral and screening populations overseen by world opinion leaders in cervical cancer screening. The performance of PapType® has been largely consistent across all studies providing confidence in PapType's robust clinical performance, reliability and reproducibility.

Genera recently completed a significant clinical study in ~6,650 patient samples at the Wolfson Institute (UK) using the Beckman Coulter CytoFLEX™ instrument. Genera has received the preliminary data from this study and this data further supports the use of PapType® as a HPV screening test.

The global market opportunity for HPV testing is expected to exceed ~US$1.5 to US$2 billion per annum as numerous countries follow Australia's lead in replacing the traditional Pap smear with HPV testing as the front line screening tool in the fight against cervical cancer in women. A high performing HPV test partnered with a leading global IVD company could be expected to capture a significant portion of this market opportunity.

New Highly Automated Instrumentation Development & IVD partnering

Genera has progressed a collaboration with Beckman Coulter's Automation group in Indianapolis (USA) to provide a highly automated workflow for Genera's PapType® HPV test fully integrated with the CytoFLEX™, a 3rd party filtration device and a Beckman engineered robotic liquid handling platform. The system is based upon a new innovative instrumentation platform first unveiled by Beckman Coulter in early February at the 2017 Society for Laboratory Automation and Screening ('SLAS') held in Washington DC. Such a system may best position PapType® for use in high volume throughput pathology laboratories while also running other Genera AmpaSand based tests. Genera successfully validated the 3rd party filtration device during the March quarter and the new fully integrated highly automated instrumentation system is due for Research Use Only testing release late in the current June quarter.

This new highly automated Beckman Coulter instrumentation system will provide operator workflow benefits not experienced before by Genera customers. The new system will also include random access for additional plate loading mid-run allowing significant operator workflow benefits and the automated run of additional plates. Throughput on the new system should be able to yield testing volumes in excess of greater than 600 tests per day on a single system. This level of throughput compares favorably with the higher throughput systems currently offered by major global IVD companies such as those from Roche (Cobas) and Hologic (Panther).

Subsequent to this instrumentation automation collaboration Genera envisages other commercial collaborative opportunities with Beckman Coulter going forward including the optimisation of reagent transportation logistics.

Genera is cognisant of the need for a full global distribution footprint in order to maximise the value of the AmpaSand® testing platform. To this end Genera has commenced discussions with another significant global IVD company with the view to potentially provide this potential partner non-

exclusive access to its expanded test menu. This potential IVD partner's US operations continue to run raw clinical cervical swab samples to complete an independent validation, initially of the PapType® HPV test. To date feedback from this validation study has been positive.

Genera's scientific team has been closely engaged with the new IVD collaborator's development team based in the US with a view to exploring and gaining technical comfort regarding how Genera's PapType®, and other AmpaSand® MDx tests, may fit with its existing instrumentation market offering and capability as well as complementing existing consumable reagent sales in DNA and RNA extraction. Genera's PapType® and RTIplex™ assays have to date been validated using the Roche MagNA-Pure™ extraction system and Genera sees considerable ancillary benefit in the validation and adoption of a new high performance sample prep and extraction system provided by an aligned partner.

This particular potential IVD partner has a significant footprint of front-end sample preparation and extraction systems installed with pathology companies globally and may provide complementary capability and support alongside what Genera is currently pursuing with Beckman Coulter.

The board believes the current strategy has the best prospects for delivering an optimal result given current market dynamics.

QSand™

The board believes that the new prospective IVD partner may provide synergies outside of instrumentation and broad distribution capabilities in traditional pathology markets – namely in point-of-care testing engineering development that may be applicable to the development of Genera's next generation QSand™ technology.

Genera's QSand™ technology has exciting potential in the point-of-care market as well as traditional pathology markets. Based upon the concept of 'Whispering Gallery Modes' ('WGMs') - a new photonic principle involving discrete measurement of spectral shifts in light/wavelengths, QSand™ provides a unique method for analyte detection which leverages Genera's core intellectual property and knowhow in chemically modifying silica microspheres to produce custom Quantum dots.

