



Biotech Daily

Tuesday March 29, 2016

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH DOWN: GENETIC TECHNO UP 10.5%, PRANA DOWN 8%**
- * **VOLPARA \$10m IPO FOR BREAST IMAGING SOFTWARE**
- * **MGC, SYDNEY UNI 'WHITE PAPER' ON MEDICAL CANNABIS**
- * **PATRY'S LICENCES YALE NUCLEI-PENETRATING ANTI-DNA ANTIBODIES**
- * **RHINOMED: US DISTRIBUTION, TRIAL DELAY, FUNDS TRADING HALT**
- * **CLARITY APPOINTS EX-COCHLEAR CEO DR CHRIS ROBERTS DIRECTOR**
- * **PHOSPHAGENICS RECEIVES \$2.4m FEDERAL R&D TAX REFUND**

MARKET REPORT

The Australian stock market fell 1.57 percent on Tuesday March 29, 2016 with the ASX200 down 79.7 points to 5,004.5 points.

Seven of the Biotech Daily Top 40 stocks were up, 20 fell, 10 traded unchanged and three were untraded. All three Big Caps fell.

Genetic Technologies was the best, up 0.2 cents or 10.5 percent to 2.1 cents with 711,573 shares traded.

IDT climbed 5.4 percent; Medical Developments and Reva were up more than three percent; with Actinogen, Bionomics and Universal Biosensors up more than one percent.

Prana led the falls, down 0.6 cents or 8.2 percent to 6.7 cents with 807,897 shares traded.

Anteo, Cellmid and Mesoblast lost more than five percent; Avita, Biotron, Compumedics and Sirtex fell more than four percent; Benitec, CSL, Nanosonics, Oncosil and Polynovo were down more than three percent; Antisense and Cochlear shed more than two percent; Acrux, Impedimed, Opthea, Orthocell, Pro Medicus, Resmed and Tissue Therapies were down more than one percent; with Clinuvel down 0.7 percent.

VOLPARA HEALTH TECHNOLOGIES

Volpara has filed its prospectus to raise \$10 million at 50 cents a share to list on the ASX and commercialize breast imaging software for cancer detection.

Earlier this month, Volpara said it hoped to raise \$20 million (BD: Mar 1, 2016).

The Wellington, New Zealand-based Volpara said that its US Food and Drug Administration-cleared software was able to analyze breast density, which was a risk factor for cancer, indicating a likely higher incidence of breast cancer and a characteristic which could hide cancer in a mammogram.

The company said that the software transformed a digital mammogram, from any supported x-ray vendor, into quantitative, standardized information about the breast, to inform decision-making about next steps in cancer detection, including controlling radiation doses for scans.

Volpara said that in the US, legislation in 24 states had made it compulsory for breast density to be tested, based on a movement by women with dense breasts who discovered they had breast cancer after getting the all clear from mammograms.

The company said that of all cancers, breast cancer caused the third highest economic loss, at \$US88 billion a year and affected one in eight women, globally.

Volpara said that mammograms were important for the early detection of breast cancer and had reduced the risk of death by 40 percent, but they “only detect 65 percent of cancers in women with dense breasts”.

The company said it had “first mover advantage”, its technology was the only objective measurement of breast density, its software was marketed in 34 countries, with revenue for the nine months to December 31, 2016 of \$2.3 million.

Volpara said the offer was being managed and fully-underwritten by Morgans Corporate and would give the company a total market capitalization of \$61 million following the offer.

Volpara said its board would comprise chairman Roger Allen, chief executive officer Dr Ralph Highnam and directors Prof John Michael Brady, John Pavlidis, John Diddams and Lyn Swinburne, with the management team including chief financial officer Brian Leights, chief commercial officer Mark Koeniguer, chief technology officer Dr David Murray and chief marketing officer Julian Marshall.

The company said that the capital raising would open on April 4 and close on April 15, with ASX listing, subject to confirmation, scheduled for April 27, 2016.

The prospectus is available at: <http://volparasolutions.com/investors/>.

Volpara is a public unlisted company.

MGC PHARMACEUTICALS

MGC says it has published what it calls “a white paper” with the University of Sydney on the Australian medical cannabis industry and potential commercial opportunities.

A “white paper” is usually an authoritative government report.

MGC said that the paper, entitled ‘Medicinal Cannabis in Australia: Science, Regulation and Industry’ was developed by the University of Sydney Business School’s Community Placement Program, in partnership with MGC and is available at:

http://mgcpharma.com.au/wp-content/uploads/2016/03/mgc_whitepaper_final-sml.pdf.

The paper covers demand and use of medical cannabis, regulation and policy options and follows recent Federal legislation and expected State legislation.

MGC managing-director Nativ Segev said the paper “confirms to us the strong need for developing the medicinal cannabis industry in Australia, which is estimated to be worth \$100-150 million per annum based on the estimated current market demand”.

MGC fell 0.1 cents or 3.3 percent to 2.9 cents with 4.5 million shares traded.

PATRYS

Patrys says it has acquired a licence to a Yale University-discovered portfolio of pre-clinical anti-DNA antibodies, fragments and variants that penetrate cell nuclei.

Patrys said that the pre-clinical antibodies had “the unusual ability to penetrate into cancer cell nuclei and inhibit DNA repair mechanisms and [had] potential application as stand-alone therapies and as adjuncts to augment existing therapies or to help overcome resistance associated with DNA repair mechanisms”.

The company said that it acquired the licence to the anti-DNA antibody platform through a scrip acquisition, of Nucleus Therapeutics Pty Ltd in three tranches with a value of up to \$720,000, with the vendors including Yale University owning 14.36 percent of its issued capital.

