



Biotech Daily

Monday November 16, 2015

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH DOWN: ANTISENSE UP 25%, STARPHARMA 24%; MESOBLAST DOWN 38%**
- * **MESOBLAST RAISES \$96m AT 34% DISCOUNT**
- * **STAFFORD FOX \$3m FOR WEHI RARE CANCER RESEARCH**
- * **PRO MEDICUS WINS \$3m GERMAN HOSPITAL CONTRACT**
- * **STARPHARMA: '100% DENDRIMER CONJUGATE MOUSE TUMOR SUCCESS'**
- * **NOVOGEN UNDERWRITTEN OPTIONS TO RAISE \$690k**
- * **LIVING CELL, DIATRANZ OTSUKA 'DIABECCELL NEEDS IMPROVEMENT'**
- * **LBT COMPLETES APAS TRIALS FOR FDA APPLICATION**
- * **ANTISENSE LOSES FOUNDING CEO, DIRECTOR DR CHRIS BELYEA**
- * **PHYLOGICA: 'PHYLOMER-MYC BEATS GOLD-STANDARD FOR CANCER'**
- * **ORTHOCELL REQUESTS CAPITAL RAISING TRADING HALT**
- * **UP TO 23% OF ADMEDUS OPPOSE DIRECTOR STOCK; CONSOLIDATION**
- * **ALLAN GRAY FURTHER REDUCES TO 9% OF PHOSPHAGENICS**
- * **ALLAN GRAY FURTHER REDUCES TO 9% OF ALCHEMIA**
- * **SANDON CAPITAL TAKES 16% OF ALCHEMIA**
- * **LEEDMAN FAMILY, TASHTECH TAKE 5.45% OF RESAPP**

MARKET REPORT

The Australian stock market fell 0.94 percent on Monday November 16, 2015 with the ASX200 down 47.5 points to 5,003.8 points. Nine of the Biotech Daily Top 40 stocks were up, 20 fell, eight traded unchanged and three were untraded.

Antisense was the best, up 1.8 cents or 25 percent to nine cents with one million shares traded, followed by Starpharma up 24.1 percent to 90 cents with 4.5 million shares traded. Polynovo climbed 9.4 percent; Pro Medicus and Uscom were up more than five percent; Optiscan and Prima rose more than two percent; Ellex and Neuren were up more than one percent; with Resmed up 0.5 percent.

Mesoblast led the falls, down \$1.31 or 38.4 percent to \$2.10 with 6.4 million shares traded. Cellmid lost 10 percent; Living Cell fell 9.1 percent; Tissue Therapies shed five percent; Bionomics and Impedimed fell four percent or more; Actinogen, Benitec, Psivida and Viralytics were down more than three percent; Avita and Pharmaxis shed more than two percent; with Anteo, Circadian, Osprey, Reva, Sirtex and Universal Biosensors down one percent or more.

MESOBLAST

Mesoblast says it expects to raise about \$95.8 million through a US placement at \$US8.00 per American depository share and listed on the Nasdaq.

Mesoblast previously said that each American depository share (ADS) was equivalent to five Australian shares, implying that at \$US8.00 (\$A11.26), the US placement was equivalent to \$2.252 per Australian share, a 33.96 percent discount to its last closing price of \$3.41 (BD: Nov 3, 2015).

The company said that the issue was about 12.6 percent of its issued share capital and it intended to use the proceeds for its clinical programs, research and development expenses, commercial manufacturing requirements and general purposes.

Mesoblast said that JP Morgan and Credit Suisse were the joint book-running managers and underwriters representatives, with Maxim and Ladenburg Thalmann co-managers.

Mesoblast lost \$1.31 or 38.4 percent to \$2.10 with 6.4 million shares traded.

THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH

The Walter and Eliza Hall Institute says the Stafford Fox Medical Research Foundation has provided \$3 million for new strategies to diagnose and treat rare cancers.

The Institute said the funds would support researchers Prof Tony Papenfuss and Prof Clare Scott, who was also an oncologist at the Royal Melbourne Hospital.

Prof Scott said that options for people with rare cancers were often limited, with one in three people who die from cancer to die from a rare cancer.

“A major objective of this research is to recommend effective treatments for rare cancer patients by genetically matching their cancers to existing anti-cancer medications that are used for more common cancer types,” Prof Scott said.

PRO MEDICUS

Pro Medicus says its European subsidiary Visage Imaging GmbH has signed a \$3 million five-year contract with one of Germany’s largest Government-run hospitals.

