



Biotech Daily

Wednesday March 29, 2017

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH UP: PRANA UP 13%, OPTHEA DOWN 7%**
- * **VICTORIA GENOMICS PROJECT FOR SUPERBUGS**
- * **MELBOURNE UNI: MOUSE NEURAL CELLS HOPE FOR GUT DISORDERS**
- * **WEHI: MALARIA PARASITES 'WALK THROUGH CELL WALLS'**
- * **MESOBLAST ABOVE \$1b, AGAIN, \$1.8b TO GO**
- * **NUHEARA RAISES \$4.4m, PLAN FOR \$2.6m MORE**
- * **NEUROTECH COMPLETES US MENTE AUTISM TRIAL ENROLMENT**
- * **AUSTRALIA APPROVES MMJ CANNABIS IMPORT**
- * **PFIZER TO EVALUATE SUDA OROMIST ORO-MUCOSAL SPRAY**
- * **OBJ, UNNAMED COMPANY BODYGUARD COLLABORATION**
- * **PIPPA MANN CONTINUES AS GENETIC TECHNOLOGIES AMBASSADOR**
- * **RHINOMED PLACEMENT, 60m DIRECTOR OPTIONS, CONSOLIDATION EGM**
- * **W WHITNEY GEORGE TAKES 18% OF RHINOMED**
- * **VOLPARA TO RELEASE 12m ESCROW SHARES**
- * **BRAIN TAKES CAPITAL RAISING TRADING HALT TO SUSPENSION**
- * **DAVID HEANEY REPLACES CYCLOPHARM CHAIR VANDA GOULD
- TOM MCDONALD DIRECTOR**

MARKET REPORT

The Australian stock market climbed 0.9 percent on Wednesday March 29, 2017, with the ASX200 up 52.3 points to 5,873.5 points. Fifteen of the Biotech Daily Top 40 stocks were up, 12 fell, 12 traded unchanged and one was untraded. All three Big Caps were up.

Yesterday's worst, Prana, was today's best, up 0.6 cents or 13.0 percent to 5.2 cents with 507,052 shares traded. Psivida climbed 11.1 percent; Oncosil was up 10.7 percent; Avita improved 6.4 percent; Living Cell was up 4.35 percent; Acrux and Actinogen were up more than three percent; Bionomics, Orthocell and Universal Biosensors rose more than two percent; Admedus, Cochlear, CSL and Pharmaxis were up more than one percent; with Impedimed, Nanosonics, Pro Medicus and Resmed up by less than one percent.

Opthea led the falls, down six cents or 6.9 percent to 81 cents with 690,045 shares traded. Mesoblast lost 4.9 percent; IDT was down 3.45 percent; Neuren shed 2.7 percent; Airxpanders, Clinuvel, Cyclopharm, Medical Developments and Osprey were down more than one percent; with Ellex, Sirtex and Viralytics down by less than one percent.

VICTORIA GOVERNMENT

The Victoria Government says it will invest \$25 million over four years for genomic sequencing across five disease areas, including hospital superbugs.

A Victoria Government media release said the project would be led by the Melbourne Genomics Health Alliance and would see about 2,000 Victorians access genomic sequencing tests over four years.

The five disease areas include the control of multi-drug resistant microbes in hospitals and protect patients from infections; genomic sequencing in bone marrow failure to offer a quicker and more accurate diagnosis; better and earlier diagnosis of complex neurological and neurodegenerative diseases such as early-onset dementia, early-onset motor neurone disease and certain forms of Parkinson's disease; a more accurate diagnosis of genetic kidney disease; and improving understanding of causes of multiple abnormalities in babies who die in utero or early in infancy

Victoria Minister for Health Jill Hennessy said that the State was "leading the world when it comes to genomic sequencing and its application in the fight against superbugs is yet another revolutionary step forward".

"It has the power to identify potential superbug outbreaks before they become a real threat to the most vulnerable of patients," Ms Hennessy said.

Victoria's Parliamentary Secretary for Medical Research Frank McGuire said that patients with rare genetic conditions could "suffer years of testing and expensive bills without ever learning what's making them ill".

"Our investment in genomic sequencing will help change that," Mr McGuire said.