Other Development initiatives

Development of the new sexually transmitted infections ('STI') assay continued to move forward during the quarter. After receiving additional *'voice-of-customer'* feedback, including input from some of Australia's leading sexual health experts, Genera believes that it has the construct of an optimal assay for comprehensive STI testing. The global addressable market for STI testing, excluding HPV testing, is estimated at greater than ~US$500m in 2017.

Given the significant test volumes particularly in Chlamydia Trachomatis and Neisseria Gonorrhoeae ('CT/NG') testing markets required by most large commercial pathology laboratories, automation and volume throughput is critical for market success. As an example, as STI testing continues to grow at a rapid rate some Australian lab customers are expected to run more baseline CT/NG tests than HPV screening tests, even after the new HPV cervical screening regime is introduced.

As a true, high-throughput, plate based multiplex technology, the AmpaSand® platform has the capability to offer pathology customers the required high volume STI test throughput over single working days. [1]

Genera has recently made the strategic decision to defer the release of a Research Use Only version of the STI assay until after the introduction of new highly automated instrumentation solution is released for testing late in the June quarter. A submission to the TGA and ARTG listing will follow also allowing CE-IVD approval a short time thereafter.

Genera CEO, Richard Hannebery concluded, "Since 2013/2014 the workflow and throughput demands of the market have changed dramatically. With limited financial resources over the past 3 to 4 years our team has made substantial headway in reshaping our market offering to be competitive in all key aspects of high value molecular testing. We have successfully made the transition incorporating Solid-Phase PCR into the AmpaSand® platform which, together with the introduction of new enzymes, has halved run times for our customers. We have protected many of these developments through a comprehensive patent application program with a number of new patents now being granted."

"Alongside core assay workflow developments we now have access to complementary instrumentation systems that offer an unprecedented streamlined workflow and benefits for operators running our AmpaSand® based tests. These new instrumentation systems can be well supported in the aftermarket globally without Genera having to add material in-market support resources."

"We have strong engagement with a number of highly credible global IVD companies that have the ability to take our AmpaSand® based tests to the world. As comprehensive HPV testing incorporating simultaneous genotyping finally looks about to take-off, we are in the position to release a highly competitive and differentiated offering in a number of key commercial aspects. We have a true, high throughput, plate based multiplex technology that has the flexibility and capability to offer pathology customers a broad menu of high value molecular diagnostic assays used by physicians to diagnose disease, make treatment decisions and monitor patients. We look forward to bringing all of the pieces of the puzzle together over the next 2-3 quarters for the benefit of all our stakeholders."

[1] All 'plate based' Real Time PCR platforms can 'multiplex' utilising additional wells of a plate to test for additional target analytes. As such commercially, their multiplexing capability is restricted due to a direct trade-off with volume throughput per plate (96 or 384 well). Genera's AmpaSand® technology facilitates the multiplexing of up to ~150 target analytes **in a single well** of a plate. On a like for like basis depending on the number of target analytes detected in a multiplex assay Genera's AmpaSand® technology facilities > 4X relative volume throughput. High volume throughput is a key commercial consideration for all large pathology labs undertaking STI testing.

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For further information please contact:

Mr Richard Hannebery
Chief Executive Officer
Genera Biosystems Limited
Telephone: +61 (0)3 9763 1287
www.generabiosystems.com.au

About Genera Biosystems : Genera Biosystems Limited ("GBI") is an Australian Securities Exchange listed molecular diagnostics company, which develops, manufactures and distributes advanced PCR molecular diagnostics tests. GBI has successfully developed two products to date, PapType® and RTI-Plex™, both of which are CE marked with several additional products in the company's development pipeline. Genera manufactures these products in its Therapeutics Goods Administration (TGA) certified manufacturing facility in Scoresby, Victoria, Australia.

In addition to its CE marked PapType® HPV and RTIplex™ respiratory tests Genera, is currently focused on broadening its testing menu with the development of a number of new assays in the areas of sexually transmitted infections (STI's), HIV, Aneuploidy Screening for IVF and Circulating Tumor DNA.