



Biotech Daily

Monday November 12, 2018

Daily news on ASX-listed biotechnology companies

- * **ASX UP, BIOTECH DOWN: IMPEDIMED UP 6%; MESOBLAST DOWN 28%**
- * **MESOBLAST STEM CELLS MISS HEART ENDPOINT, REDUCE GI BLEEDING**
- * **BIONOMICS TO LOSE CEO DR DEBORAH RATHJEN; RAISE \$12m**
- * **IMMUTEP IMP321, KEYTRUDA 'SOME MELANOMA EFFICACY, SAFETY'**
- * **USCOM ESTABLISHES BEIJING OFFICE**
- * **PHOSPHAGENICS LOSES \$416m MYLAN CASE**
- * **RACE CHAIR DR WILLIAM GARNER TRANSFERS, REDUCES TO 16%**

MARKET REPORT

The Australian stock market was up 0.33 percent on Monday November 12, 2018 with the ASX200 up 19.5 points to 5,941.3 points.

Ten of the Biotech Daily Top 40 stocks were up, 16 fell, six traded unchanged and eight were untraded.

Impedimed was the best, up two cents or 5.8 percent to 36.5 cents, with 57,014 shares traded.

Imugene climbed five percent; Optiscan, Osprey and Volpara were up more than three percent; Factor Therapeutics rose 2.8 percent; CSL, Ellex, LBT and Nanosonics were up more than one percent; with Opthea up 0.9 percent.

Mesoblast led the falls, down as much as 77.5 cents or 35.55 percent to \$1.405, before closing down 61 cents or 28.0 percent at \$1.57, with 15.0 million shares traded.

Clinuvel and Immutep lost more than eight percent; Avita fell 7.3 percent; Uscom was down 6.9 percent; Actinogen and Pro Medicus fell four percent or more; Starpharma was down 3.6 percent; Airxpanders shed 2.8 percent; Dimerix, Medical Developments, Neuren, Pharmaxis, Polynovo, Resmed and Telix were down one percent or more; with Cochlear and Cynata down by less than one percent.

MESOBLAST

Mesoblast says the 159-patient, phase II trial of mesenchymal precursor cells for heart failure did not meet its primary endpoint, but showed benefit for gastro-intestinal bleeding. Mesoblast said the trial of its MPC-150-IM mesenchymal precursor cells for end stage heart failure did not meet the primary endpoint of temporary weaning of end-stage heart failure patients from left ventricular assist devices (LVADs), or heart pumps, but showed benefit for a sub-group and reduced the “clinically meaningful” gastro-intestinal bleeding. The company said that the primary endpoint of temporary weaning from full LVAD support was not achieved, because “the high rate of pump thrombosis reduced the number of evaluable wean attempts”.

Mesoblast said that “significant beneficial effect was observed on the primary endpoint of temporary weaning from full LVAD support in a pre-determined subgroup analysis of ischemic heart failure patients” which comprised 70 patients (44%) ($p = 0.02$).

The company said it found a “significant reduction in cumulative incidence of major [gastro-intestinal] bleeding events by 48 percent, from 33 percent in controls to 17 percent [in those receiving stem cells] ($p = 0.02$)”.

Mesoblast said there was a “significant reduction in rate of major [gastro-intestinal] bleeding events by 76 percent, from 15.9 per 100 patient months to 3.8 per 100 patient months ($p < 0.001$)” and a significant reduction in rate of hospitalization for gastro-intestinal bleeding by 65 percent from 0.21 to 0.07 per 100 patient months ($p = 0.03$).

The company said that there was “no significant reduction in all cause re-admissions, no patients experienced a safety-stopping event for the trial [and] overall mortality was similar between the two groups, 14 percent versus 15 percent at 12 months”.

Mesoblast said it had received specific guidance from the US Food and Drug Administration that reduction in major gastro-intestinal bleeding episodes and related hospitalizations in the current trial was “a clinically meaningful outcome with a high unmet need that could meet requirements for an approvable regulatory endpoint”.

The company said that the FDA had advised that the primary endpoint in the current trial of temporary weaning from full LVAD support was considered “a biomarker and ... not a clinically meaningful outcome in and of itself”.

Mesoblast chief executive Prof Silviu Itescu said the company was “very pleased by the results of this independently conducted trial”.

“The clinically meaningful outcome achieved in these very high-risk patients provides a potential pathway to bring our heart failure product candidate MPC-150-IM to market sooner for these patients in great need,” Prof Itescu said.

“In addition, the ability to address inflammation and endothelial dysfunction, mechanisms central to the development and progression of heart failure, may have broader implications for the use of our cells in patients with advanced heart failure,” Prof Itescu said.

Mesoblast said the trial was conducted by the Cardiothoracic Surgical Trials Network with the International Centre of Outcomes and Innovation Research at Mt Sinai School of Medicine, as the coordinating centre and was funded and sponsored by the US National Institutes of Health and the Canadian Institutes for Health Research.