THE UNIVERSITY OF MELBOURNE

The University of Melbourne says it has transplanted nerve stem cells into mouse colons potentially leading to a treatment for paediatric gut disorders.

The University said that children with Hirschsprung's disease were born without the nerves needed for peristalsis, the muscular contractions that push food from the oesophagus to the anus.

The University said that the disease was usually diagnosed at birth when the baby failed to pass their first stool, or meconium, with the only treatment surgery, followed by lifelong complications and, commonly, psychosocial problems.

The University said the gut had its own nervous system and neural stem cells migrated from the base of the brain to the gut, where they differentiated into neurons that controlled different aspects of the digestive process, but some cells went missing.

The University said that a research team led by Prof Heather Young and Dr Lincon Stamp transplanted neural stem cells into mouse models of Hirschsprung's disease.

"We found that as little as one month after transplantation, the stem cells didn't just look like neurons, they were behaving like proper neurons," Dr Stamp said.

The University said that the team used a technique called optogenetics, using light to activate the neurons and then record activity within the muscle walls.

"We found these neurons weren't just firing off signals, but were also connecting with the bowel wall," Dr Stamp said.

The research article, entitled 'Optogenetic Demonstration of Functional Innervation of Mouse Colon by Neurons Derived From Transplanted Neural Cells' was published in the journal *Gastroenterology* and an abstract is available at:

[http://www.gastrojournal.org/article/S0016-5085\(17\)30034-3/fulltext](http://www.gastrojournal.org/article/S0016-5085(17)30034-3/fulltext).

The University said that the research could provide useful insights for gut disorders affecting adults, such as gastroparesis and achalasia.

THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH

The Walter and Eliza Hall Institute says that researchers have identified proteins that enable malaria parasites to “walk through cell walls”.

The Institute said the ability to traverse cell walls was shown using its first insectary to grow human malaria parasites.

WEHI said that the research identified two parasite proteins that were the key to the ability to cross cell walls and the proteins “could be targeted to develop much-needed anti-malarial drugs or vaccines”.

The Institute said that the research article, entitled ‘Cell Traversal Activity Is Important for Plasmodium falciparum Liver Infection in Humanized Mice’ was published in the journal Cell Reports and an abstract was available at:

[http://www.cell.com/cell-reports/fulltext/S2211-1247\(17\)30334-0](http://www.cell.com/cell-reports/fulltext/S2211-1247(17)30334-0).

WEHI said that Dr Justin Boddey, Dr Sara Erickson and Annie Yang led a team investigating how the malaria parasite Plasmodium falciparum travelled from the site of a mosquito bite to invade human liver cells, the first step in malaria infection.

The Institute said that when a person was infected with malaria, the parasite invaded and multiplied in liver cells, but doesn’t cause disease.

WEHI said the parasites “burst out of the liver” and infected the blood, causing symptoms such as fever, chills, fatigue and muscle and joint pain characteristic of malaria.

Dr Boddey said the research confirmed that Plasmodium falciparum had the ability to “walk through cell walls” as it sought out liver cells where it could hide and multiply.

“We have shown that Plasmodium falciparum employs a technique called cell traversal to quickly move through host cells in their path as they seek out liver cells to infect,” Dr Boddey said.

“Our study identified that Plasmodium falciparum parasites traverse human cells, effectively walking through cell walls, using two proteins called SPECT and PLP1 to achieve this superpower,” Dr Boddey said.

“This allows parasites to get from the skin to the liver very quickly following a mosquito bite,” Dr Boddey said.

WEHI said that malaria caused more than 650,000 deaths each year, predominantly in children and pregnant women and there was an urgent need for new malaria vaccines and treatments in an effort to eradicate the disease.

MESOBLAST

Yesterday, Mesoblast broke through the \$1 billion market cap level, again, following the issue of 26.25 million shares at \$2.00 a share and the price rising above \$2.37.

With a total of about 427,948,819 shares on offer, Mesoblast passed through the \$1 billion barrier the day after the significantly discounted placement, which raised \$52.5 million (BD: Mar 27, 2017).

Mesoblast fell below the \$1 billion mark in 2015, following its US initial public offer to raise \$95.8 million at a 34 percent discount and list on the Nasdaq (BD: Nov 16, 2015).

