

Biotech Daily

Wednesday July 2, 2014

Daily news on ASX-listed biotechnology companies

- * ASX, BIOTECH UP: LIVING CELL UP 8%, ELLEX DOWN 7.5%
- * WEHI-916 BLOCKS MALARIA GATEKEEPER ENZYME
- * BONE STARTS ORAL CAPTHYMONE OSTEOPOROSIS TRIAL
- * D3, VIROCLINICS ALLIANCE FOR VIROLOGY DEVELOPMENT
- * COMPUMEDICS SIGNS \$4m ASIA SLEEP DIAGNOSTIC CONTRACTS
- * GI DYNAMICS SLOW SALES, LOSES MARK TWYMAN
- * CALZADA BACKS CHAIRMAN DAVID WILLIAMS 10m OPTIONS
- * BENITEC UNMARKETABLE PARCEL FACILITY
- * ACUVAX ACTIVISTIC FUNDS COLLECTION PLACEMENT EGM
- * CONSTABLES REDUCE TO 5% OF ANTISENSE
- * BRAIN REQUESTS CAPITAL RAISING TRADING HALT
- * KRIS KNAUER REPLACES BIOPROSPECT DIRECTOR PETER MAY

MARKET REPORT

The Australian stock market climbed 1.48 percent on Wednesday July 2, 2014 with the S&P ASX 200 up 79.5 points to 5,455.4 points. Eighteen of the Biotech Daily Top 40 stocks were up, 14 fell, seven traded unchanged and one was untraded.

Living Cell was the best, up 0.4 cents or eight percent to 5.4 cents with 62,250 shares traded. Analytica climbed 7.5 percent; Psivida was up 6.4 percent; Circadian and Viralytics were up more than five percent; Pharmaxis and Prima were up more than four percent; Acrux, Admedus, Atcor, Cellmid, Compumedics and Optiscan climbed more than three percent; Benitec, IDT and Uscom rose more than two percent; Nanosonics was up 1.9 percent; with Cochlear, CSL, Resmed and Sirtex up by less than one percent.

Ellex led the falls, down three cents or 7.5 percent to 37 cents with 9,408 shares traded. GI Dynamics lost 6.9 percent; both Anteo and Universal Biosensors fell five percent; Biotron fell 4.8 percent; Antisense and Medical Developments lost more than three percent; Genetic Technologies and Prana shed more than two percent; with Bionomics, Neuren, Phosphagenics and Starpharma down by more than one percent.

THE WALTER AND ELIZA HALL INSTITUTE FOR MEDICAL RESEARCH

The Walter and Eliza Hall Institute says its researchers are close to a new target for malaria treatment with WEHI-916 blocking an enzyme essential for parasite survival. The Institute said that WEHI-916 was the first step toward a new class of anti-malarial drugs that could cure and prevent malaria infections caused by all species of the parasite, including those resistant to existing drugs.

WEHI said its staff developed WEHI-916 to block the malaria enzyme plasmepsin V which had been shown to be a gatekeeper enzyme responsible for controlling the transport of critical proteins in and out of the parasite.

The Institute said that the research led by Dr Brad Sleebs and Dr Justin Boddey was published by the Public Library of Science Biology in a paper entitled 'Inhibition of Plasmepsin V Activity Demonstrates Its Essential Role in Protein Export, PfEMP1 Display, and Survival of Malaria Parasites'.

The article is at: <u>http://www.plosbiology.org/article/info:doi/10.1371/journal.pbio.1001897</u>. Dr Boddey said the research team used WEHI-916 to prove the importance of plasmepsin V to malaria parasite survival.

"In this study, we developed a novel compound to target Plasmepsin V and showed for the first time that the enzyme is essential for survival of the malaria parasite," Dr Boddey said. "WEHI-916 is really exciting because if you block plasmepsin V, the malaria parasite dies," Dr Boddey said.

Dr Boddey said plasmepsin V was "an ideal drug target because its inhibition effectively halted the transport of hundreds of malaria proteins".

"The Plasmodium parasite needs to produce and deliver over 300 different proteins to the red blood cell to survive in the body and hide from the host's immune system," Dr Boddey said. "Instead of targeting individual proteins, we can block plasmepsin V and prevent all of those proteins from leaving the parasite."

Dr Sleebs said WEHI-916 could lead to drugs that were effective in curing malaria caused by all five species of Plasmodium parasite that cause malaria.

