



Biotech Daily

Wednesday April 26, 2017

Daily news on ASX-listed biotechnology companies

- * **ASX UP, BIOTECH DOWN: MESOBLAST UP 6.5%; NEUREN DOWN 8%**
- * **UNIQUEST, PREVECEUTICAL CANNABINOID NASAL GEL 'TO THE BRAIN'**
- * **REVA TREATS 1st PATIENT IN FANTOM 'COMPLEX CASE' TRIAL**
- * **ONCOSIL IMPLANTS 1st BRACHYSIL PANCREATIC CANCER PATIENT**
- * **REDHILL ENROLS LAST PATIENT IN PHASE II RHB-102 IBS TRIAL**
- * **MONASH SHOWS G-COUPLED PROTEIN STRUCTURE**
- * **ACRUX, ELI LILLY Q3 AXIRON SALES DOWN 26% TO \$36m**
- * **ANALYTICA: US GUIDELINES BACK PERICOACH FOR INCONTINENCE**
- * **J&J \$285k SINGAPORE QUICKFIRE OBESITY CHALLENGE**
- * **MMJ: 'HARVEST ONE TSX-V LISTING FOR RECREATIONAL MARIJUANA'**
- * **MACH7 HAS ONE QUARTER CASH, 'MORE COMING'**
- * **BRAIN RESOURCE LICENCES MYBRAINSOLUTIONS TO TEVA FOR ISRAEL**
- * **NEUROTECH: BONVIE DISTRIBUTES MENTE AUTISM IN GREECE, CYPRUS**
- * **WASHINGTON H SOUL PATTINSON, HUNTER HALL BELOW 5% IN SIRTEX**
- * **ARC APPOINTS PROF SUE THOMAS CEO**

MARKET REPORT

The Australian stock market was up 0.68 percent on Wednesday April 26, 2017 with the ASX200 up 40.2 points to 5,912.0 points. Eleven of the Biotech Daily Top 40 stocks were up, 21 fell, seven traded unchanged and one was untraded.

Mesoblast was the best, up 20 cents or 6.5 percent to \$3.28 with 1.75 million shares traded. Actinogen, Impedimed and Oncosil improved four percent or more; Osprey, Prima and Starpharma climbed more than three percent; ITL rose 2.6 percent; CSL, Nanosonics, Resmed and Sirtex were up more than one percent; with Ellex up 0.5 percent.

Neuren led the falls, down 0.6 cents or 7.9 percent to seven cents with 2.4 million shares traded. Living Cell and Uscom lost seven percent or more; Avita and Benitec fell more than five percent; Airxpanders, Polynovo and Reva were down more than four percent; Acrux, Orthocell, Prana and Psivida were down more than three percent; Atcor, Factor Therapeutics, Medical Developments, Opthea, Pharmaxis and Universal Biosensors shed more than one percent; with Clinuvel, Cochlear, Pro Medicus and Viralytics down by less than one percent.

UNIQUEST

Uniquet says it has a second agreement with Preveceutical Medical to developing a soluble nasal gel to deliver cannabinoids “directly to the brain”.

Last week, Uniquet said it had a research agreement with the Vancouver, British Columbia-based Preveceutical Medical to develop therapeutic peptides from scorpion venom (BD: Apr 21, 2017).

Uniquet is the main commercialisation arm of the University of Queensland and its chief executive officer Dr Dean Moss said that Preveceutical was “interested in accessing [the University’s] intellectual property and expertise to develop soluble gels to deliver cannabinoids to the central nervous system”.

“[Soluble gels] potentially provide a safer, more reliable platform to deliver drugs, such as cannabinoids, directly to the [central nervous system], avoiding unwanted rapid metabolism, thus providing clinical benefit from direct nose-to-brain delivery,” Dr Moss said.

Uniquet said the University researcher behind the technology Dr Harendra Parekh, who last week was credited with developing peptides from scorpion venom for immune-boosting applications, would work with Preveceutical on the program analyzing plant-derived cannabinoids and formulating them into soluble gels for further testing.

Dr Parekh said the gels were liquid when sprayed into the nose and formed gels when warmed in the nasal cavity.

“This feature can potentially be exploited to deliver drugs through the nasal mucosa,” Dr Parekh said. “The longer-term goal is to develop [soluble] gels as safe, reliable delivery systems for cannabinoid extracts across a range of disease indications.”