Pro Medicus said that as part of the deal, the unnamed hospital would implement its Visage 7 as the central component of “a deconstructed picture archiving and communication system strategy, integrating it to the hospitals’ recently selected workflow” and several existing digital imaging and communications in medicine (Dicom) archives.

The company said that most of the diagnostic workstations would be installed on Apple Mac computers running the Unix-based operating system X, or OS X.

Pro Medicus said that Visage 7 satellite servers would be implemented at three other Government sites in northern and southern Germany to facilitate an enhanced level of image sharing with these sites for cross-regional diagnostic imaging access.

Visage general-manager Dr Malte Westerhoff said that the deal was “further validation of the strength of our technology and our strategy of being a key component of the worldwide move towards deconstructed or best-in-breed [picture archiving and communication systems]”.

“Our unique streaming technology allows instant access to image data for better patient care and increased efficiency,” Dr Westerhoff said.

Pro Medicus chief executive officer Dr Sam Hupert said the strategic sale “significantly bolstered our footprint in the German Enterprise hospital space, traditionally a difficult market to penetrate, [and] it has also shown that the modular or deconstructed approach to medical imaging is now starting to gain momentum in Europe”.

Pro Medicus climbed 17 cents or 5.4 percent to \$3.33.

[STARPHARMA](#)

Starpharma says its antibody-targeted dendrimer conjugate has resulted in complete ovarian cancer tumor regression and 100 percent survival in mice.

Starpharma said that its antibody-targeted dendrimer enhanced (DEP) conjugate, using Herceptin as the targeting group, with an unnamed chemotherapy drug, significantly outperformed both Roche's Herceptin antibody-drug conjugate Kadcylla and the monoclonal antibody Herceptin, or trastuzumab, itself in the pre-clinical ovarian cancer model.

The company provided a graph showing that tumor volumes treated with saline, Herceptin and Kadcylla all rose at approximately the same rate, from about 100 cubic millimetres to more than 1,000 mm³, while its DEP conjugate reduced tumor volumes from the same level to near zero in 15 days ($p = 0.0011$).

Starpharma said that ovarian cancer xenograft in mice with five or six in each group received 10mg/kg of saline or 10mg/kg Kadcylla and the DEP-conjugate group was dosed once a week for three weeks, with Herceptin dosed at 20mg/kg twice each week for three weeks.

The company said that the targeted DEP treated group "showed vastly improved anti-cancer effectiveness and survival compared to both Kadcylla and Herceptin".

Starpharma said that the targeted DEP treated group exhibited complete regression after treatment which was maintained for the 60 days and on-going duration of the experiment. The company said that in the Kadcylla group, only tumour stasis was observed during treatment with a maximum inhibition of 32 percent at day 12, but soon after completion of dosing tumor regrowth occurred.

Starpharma said that 100 percent of the DEP treated group survived at 60 days, but by day 50, none of the Kadcylla treated group were alive.

Starpharma chief executive officer Dr Jackie Fairley said the company was "very excited by these latest results for our targeted DEP conjugates and feedback from commercial parties on this new data has been very positive indeed".

"Discussions are now underway with a number of pharmaceutical companies in relation to this targeted DEP conjugate and the application of Starpharma's targeted DEP platform to their proprietary drugs," Dr Fairley said.

Starpharma said that its targeted DEP conjugate consisted of a dendrimer scaffold, a targeting group in this case consisting of the monoclonal antibody trastuzumab or Herceptin, and a payload of an anti-cancer drug.

The company said that targeted DEP conjugates had a number of advantages over standard antibody drug conjugates including higher drug loading and manufacturing advantages.

Starpharma climbed 17.5 cents or 24.1 percent to 90 cents with 4.5 million shares traded.

[NOVOGEN](#)

Novogen says that it will raise \$690,000 through Lodge Partners underwriting options exercisable at 12.5 cents option, which will expire on November 18, 2015.

Novogen said that the funds would reinforce its financial position and be allocated to its phase I clinical trial of Cantrixil, expected to start in 2016.

Novogen fell half a cent or 3.45 percent to 14 cents with 1.95 million shares traded.

LIVING CELL TECHNOLOGIES

Living Cell says that a presentation on its Diabecell encapsulated pig islets of Langerhans cells for type 1 diabetes produced inconclusive results.

Living Cell said that the presentation was given by Otsuka Pharmaceutical Factory chief scientific advisor Prof Shinichi Matsumoto at the Joint Congress of the International Xenotransplantation Association and International Pancreas and Transplant Association and the Cell Transplant Society in Melbourne.