The company said that major gastro-intestinal bleeding in LVAD recipients was thought to be caused by a general state of inflammation in the heart and abnormal blood vessels in the gastro-intestinal tract.

Mesoblast said the proposed mechanism of action for its stem cells was “through secretion of biomolecules which reduce damaging inflammation and reverse endothelial dysfunction associated with inflammation”.

Mesoblast lost 61 cents or 28.0 percent to \$1.57 with 15.0 million shares traded.

BIONOMICS

Bionomics says Dr Deborah Rathjen, will retire next year, Dr Errol De Souza has been appointed executive chairman, and it expects to raise \$11.9 million.

Bionomics announced Dr Rathjen's departure and the capital raising at 6.40pm last Friday night.

Biotech Daily had published and closed for the week and missed the announcement.

On Friday, prior to the announcements, the company was the best of the Biotech Daily Top 40 Index (BDI-40), up 1.5 cents or 10.7 percent to 15.5 cents, with 2.0 million shares traded.

Today, Bionomics said that Dr Rathjen had resigned as managing-director but would remain chief executive officer until January 31, 2019, with chairman Dr De Souza appointed executive chairman, from today.

The company said that recently-appointed chief financial officer Steven Lydeamore had "resigned to pursue another opportunity" effective from November 23, 2018.

Bionomics said that former chief financial officer Stephen Birrell had been appointed interim-chief financial officer.

The company said that Mr Birrell was its chief financial officer from 2005 to 2009 and re-joined Bionomics in 2013 as group financial controller.

Bionomics said that it had raised \$7,873,505 from BVF and affiliated funds at 16.37 cents share, a premium of 10 percent to the 5-day volume-weighted average price, taking BVF's holding from 10.02 percent to 19.9 percent and appointing BVF's Mitch Kaye as a director. The company said it expected to raise a further \$3,984,183 at 16.37 cents share from other institutional investors and offer a share purchase plan at 15.5 cents a share, capped at 2.5 percent of its issued capital.

Dr De Souza said the company had reduced costs by focusing on its central nervous system portfolio, divesting its oncology assets, closing its US operations and reducing staff.

"We are continuing to assess our strategic options for partnering and portfolio prioritization and protection of our major assets whilst continuing to implement further cost-cutting measures to conserve cash," Dr De Souza said.

"Deborah has been pivotal in building Bionomics from its inception as a genetics company in 2000 to developing a strong therapeutics portfolio through both an acquisition and internal development strategy," Dr De Souza said.

"She was instrumental in implementing our partnering strategy which has resulted in multiple collaborations over the years including our major ongoing collaboration with Merck & Co," Dr De Souza said.

Bionomics said it had appointed Greenhill & Co to conduct a review of the company to be completed by April 2019.

The company said that BVF chief operating officer Mr Kaye was previously the founding member of Xmark Opportunity Partners LLC and a founding member of Brown Simpson Asset Management LLC, as well as the founder of consumer advocacy business Medclaims Liaison LLC.

The company said that Mr Kaye was Navigant Capital Advisors managing director and a director of private and public companies, as well as the New York Alzheimer's Association. Bionomics said that Mr Kaye held a Bachelor of Arts from the Middletown, Connecticut-based Wesleyan University and a Doctor of Jurisprudence from the Evanston, Illinois-based Northwestern University School of Law.

At 9.08am today, Bionomics requested a trading halt for the capital raising and last traded on Friday at 15.5 cents.

[IMMUTEP \(FORMERLY PRIMA BIOMED\)](#)

Immutep says its 24-patient, phase I, Tactimel study has shown efficacy and safety from 18 patients in part A and safety from six patients in part B.

In 2016, the then Prima Biomed began the 24 patient “two active immune-therapeutics in melanoma”, or Tactimel trial, in which patients with unresectable or metastatic melanoma would be dosed with IMP321, or eftilagimod alpha, in combination with the checkpoint inhibitor pembrolizumab, or Keytruda (BD: Jan 27, 2016).

The company said that the part A patients were dosed with Keytruda for four cycles, adding three different dose levels of IMP321 in the fifth cycle.

Today, Immutep chief executive officer Marc Voigt told Biotech Daily that following the addition of IMP321 to the Keytruda regime at cycle five, 10 of 18 patients (55.5%) had tumor shrinkage and patients showed “more durable responses up to 24 or 27 months”.

Mr Voigt said that while the company could not claim two “complete responses” as defined in the trial protocols, there were two patients who had a complete disappearance of all target lesions after 11 months and 18 months.

In a poster presentation, titled ‘Results from a Phase I dose escalation trial (TACTI-mel) with soluble LAG-3 protein eftilagimod alpha (IMP321) together with pembrolizumab in unresectable or metastatic melanoma’, the authors concluded that “combination of IMP321 (1mg, 6mg and 30mg) and pembrolizumab in advanced metastatic melanoma patients is safe and well tolerated without any [dose-limiting toxicities]”.