Preveceutical executive chairman Stephen Van Deventer said that evidence of the clinical benefits associated with cannabinoids and the recent legalization of medical marijuana in a number of jurisdictions were the drivers for the collaboration.

“Nasal delivery of cannabinoids could potentially provide a safer and more reliable delivery platform with clinical benefits for pain, inflammation, seizures, and mental illness,” Mr Van Deventer said.

Uniquet said that Preveceutical had an option to licence its gel technology.

REVA MEDICAL

Reva says it has enrolled the first of up to 50 patients in the expanded Fantom II trial, evaluating the Fantom bio-resorbable scaffold in complex cases.

Reva said that the German trial would examine the safety and efficacy of the Fantom stent in cases including multiple vessels and long lesions.

The company said that the primary endpoint was the rate of major adverse cardiac events at six-months.

Reva said that the Kiel-based Universitätsklinikum Schleswig-Holstein’s Dr Matthias Lutz performed the first implant on a patient with diffuse disease in the right coronary artery, with a total lesion length of more than 50mm and was successfully treated with three 24mm Fantom scaffolds.

Dr Lutz said the scaffolds “were clearly visible during the procedure, allowing for accurate placement of multiple scaffolds without relying on marker band alignment, the method we use when implanting other scaffolds that are not visible”.

“Fantom’s thin struts aided in the delivery of the device through the diseased vessel, and absolutely no resistance was encountered when overlapping scaffolds, which helped ensure the success of the procedure,” Dr Lutz said.

Reva fell 4.5 cents or 4.3 percent to \$1.005.

ONCOSIL MEDICAL

Oncosil says it has implanted its first of 20 patients with its Brachysil radiation therapy of pancreatic cancer on April 24, 2017 at Melbourne's Monash Health.

Oncosil said that the implantation procedure was consistent with that documented in the prior Brachysil studies in pancreatic cancer.

The company said the multi-centre, randomized, open-label 'Oncopac-1' safety trial in patients with locally advanced, unresectable pancreatic adeno-carcinoma had been approved in Australia, the US and Europe (BD: Aug 2, 2016; Feb 13, 2017).

Oncosil was up half a cent or four percent to 13 cents.

REDHILL BIOPHARMA

The Israel-based Redhill says it has enrolled the last of 127 patients in its phase II trial of Bekinda, or RHB-102, for irritable bowel syndrome with diarrhoea.

Redhill said that it expected top-line results from the randomized, double-blind, controlled trial by October 2017.

Last week, the company said it expected top-line results from a phase III study of RHB-102 for gastroenteritis and gastritis by July 2017 (BD" Apr 19, 2017).

In 2010, Israel's Redhill bought Myoconda (RHB-104), Heliconda (RHB-105) and Picoconda (RHB-106) from Sydney's Giaconda (BD: Aug 17, 2010).

Last night on the Nasdaq, Redhill was up five US cents or 0.49 percent to \$US10.27 (\$A13.66) with 19,306 shares traded.

MONASH UNIVERSITY

Monash University says its researchers have shown the structure of a drug target for chronic diseases using cryo-electron microscopy.

The Melbourne-based Monash University said that treatments for chronic diseases including osteoporosis, diabetes and obesity targeted class B G-protein-coupled-receptors, but there were gaps in the knowledge of how the receptors functioned.

The University said that because class B G-protein-coupled-receptors were small and in the past few years technology advanced to a stage where researchers were able to solve the structure to better understand what the receptors looked like.

Monash University said the structure of the calcitonin receptor, a receptor targeted by treatments for hyper-calcaemia and the bone disorder Paget's disease, was solved by Monash Institute of Pharmaceutical Sciences researchers and their collaborators.

The Monash University media release said that it was the first time that a cryo-electron microscope had been used to show the structure of a G-protein-coupled-receptor and the first time that the full-length structure of a receptor in this class had been solved.

The research, entitled 'Phase-plate cryo-EM structure of a class B GPCR-G-protein complex' was published in Nature and is available at: <http://rdcu.be/ry4Q>.

Monash Institute of Pharmaceutical Sciences (MIPS) head of drug discovery biology Prof Patrick Sexton said that "the information revealed by this study should ultimately enable the design of better drugs to treat not only diseases regulated by the calcitonin receptor but also those involving related receptors including diabetes, obesity, osteoporosis and migraine".