Prof Matsumoto's presentation, entitled 'Clinical trial of encapsulated neonatal porcine islet xenotransplantation' concluded that the procedure was safe procedure, with no infectious issue so far, but "efficacy [was] not stable".

The presentation said that the four patients receiving two doses of the 10,000 international equivalent units of Diabecell had a lower than 7.0 percent HbA1c for more than two years with a "significant reduction of unaware hypoglycaemia and severe hypoglycaemia".

The presentation said that high doses were not more effective than low doses and for the next trial the company would improve the quality of islets and use the low dose.

Living Cell said the trials were undertaken by 50 percent joint venture Diatranz Otsuka which had licenced Otsuka Pharmaceutical Factory to further develop Diabecell in US.

Living Cell fell half a cent or 9.1 percent to five cents with 1.8 million shares traded

LBT INNOVATIONS

LBT says that testing of its automated plate assessment system (APAS), at Sydney's St Vincent's Hospital concludes the trial program for its US regulatory application.

LBT said that APAS achieved greater than 98 percent sensitivity in its detection of disease-causing bacteria on two of the most widely-used culture media, blood agar and MacConkey agar, in urine samples from 2,122 patients.

The company said that along with previous results the data would form the basis of a 510(k) de novo submission to the US Food and Drug Administration by the end of 2015.

LBT said that the results were similar to those of a major trial of APAS at Tricore Reference Laboratories in Albuquerque, New Mexico, which also tested the technology against a panel of three microbiologists in July and August (BD: Oct 7, 2015).

The company said that St Vincent's and Tricore trials followed an initial trial at Melbourne's Healthscope Pathology in 2014 and in total the three trials tested APAS efficacy in more than 10,000 patients.

LBT said that all of the primary endpoints were exceeded, as well as a number of secondary endpoints on differentiation and classification of clinical results, with implications for the automated reporting and integration of patient results.

LBT was up one cent or 5.9 percent to 18 cents.

ANTISENSE THERAPEUTICS

Antisense director Dr Chris Belyea has filed his Final Director's Interest Notice, following the company's annual general meeting.

Antisense recently appointed William Goolsbee and director Dr Gary Pace as a non-executive directors (BD: Oct 15, Nov 9, 2015).

In October, Antisense said that Mr Goolsbee would replace Dr Belyea who had previously advised his intent to retire at the conclusion of the November 12, 2015 meeting.

Antisense managing-director Mark Diamond told Biotech Daily that Dr Belyea a founding director and the company's founding chief executive officer.

Antisense climbed 1.8 cents or 25 percent to nine cents with one million shares traded.

PHYLOGICA

Phylogica says it has identified multiple proprietary Phylomer candidates with confirmed ability to bind and block intracellular Myc transcription factor activity.

Phylogica said that two of the candidates exhibited “better killing activity in cancer cells than the previous gold-standard Omomyc when fused to Phylogica’s proprietary cell penetrating Phylomers”.

Earlier this month, Phylogica said that an expanded breast cancer study in mice confirmed that its peptide-Omomyc fusion “significantly reduces tumor size” with sustained tumor inhibition, reproducing findings in an animal model of breast cancer undertaken earlier this year (BD: Mar 30, Nov 5, 2015).

The company said at that time that the Myc transcription factor was “a highly validated intracellular cancer target, expressed in many common cancers that had proven to be undruggable with conventional therapies”.

Separate research said that Omomyc interfered with the action of Myc.

Today, Phylogica chief executive officer Dr Richard Hopkins said the company had “identified at least two proprietary Phylomers that represent the most potent inhibitors of Myc yet described”.

“This outcome is a testament to the power of the Phylomer platform which has unique potential to discover and deliver our own drugs against some of the highest value, but currently undruggable, targets in cancer,” Dr Hopkins said.

Phylogica said that preliminary testing using one of the two Phylomers with superior activity to Omomyc showed that the peptide was stable when incubated in serum for more than 24 hours.

The company said that serum stability was an important drug-like property required to achieve activity in animal models of disease.

Phylogica chief scientific officer Dr Paul Watt said the company had assayed fewer than 20 percent of the hits identified in the primary screens against Myc as fusions to the cell-penetrating Phylomers.

“We are encouraged by the high hit rate so far and are confident that a larger pool of specific Myc inhibitors will emerge once the functional screens are completed early next year,” Dr Watt said.

“Once we have identified a broader set of Myc inhibitors we will then choose the highest quality candidates for analysis in animal models of cancer,” Dr Watt said.

Phylogica said that its “differentiation in the field of intracellular drug delivery now extends from best in class cell penetrating Phylomers for drug delivery to best in class active biologics drug compounds active against Myc”.