Patrys said that each tranche would be based on the 7-day volume weighted average price prior to the completion of a milestone, with the first milestone achieved and requiring the payment of Patrys shares to the value of \$360,000 to the vendors.

The company said that the second tranche would be triggered by the granting of specified patents associated with the technology, for shares to the value of \$180,000, with the final; tranche of \$180,000 in shares to be paid on dosing the first patient in a phase I trial.

Patrys said the terms of the Yale licence agreement were confidential, but included an agreed development plan, milestones and a sliding scale of sales royalties.

The company said that the lead candidates were auto-antibodies known as 3E10, or Deoxymab, and 5C6, which had “the capacity to penetrate cancer cell nuclei, damage DNA, inhibit DNA repair and kill DNA repair-deficient cancer cells”.

Patrys said that both Deoxymab and 5C6 when used as single agents were selectively toxic to cancer cells with DNA repair deficiencies such as those with mutations in the BRCA2 and PTEN genes.

The company said that the mechanisms of action of both Deoxymab and 5C6 had possible advantages over poly-adenosine diphosphate ribose polymerase inhibitors as they were able to inhibit both single and double-stranded DNA repair pathways and cause accumulation of DNA damage in cancer cells, suggesting “potential utility in a range of cancers, including some rare diseases like glioblastoma”.

Patrys said that as well as showing single agent potential, the antibodies had the ability to sensitize cancer cells to radiation and chemotherapy and interfere with a cell’s ability to sustain itself through DNA repair.

The company said the antibodies were the subject of three patent applications lodged by Yale University, the University of California Los Angeles and the US Department of Veterans Affairs, with protection being sought in Europe, Japan and the US, covering the use of Deoxymab and fragments and/or variants to treat cancer, to 2035.

Patrys chief executive officer Dr James Campbell said the company was “delighted to have finalized the acquisition and to be the licensee of these exciting new assets”.

“Our team has evaluated numerous potential assets from around the globe and we feel confident that these assets offer a favourable risk/reward profile for our shareholders,” Dr Campbell said.

“This acquisition elevates and expands Patrys’ oncology pipeline beyond [immunoglobulin M] technologies, and gives Patrys a strong position in a new field of immune-oncology,” Dr Campbell said.

Patrys said it would initiate and manage pre-clinical studies of a number of lead candidates to guide an eventual clinical development strategy for the new assets, working closely with the inventors from Yale University.

Patrys climbed 0.2 cents or 28.6 percent to 0.9 cents with 2.2 million shares traded.

RHINOMED

In a series of announcements Rhinomed has requested a capital-raising trading halt, announced a delay in a trial and expanded distribution in the US.

Rhinomed said that its phase I trial of its intra-nasal positive expiratory air pressure (Inpeap) technology for obstructive sleep apnoea at Monash Health was nearing completion with 18 of the 20 patients completing the study.

The company said it expected the results of the independent trial to be finalized in early 2016, "but now expects the final two patients to be recruited and for Monash Health to complete the study in the next six weeks".

Rhinomed said that it had appointed the Charlotte, North Carolina-based Europa Sports Products to distribute its Turbine and Mute nasal plug breathing technology to US health and fitness shops, health club facilities and the food and drug market.

The company said that Europa Sports was "one of America's leading sports equipment and supplements distributors" representing more than 300 brands.

Europa co-chief executive officer Eric Hillman said the US market was "wide open for a product like this".

Rhinomed said that revenues from product sales under the agreement were expected to begin by the end of 2016.

The company said that its Mute snoring and sleep nasal plugs would be promoted through a 107-shop program in the New York-based Duane Reade chain of drug stores and Mute would be available in 891 Walgreens shops across the US.

Rhinomed said that an initial order had been received for 22,500 packs of Mute.

The company said that a 68,462 subject study by the US Centre of Disease Control and Prevention found that 48 percent of Americans snore.

Rhinomed last traded up 0.2 cents or 4.2 percent to at 2.5 cents.

CLARITY PHARMACEUTICALS

Clarity says it has appointed former Cochlear chief executive officer Dr Chris Roberts as an independent non-executive director.

Clarity said that Dr Roberts had more than 40 years experience in the medical innovation and had served on the boards of a number of ASX listed companies as well as research institutions and government entities.

The company said that he was Cochlear's chief executive officer for 11 years and was chairman of Sirtex from 2000 to 2002 including during its listing on the ASX.

Clarity said that Dr Roberts was an executive vice-president of Resmed from 1992 to 2004 and was currently a non-executive director of Resmed and Oncosil.

The company said that Dr Roberts was a director Innovation Science Australia, Jobs for NSW, the University of Technology Sydney's vice-chancellor's industry advisory board, the University of New South Wales Faculty of Medicine advisory council, Monash University Industry Council of Advisors and the National Health and Medical Research Council's health innovation advisory committee, as well as a member of the board of governors of the Centenary Institute of Cancer Medicine and Cell Biology and an honorary fellow of the Australian Institute of Business and Economics at the University of Queensland, and a professor in biomedical engineering, with the Plus Alliance of the University of New South Wales, King's College London and Arizona State University.

Clarity said it was developing targeted radiopharmaceutical therapies to assist in the drug development pipeline of novel therapies and its platform technology allowed drugs to be radio-labelled and visualized using positron emission tomography imaging.

Clarity is a private company.

PHOSPHAGENICS

Phosphagenics says it has received \$2,441,912 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program.

Phosphagenics said the rebate related to Australian and eligible overseas research and development activities for the year to June 30, 2015.

Phosphagenics was unchanged at 0.8 cents.