Monash said that the research was conducted with the Max Planck Institute of Biochemistry in Germany, the University of Michigan, Stanford University and the Mayo Clinic.

ACRUX

Acrux says that net sales of Axiron fell 26.2 percent to \$US27.3 million (\$A36.3 million) for the three months to March 31, 2017 compared to previous corresponding period.

The net sales figure is the lowest three months figure since posting \$US23.9 million for the three months to December 31, 2012 (BD: Jan 30, 2013).

Acrux fell one cent or 3.6 percent to 26.5 cents.

ANALYTICA

Analytica says that US guidelines support pelvic floor exercise as a first-line treatment for stress urinary incontinence.

Analytica, which is commercializing its intra-vaginal Pericoach system for pelvic floor exercise and sexual health, said that a joint release from the American Urological Association and the Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction published clinical guidelines with 24 recommendations on evaluations, discussion of risks as well as alternatives to surgical treatment options.

The company said that for patients wishing to undergo treatment, the guidelines recommended non-surgical interventions including pelvic floor exercises as the first line of treatment, which echoed guidelines issued in 2016 by the American College of Physicians.

Analytica said that American Urological Association and the Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction said that the prevalence of stress urinary incontinence had been reported to be as high as 49 percent and other sources reported that 30 percent of women with stress urinary incontinence would choose to undergo surgical procedures.

The company said that the clear majority of surgical procedures were being done through mid-urethral slings, which were US Food and Drug Administration approved in 1998, resulting in limited long term data.

Analytica said its Pericoach system provides biofeedback during pelvic floor exercise sessions and guides a patient through their exercise program, recording exercise frequency and pelvic floor muscle strength improvement to show the patient how she was improving with time, providing surgeons with independently-collected evidence that the patient has complied with a prescribed conservative treatment program before deciding whether to proceed to surgery.

The company said that for patients who did proceed, the information could serve as another source of proof that appropriate clinical guidance was followed on the care pathway to surgical intervention, potentially mitigating legal action should a surgical risk come to fruition.

Analytica chairman Dr Michael Monsour said that "all surgery carries risks, and these guidelines recommend that clinicians discuss conservative treatments in detail with patients before moving to surgery".

"Unfortunately, patient compliance with those conservative treatments has been almost impossible to measure until now," Dr Monsour said.

Dr Monsour said that the Pericoach system provided independent evidence that the pelvic floor exercise part of a conservative treatment plan was followed by the patient.

"The costs of surgery and insurance are growing rapidly and with all litigation in this field, having evidence to back up your decisions is critical," Dr Monsour said.

Analytica was up 0.05 cents or 9.1 percent to 0.6 cents with 2.25 million shares traded.

JOHNSON & JOHNSON INNOVATION

Johnson & Johnson Innovation says it has launched the \$S300,000 (\$A285,450) Singapore Quickfire Challenge for metabolic disease innovation.

Johnson & Johnson said the competition was launched last month, with Singapore's Agency for Science, Technology and Research (Astar) commercialization arm Exploit Technologies Pte Ltd and the Singapore-MIT Alliance for Research and Technology. The company said that each of the three Quickfire Challenge winners would be awarded \$S100,000 project money for research in Singapore, access to Exploit Technologies laboratory space and one year of mentorship and coaching by Johnson & Johnson Innovation, Exploit Technologies and Alliance staff.

Johnson & Johnson said the competition was looking for "the best ideas, technologies, or solutions ... [to make a] difference for the millions of people in Asia Pacific and around the world who suffer from metabolic diseases, such as diabetes and obesity".

The company said that the problem of metabolic diseases was "reaching epidemic proportions in Asia Pacific" with diabetes affecting more than 250 million people and expected to affect more than 500 million people in China and India by 2030.

"Obesity is growing particularly fast in China, with the disease burden rising from 11.3 percent to 27.9 percent of adults, and from 5.7 percent to 18.8 percent of youths aged 19 9years] and below between 1980 and 2013," Johnson & Johnson said.

The company said that at least one core team member of the applicant team must reside in Singapore for no less than 50 percent of the term of the grant.

Johnson & Johnson said that all finalists would receive eight weeks of mentorship.

The company said the deadline for submissions was May 17, 2017 and prospective applicants should go to: <http://jllabs.jnjinnovation.com/quickfire-challenges>.