The company said it would publishing the results of animal models demonstrating the effects of systemically delivered proprietary Phylomer-cargo compounds in 2016.

Phylogica said that more than 70 percent of cancer cases depended on the mutant gene Myc for survival, with no effective Myc therapies available.

Phylogica was up 0.1 cents or 6.7 percent to 1.6 cents with 11.1 million shares traded.

ORTHOCELL

Orthocell has requested a trading halt “pending the release of an announcement in relation to a capital raising”.

Trading will resume on November 18, 2015 or on an earlier announcement.

Orthocell last traded at 53.5 cents.

ADMEDUS

All resolutions to the Admedus annual general meeting were passed, but with significant dissent against the issue of shares and options to directors.

The largest percentage vote opposed the issue of 1,000,000 options to Grant Seaberg with 117,589,533 votes (22.7%) against and 401,241,832 votes (77.3%) in favor, with similar levels of dissent against the issue of 1,000,000 options to Wayne Paterson, as well as the issue of \$90,046 in shares in lieu of director fees to chief executive officer Lee Rodne, \$54,120 in shares to director Michael Bennett, \$22,000 in shares to chairman Christopher Catlow, and \$15,400 in shares each to directors Mr Paterson, Graeme Rowley, Mr Seaberg and Peter Turvey (BD: Oct 14, 2015).

Admedus said that the remuneration report was opposed by 84,645,441 votes (16.5%) with resolutions on the 10-for-one stock consolidation, the prior issue of 171,500,000 placement shares at seven cents a share and the approval of the 10 percent placement facility and the employee option plan passed by a wider margin.

The company said that Mr Turvey and Mr Bennett were re-elected overwhelmingly as were resolutions on the the company's deeds of indemnity access and insurance.

The company's most recent Appendix 3B new issue announcement said that Admedus had 1,847,163,064 shares on issue, meaning that largest opposition, of 122,220,226 votes (21.15%) against the issue of shares to Mr Rowley, amounted to 6.6 percent of the company, sufficient to requisition extraordinary general meetings.

Separately, Admedus said that today November 16, would be the last day of pre-consolidation trading with normal trading resuming on November 27, 2015.

Admedus was unchanged at 6.7 cents with 6.4 million shares traded.

PHOSPHAGENICS

Allan Gray says it has reduced its holding in Phosphagenics from 130,225,989 shares (10.32%) to 114,497,043 shares (9.07%).

Last week, Allan Gray, previously known as Orbis Investment Management, reduced its holding in Phosphagenics to 10.32 percent, selling 22,115,561 shares for \$408,759 or 1.85 cents a share (BD: Nov 9, 2015)

Today, Allan Gray, said that between November 6 and 11, 2015 it sold 15,728,946 shares for \$309,619 or 1.97 cents a share.

Last year, Phosphagenics raised \$16.3 million in a placement at eight cents a share and a further \$3 million through a share plan (BD: Jul 11, Aug 5, 2014).

Phosphagenics fell 0.1 cents or 5.9 percent to 1.6 cents with 7.75 million shares traded.

ALCHEMIA

Allan Gray Australia says it has reduced its holding in Alchemia from 36,920,695 shares (11.37%) to 29,529,489 shares (9.09%).

In September and October Allan Gray sold 13,630,363 shares for 6.3 cents a share and later sold 6,204,109 shares for 8.2 cents a share (BD: Sep 30, Oct 20, 2015).

In its substantial shareholder notice, Allan Gray said that between October 16 and November 11, 2015 it sold 7,391,206 shares for \$658,046 or 8.9 cents a share.

Alchemia fell 0.1 cents or 1.1 percent to nine cents.

ALCHEMIA

The Sydney-based Sandon Capital says it has increased its substantial holding in Alchemia from 42,932,484 shares (13.2%) to 50,543,624 shares (15.6%). Sandon said it bought the 7,611,140 shares on-market, between August 31 and November 13, 2015 for \$660,592 or an average price of 8.7 cents a share.

RESAPP HEALTH (FORMERLY NARHEX LIFE SCIENCES)

Brian and Natasha Leedman say they have become substantial shareholders in Resapp with 30,560,000 shares (5.45%).

The Perth, Western Australia-based Mr Leedman said in the substantial shareholder notice that the shares were held directly as well as through Tashtech Pty Ltd.

The notice said that shares were acquired on July 2, 2015 through the prospectus and a further 3,060,000 shares were acquired on September 10, 2015 at 1.8 cents a share.

Resapp fell 2.5 cents or 18.5 percent to 11 cents with 26.3 million shares traded.