The poster said that in part A, six of 18 patients (33%) had an overall response and 10 (55.5%) patients had tumor shrinkage, two patients had “a complete disappearance of all target lesions” and in both parts, combination therapy was well tolerated with no local erythema, and injection site reactions as the most common side effects.

Immutep said five patients had long-lasting disease control or remission of 12 months or more and “the results support the hypothesis that combining ... IMP321 ... with a checkpoint inhibitor, pembrolizumab, results in a therapeutic synergy”.

Immutep said that part B was ongoing with patients receiving IMP321 30mg from the first cycle of pembrolizumab.

Immutep said it presented its 110-patient, phase II Tacti-002 trial design for IMP321 with pembrolizumab for non-small cell lung cancer and head and neck squamous cell cancer. Immutep fell 0.4 cents or 8.3 percent to 4.4 cents with 9.4 million shares traded.

[USCOM](#)

Uscom says it has established and registered Uscom China, located in Beijing’s business and technology sector in the Chaoyang district.

Uscom said that the registration was “a commitment to the Chinese market, designed to underwrite growth by achieving favored status as a supplier, and accessing simplified processes for product and [intellectual property] registrations, product importation, staff employment and administration” and the establishment of Uscom China followed “significant cornerstone Chinese investment in Uscom” and the appointment of the Beijing-based director of China operations Teresa Guo.

Uscom executive chairman Prof Rob Phillips told Biotech Daily, that Uscom China already had four staff members and expected to have 10 by the end of 2018.

Prof Phillips said that Uscom China was “a critical step forward for our business and further aligns us with the largest and fastest growing medical device market in the world as we steer our seven new devices through National Medical Product Authority regulation, formerly the China Food and Drug Administration”.

Uscom fell one cent or 6.9 percent to 13.5 cents.

PHOSPHAGENICS

Phosphagenics says it has lost its \$US300 million (\$A415.5 million) case against Mylan Laboratories over injected TPM-daptomycin for skin infections.

Phosphagenics told the ASX today that the Singapore International Arbitration Centre Arbitration Centre issued a partial final award “that Phosphagenics was unsuccessful in all of its claims”.

Last year, Phosphagenics said it has filed its expert reports in the arbitration, including the \$US300 million damages claim over Mylan’s licence of its tocopheryl phosphate mixture (TPM) daptomycin for skin infections and staphylococcus aureus bloodstream infections originally licenced to Strides Arcolab subsidiary, the India-based Agila Specialties, acquired by Mylan in 2013 (BD: Oct 30, 2012; Mar 3, May 29, 2017; Oct 23, 2018). In September, the company said that the Mylan on-line product catalogue included a generic daptomycin injectable product (BD: Sep 10, 2018).

Today, Phosphagenics said “the parties will make submissions on costs, on a date to be set, which are reserved to a final award on costs”.

“Phosphagenics has spent approximately \$5.6 million on arbitration and legal fees to date,” the company said.

“The board must take into account a significant adverse cost order,” the company said.

“This arbitration loss has a serious impact on the company and the board will need to carefully consider the alternative courses of action available to it,” Phosphagenics said.

The company said it had cash on hand of \$2.3 million not including a further \$200,000 Federal Research and Development Incentive expected by the end of 2018.

“The board is very disappointed ... that Phosphagenics was unsuccessful in all of its claims,” the company said.

Phosphagenics said the award included findings against its claims to intellectual property rights relating to a lyophilized TPM-daptomycin formulation and its claim that Mylan had not used commercially reasonable efforts to develop TPM-daptomycin.

The company said “notwithstanding the award the licencing agreement remains in force.”

“The licencing agreement includes clauses requiring Mylan to continue to take commercially reasonable efforts to develop TPM-daptomycin, not to sell a generic daptomycin (with limited exceptions) and to pay royalties to Phosphagenics on commercial sales of TPM-daptomycin,” the company said.

Phosphagenics said it might be required “to enforce its remaining rights to require Mylan to act in line with requirements of the licencing agreement”.

Phosphagenics closed down 2.3 cents or 88.5 percent to 0.3 cents with 278.65 million shares traded.

RACE ONCOLOGY

Race chairman Dr William Garner says he has further reduced his holding in the company from 14,294,218 shares (18.51%) to 12,583,443 shares (16.29%).

In September, Dr Garner said he reduced his holding in the company from 15,100,000 shares (19.95%) to 14,294,218 shares (18.51%) (BD: Sep 18, 2018).

Today, Dr Garner said that on November 9, 2018 he transferred 1,360,775 shares off-market “to non-related shareholders of director-related entity” for no cost and bought 350,000 shares for \$47,263 or 13.5 cents a share.

Race was up 1.5 cents or 11.5 percent to 14.5 cents with 3.5 million shares traded.