MMJ PHYTOTECH

MMJ says Harvest One Capital will list on the Toronto Venture Exchange and has conditional approval to acquire its United Greeneries and Satipharm AG.

MMJ said that Harvest One Cannabis (TSX-V: HVST) had been approved as a tier 1 life science issuer, with shares expected to resume trading about April 28, 2017.

The company said that on completion it would own 60 percent of Harvest One and the acquisition approval was the final escrow requirement for the release of \$C25 million secured under the recent Harvest One capital raising (BD: Feb 23, 2017).

MMJ said that on listing, its managing-director Andreas Gedeon would be appointed Harvest One's managing-director and a near-term focus was the rapid scaling-up of production at the Duncan facility, "as it will enable the business to establish a first-mover advantage in the soon to be legalized Canadian recreational market".

MMJ was up two cents or 3.3 percent to 62 cents with 2.9 million shares traded.

MACH7 TECHNOLOGIES

Mach7 says its net operating cash burn for the three months to March 31, 2017 was \$2,872,000 with cash at the end of the quarter of \$3,049,000.

In a company update, Mach7 said that payments were irregular and the three months to March 31 did not include receipts from pending new contracts, so the three months produced a larger net cash outflow from operations than was usual or expected.

The company said that the pending contracts were "in the final stages of negotiation" and it expected cash receipts to be recognized in the three months to June 30, 2017.

Mach7 fell 1.5 cents or 5.9 percent to 24 cents with 1.7 million shares traded.

BRAIN RESOURCE

Brain Resource says it has licenced its Mybrainsolutions diagnostic and training product to Teva Pharmaceutical Industries for use in Israel.

Brain said that the agreement terms were confidential, but the focus was on providing a digital health product for attention deficit hyperactivity disorder and the roll-out was expected to begin by October 2017.

Brain was untraded at eight cents.

NEUROTECH INTERNATIONAL

Malta's Neurotech says it has appointed the Athens-based Bonvie Group to market and distribute its Mente Autism system in Greece and Cyprus (BD: Nov 4, 2016).

Neurotech fell six cents or 25 percent to 18 cents.

SIRTEX MEDICAL

Washington H Soul Pattinson and WHSP Hunter Hall say they have ceased their substantial holding in Sirtex

Washington H Soul Pattinson said that between March 30 and April 20, 2017, it sold 490,461 shares for \$8,290,023 or an average of \$16.90 a share.

Last month, the Sydney-based Washington H Soul Pattinson said it became substantial with 3,328,542 shares or 5.77 percent, due to its acquisition of more than 20 percent of Hunter Hall (BD: Mar 6, 2017).

Last year, Hunter Hall Investment Management said it had increased its substantial holding in Sirtex to 3,857,489 shares or 6.69% percent (BD: Dec 13, 2016).

Sirtex was up 16 cents or 1.1 percent to \$14.96 with 1.25 million shares traded.

THE AUSTRALIAN RESEARCH COUNCIL

The Australian Research Council says it has appointed Prof Sue Thomas as its chief executive officer replacing Prof Aidan Byrne effective from July 3, 2017.

The Council said it provided advice to the Federal Government on research and managed about \$800 million a year grants.

The ARC said that Prof Thomas's "depth of experience in research and research management would help deliver ARC's key priorities and deliverables".

The Council said that Prof Thomas was previously the provost and deputy vice-chancellor of the Armidale, New South Wales-based University of New England and had specialized in microbial genetics, with experience managing innovation across a range of disciplines.

The ARC said that Prof Thomas held a Bachelor of Science and Doctor of Philosophy in Microbiology from Melbourne's La Trobe University.

The Council said that Prof Thomas previously worked for the New Jersey-based Princeton University and the UK Medical Research Council.

The ARC said that Prof Thomas was at Adelaide's Flinders University from 1990, was appointed the head of the School of Biological Sciences in 2000, before moving to the University of Canberra in 2005 as pro vice-chancellor, and in 2009 was appointed as Charles Sturt University's deputy vice-chancellor, responsible for research.

The Council said that Prof Byrne had been appointed University of Queensland provost.

**Biotech Daily can be contacted at: PO Box 5000, Carlton, Victoria, Australia, 3053
email: editor@biotechdaily.com.au; www.biotechdaily.com.au; twitter: @biotech_daily**