Prior to the Nasdaq listing, Mesoblast was trading at \$3.41 a share and the next day fell to \$2.04, falling as low as \$1.01 on June 28, 2016.

The company’s all-time high was \$10.04 on October 24, 2011, with an implied market capitalization of \$2,815.5 million on that day.

The company’s market capitalization was above \$2 billion from March to November 2011, from February to May 2012 and briefly above \$2 billion in October 2013, with Mesoblast’s highest end-of-month market capitalization \$2,549 million on July 31, 2011.

Mesoblast closed down 12 cents or 4.92 percent at \$2.32 with 877,103 shares traded.

[NUHEARA](#)

Nuheara says an oversubscribed placement has raised \$4,400,000 at eight cents a share and it will offer a share plan for a further \$2,600,000.

Nuheara said that the share plan would offer parcels of shares from \$2,500 to \$15,000 for shareholders at the record date of March 28, with the plan to open on April 5 and close on April 28, 2017.

The company said that the placement was “corner-stoned by two large [unnamed] multinational institutional funds” and the funds would be used to fund the production and marketing of its Iqbuds sound filtering and device ear-buds.

Nuheara said that Hunter Capital Advisors was the lead manager and book-runner to the offer.

Nuheara fell 0.1 cents or 1.2 percent to 8.3 cents with 2.8 million shares traded.

[NEUROTECH INTERNATIONAL](#)

Neurotech says it has completed enrolment of the 64 paediatric autism patients in its US randomized, double blind, placebo-controlled trial of its Mente Autism training device.

The Malta-based Neurotech said the trial would include the use of the Mente Autism system progressively, with all subjects expected to be included by the end of May 2017.

The company said the prospective trial was being independently conducted by the Cape Canaveral, Florida-based Carrick Institute and would investigate Mente Autism as a therapy for children aged between three and 12 years on the autism spectrum, with each patient treated for 12 weeks and results expected by October 2017.

Neurotech’s founder and chief scientific officer Dr Adrian Attard Trevisan said that he was “confident that the trial will reinforce Mente Autism’s positioning as a clinical-quality home-based therapy for children on the autism spectrum”.

Neurotech was up one cent or 3.3 percent to 31 cents.

[MMJ PHYTOTECH](#)

MMJ says the Federal Department of Health has approved its Australian distributor HL Pharma Pty Ltd’s application for a medicinal cannabis import licence.

Last month, MMJ said that HL Pharma had made the application and on receipt of a licence and permit, Swiss subsidiary, Satipharm AG would export its cannabidiol capsules to HL Pharma for distribution to approved customers (BD: Feb 28, 2017).

MMJ said the approval was “a significant development for MMJ as it enables the company to target direct supply to Australian pharmacies through its strategic partnership with Melbourne-based HL Pharma”.

Separately, the company said that Canada would “move to legalize the recreational cannabis market by July 1, 2018”.

MMJ was up six cents or 8.7 percent to 75 cents with 19.0 million shares traded.

[SUDA](#)

Suda says that Pfizer Consumer Healthcare will evaluate Suda’s Oromist oro-mucosal spray technology for two over-the-counter molecules.

Suda chief executive officer Stephen Carter said his company was “delighted to be working with Pfizer to assess the feasibility of two interesting drugs with our Oromist platform, where we believe that our technology can offer a unique advantage”.

Suda was up 0.1 cents or 4.8 percent to 2.2 cents with 16.1 million shares traded.

OBJ

OBJ says it has a collaboration agreement with an unnamed manufacturing and distribution partner, initially focused on its Bodyguard technology.

OBJ said that the unnamed partner was manufacturer and distributor of industrial adhesive tapes for the electronics, automotive, health care, medical devices, packaging and construction industries.

The company said that the agreement contained provisions for various outcomes from the collaboration including granting the partner first right of refusal to manufacture the Bodyguard product range and have the non-exclusive right to distribute the Bodyguard product range in certain markets once it was fully commercialized.

In 2013, the company said its Bodyguard patch used its low cost magnetic microarray drug delivery technology and a study of the Bodyguard Lubricen knee patch improves knee functionality in 94 percent of volunteers in a two week aggregated locomotor function study (BD: Dec 13, 2013).

