ISSN 1443-850X

Bioshares

28 February 2022
Edition 912

Delivering independent investment research to investors on Australian biotech, pharma and healthcare companies

Companies covered: ACR, AVR, CGS, RAP, TLX

	Bioshares Portfolio
Year 1 (May '01 - May '02)	21.2%
Year 2 (May '02 - May '03)	-9.4%
Year 3 (May '03 - May '04)	70.6%
Year 4 (May '04 - May '05)	-16.3%
Year 5 (May '05 - May '06)	77.8%
Year 6 (May '06 - May '07)	17.4%
Year 7 (May '07 - May '08)	-35.8%
Year 8 (May '08 - May '09)	-7.4%
Year 9 (May '09 - May '10)	50.2%
Year 10 (May '10 - May'11)	45.4%
Year 11 (May '11 - May '12)	-18.0%
Year 12 (May '12 - May '13)	3.1%
Year 13 (May '13 - May '14)	26.6%
Year 14 (May '14 - May '15)	23.0%
Year 15 (May '15 - May '16)	33.0%
Year 16 (May '16 - May '17)	16.8%
Year 17 (May '17 - May '18)	-7.1%
Year 18 (May '18 - May '19)	-2.3%
Year 19 (May '19 - May '20)	39.5%
Year 20 (May '20 - May '21)	86.8%
Year 21 (May '21 - Current)	-11.0%
Cumulative Gain	1711%
Av. Annual gain (20 yrs)	20.7%

Bioshares is published by Blake Industry & Market Analysis Pty Ltd.
ACN 085 334 292
PO Box 193
Richmond Vic 3121
AFS Licence No. 258032

Mark Pachacz - Editor/Analyst
Email: mark{at}bioshares.com.au
Ph: 0403 850 425

Edition Number 912 (28 February 2022)

Extract from Bioshares –

ResApp Health Covid Test Results Due in Coming Weeks

Last year ResApp Health (RAP: $0.067) started recruitment in the US and India of patients with suspected COVID-19 with the aim of developing an additional smartphone app to help diagnose and monitor progression of disease. Recruitment of patients in both regions is now complete with 598 patients recruited, 312 being positive cases.

The company is in the process of training its algorithm using a cross-fold validation approach. This approach has worked well when developing its broader respiratory ResAppDx test with the training and development algorithm achieving a similar level of accuracy (around 85%) when compared in a predictive, clinical setting.

The ResApp test uses cough sounds recorded through a smartphone that is processed by an algorithm. CEO Tony Keating said that there are three applications for the technology, which is infinitely scalable. The first is to be used as a screening tool. The second is to monitor disease progression (both deterioration and clearance of disease symptoms) and thirdly, to assess the effects of 'long COVID', which relates to the long-term fibrotic damage to the lungs from the virus, an aspect that is not well understood currently.

The priority for accuracy of the test is to achieve a high sensitivity (picking up positive cases) with specificity arguably less important. False positives are less of an issue as they can be checked with a rapid test or PCR test.

Keating says that the issue with rapid antigen tests is that they have a high specificity but a low sensitivity, missing positive cases. There is clearly a need for a more accurate and scalable test that does not generate the building environmental waste from rapid tests.

Continued over

– ResApp Health cont'd from page 1

In India most of the tests were conducted on a similar i-phone, and in the US a wider range of i-phones were used. Learning from the company's US trials for its first respiratory smartphone test, ResApp has added a background noise meter which prevents the test from operating if there is elevated background noise.

All of the algorithm development is now conducted internally at ResApp using machine learning engineering experts and data processing scientists.

Once the algorithm development/selection has been completed and results are released, the company will discuss the results with regulators to reach agreement on the path to market for the test. Taking the technology forward the company will need a partner and it is currently talking to pharmaceutical, biotech, diagnostic and healthcare companies. Results from the Indian/US study are expected in coming weeks.

Keating said that there is a strong public health, clinical and commercial need for an easily accessible test such as that being developed by ResApp for detecting coronavirus infection.

The ResApp approach has other appealing features. Being a phone-based test, traceability can be incorporated to ensure results are forwarded to government health bodies, which is an issue with rapid tests (that do not have this feature). ResApp also has good 'control data' from patients it has tested for a range of respiratory conditions prior to COVID-19 including asthma, pneumonia and COPD.

Keating is confident that there is a (cough) signature that can be characterised to coronavirus infection. The company will also have data on vaccinated and unvaccinated subjects. However, the strain of the coronavirus is not being identified.

Commercialisation of the Original ResAppDx Test

The ResAppDx test is approved for use in Australia and Europe to detect several respiratory infections and conditions. It is currently in use by telehealth provider Medgate (in Switzerland), by Alodokter (in Indonesia) and by Doctors on Demand (in Australia). It is due to be launched in coming months in the Philippines. The test is also being used by Janssen Pharmaceutica NV in a clinical study.

Sales are yet to be meaningful. For that to occur wider spread adoption with other telehealth providers will be required. The company is currently in discussions with other telehealth groups in Europe.

However, for investors the short-medium term driver will be the results from the COVID-19 test and any subsequent commercial distribution deals.

ResApp is capitalised at $58 million and held cash of $3.4 million at the end of last year.

Bioshares recommendation: **Speculative Buy Class B**

Bioshares

How Bioshares Rates Stocks

For the purpose of valuation, Bioshares divides biotech stocks into two categories. The first group are stocks with existing positive cash flows or close to producing positive cash flows. The second group are stocks without near term positive cash flows, history of losses, or at early stages of commercialisation. In this second group, which are essentially speculative propositions, Bioshares grades them according to relative risk within that group, to better reflect the very large spread of risk within those stocks. For both groups, the rating "Take Some Profits" means that investors may re-weight their holding by selling between 25%-75% of a stock.

Group A

Stocks with existing positive cash flows or close to producing positive cash flows.

Buy	CMP is 20% < Fair Value
Accumulate	CMP is 10% < Fair Value
Hold	Value = CMP
Lighten	CMP is 10% > Fair Value
Sell	CMP is 20% > Fair Value

(CMP–Current Market Price)

Group B

Stocks without near term positive cash flows, history of losses, or at early stages of commercialisation.

Speculative Buy – Class A
These stocks will have more than one technology, product or investment in development, with perhaps those same technologies offering multiple opportunities. These features, coupled to the presence of alliances, partnerships and scientific advisory boards, indicate the stock is relative less risky than other biotech stocks.

Speculative Buy – Class B
These stocks may have more than one product or opportunity, and may even be close to market. However, they are likely to be lacking in several key areas. For example, their cash position is weak, or management or board may need strengthening.

Speculative Buy – Class C
These stocks generally have one product in development and lack many external validation features.

Speculative Hold – Class A or B or C

Sell

Corporate Subscribers: Cogstate, Opthea, ResApp Health, Pharmaxis, Dimerix, Adalta, Actinogen Medical, Patrys, Antisense Therapeutics, Imugene, Exopharm, Immutep, Invex Therapeutics, Anteris Technologies, Chimeric Therapeutics, Neuren Pharmaceuticals, Neurotech International, Aroa Biosurgery