Today, OBJ chairman Glyn Denison said the partner's "vast experience in the manufacture of the world's leading kinesiology tape products ... first attracted us to this potential working relationship".

"Establishing a high-volume, low-cost manufacturing capability is a major objective for Bodyguard as it allows for the development of various formulations required by distributors," Mr Denison said.

OBJ said the collaboration would also lead to introducing its micro-array technology for possible integration within the partner's existing product range.

OBJ was up 0.3 cents or 4.4 percent to 7.1 cents with 6.9 million shares traded.

GENETIC TECHNOLOGIES

Genetic Technologies says Dale Coyne Racing driver Pippa Mann will continue to promote its Brevagenplus risk assessment test for sporadic breast cancer.

Genetic Technologies said that Ms Mann would serve a second consecutive term as the product's ambassador and spokesperson.

The company said that Ms Mann was one of only nine female drivers to compete in the Indianapolis 500 and the only female driver to start in the race over the past four consecutive years.

Genetic Technologies was unchanged at one cent.

RHINOMED

Rhinomed will hold an extraordinary general meeting to ratify a placement, issue 60,000,000 director options and approve a 10-to-one consolidation.

Rhinomed said that shareholders would vote on the ratification of the prior placement of 122,135,100 shares and approve the issue of 40,000,000 to chief executive officer Michael Johnson and 10,000,000 options each to directors Brent Scrimshaw and Dr Eric Knight, all exercisable at 2.7 cents each by April 30, 2020.

The company said that the meeting would vote to approve a 10-to-one share consolidation.

The meeting will be held at the Giorgios Function Room, 1233 High Street, Armadale, Victoria on April 28, 2017 at 10.30am (AEST).

Rhinomed was up 0.1 cents or 5.6 percent to 1.9 cents.

RHINOMED

W Whitney George says he has increased his holding in Rhinomed from 43,566,205 shares (5.35%) to 165,701,205 shares (17.70%).

Earlier this month, Rhinomed said it had raised \$2,198,430 in a private placement to two US investors at 1.8 cents a share, a 16 percent premium to its 20-day volume-weighted average price, with 105,135,000 shares to be issued to Sprott Asset Management executive Mr George and 17,000,000 shares to an unnamed US investment group.

VOLPARA HEALTH TECHNOLOGIES

Volpara says that 11,864,511 shares will be released from compulsory ASX escrow on April 12, 2017.

Volpara said that following the release of the shares it would have 142,644,785 shares on issue, 94,010,908 of which would be quoted on the ASX, as well as 14,084,498 unlisted options, with 33,691,980 shares to be released from voluntary escrow on April 27, 2017. Volpara was unchanged at 42 cents.

BRAIN RESOURCE

Brain has requested a voluntary suspension to follow a trading halt “pending a material announcement to the market concerning a capital raising” (BD: Mar 27, 2017).

Brain last traded at nine cents.

CYCLOPHARM

Cyclopharm says it has appointed director David Heaney as chairman replacing Vanda Gould, effective immediately, and Tom McDonald has been appointed as a non-executive director effective, from April 3, 2017.

Cyclopharm managing-director James McBrayer told Biotech Daily that Mr Gould would continue as a non-executive director.

The company said Mr McDonald was a non-executive director of Wolfstrike Rentals Group and previously held positions with Allomak, CK Life Sciences, Lipa Pharmaceuticals and Keycorp and had held executive roles at the US-based Beckman Instruments both in Australia and overseas.

Cyclopharm said that Mr McDonald held a Bachelor of Commerce from the University of New South Wales.

The company said that Mr Heaney had been a non-executive director since 2007 and served as the acting chairman until today.

Cyclopharm said that Mr Heaney held executive positions with the National Australia Bank in Australia and the US prior to retiring in 1999 and had been a director of several listed and unlisted companies.

On October 7, 2016, Cyclopharm said that Mr Gould had stepped down from chairman to director “due to the demands on his time from responding to recent charges in relation to an on-going taxation and related matters”.

Cyclopharm fell 1.5 cents or 1.75 percent to 84 cents.