"Of the five malaria species, Plasmodium falciparum is responsible for the most deaths and is highly prevalent in Africa, while Plasmodium vivax presents major health issues for the Asia-Pacific region," Dr Sleebs said.

"Our study has shown that plasmepsin V is a key enzyme in these two important species of the parasite and WEHI-916 can inhibit plasmepsin V isolated from both of them," Dr Sleebs said.

"Not only does this compound enable us to prove plasmepsin V is an excellent drug target, it is a starting point for a research program that could lead to a new class of antimalarial drugs," Dr Sleebs said.

Dr Boddey said WEHI-916 was a crucial tool in proving plasmepsin V's importance and that researchers had been trying without success to learn more about plasmepsin V using standard genetic techniques.

"Our idea was to create a drug-like compound that would block plasmepsin V so we could investigate its importance," Dr Boddey said.

"We found that blocking plasmepsin V kills malaria parasites and delivered a new and effective potential drug at the same time," Dr Boddey said.

"We are now examining in our insectary whether plasmepsin V could be a target during other stages of the malaria lifecycle," Dr Boddey said. "The enzyme is present in the parasites that first infect humans in the liver, as well as in parasite forms that exit humans and infect mosquitoes.

"If WEHI-916 kills the parasite during these stages as well, it will mean any drugs that target plasmepsin V can be used as a preventative as well as a cure," Dr Boddey said.

COMPUMEDICS

Compumedics says four electronic health contracts worth \$US4.1 million (\$A4.3 million) over three years, with partners in South Korea, Shanghai, Hong Kong and Taiwan. Compumedics said the contracts were "a critical milestone in the development of its new mobile health ... platform".

The company said it had focused on transforming its sleep-diagnostic technology into a fully integrated internet cloud-based product for monitoring and diagnosing sleep for both the laboratory level under physician care and for consumers at home and it had progressed to the pre-commercialization phase.

Compumedics said that it had worked with each of the four partners for more than five years and they had well-established reputations and customer bases in their respective markets in sleep diagnostics and related areas.

The company said that by securing the Shanghai, China contract it was well-placed to develop the business model for that market followed by a roll-out across China, with no known competitors in this domain.

Compumedics executive chairman Dr David Burton said that his company was "a pioneer in sleep diagnostics and is uniquely placed to develop and introduce this next generation of sleep and neurology-diagnostic technology".

"These professional health services contracts position the company for a more expansive series of upcoming professional services deals," Dr Burton said.

"Importantly these developments serve as a precursor for discussions with major web technology and global-orientated telecommunications companies, who share the vision to provide highly accessible and uncompromised personalized healthcare everywhere," Dr Burton said.

"The driver of growth for this new business model is the large unmet demand in sleep testing, particularly in Asia," Dr Burton said. "It is estimated that only a small percentage of potential sleep-disorder sufferers has been diagnosed to date and a new paradigm is needed to expand sleep-testing to those who should be tested."

"As the service develops other medical modalities will be added to expand its footprint," Dr Burton said.

"We have chosen the initial partners due to their ability to work with us in establishing and fine-tuning the model for their respective territories and their ability and contacts within the market to drive acceptance of the service delivery," Dr Burton said.

"Once the model and system is mature we will bring in additional partners in existing and new markets," Dr Burton said.

Compumedics was up half a cent or 3.45 percent to 15 cents.

GI DYNAMICS

GI Dynamics says that chief commercial officer Mark Twyman has resigned effective from today.

GI Dynamics said it had launched a search for a president and chief operating officer to augment its leadership team and oversee the sales and marketing efforts for its Endobarrier duodenal liner for obesity and type 2 diabetes.

The company said that it was "experiencing challenging business conditions in certain key self-pay commercial markets".

GI Dynamics said that preliminary revenues for the three months to June 30, 2014 were estimated to be "slightly below first quarter 2014, in part due to less than expected sales in Chile, as well as delayed regulatory approval in Brazil".

GI Dynamics fell four cents or 6.9 percent to 54 cents with 2.8 million shares traded.

BONE MEDICAL

Bone Medical says it has begun an eight-patient study comparing its oral Capthymone for osteoporosis to the commercially available injectable Forteo (BD: Apr 4, 2014). Bone said that parathyroid hormone was a naturally-occurring hormone that played an important role in regulating bone formation and the company was developing an orally-delivered formulation for osteoporosis.

The company said that the trial would assess and compare parathyroid hormone blood levels based on administering different strengths of Capthymone compared to Forteo, with each patient receiving three Capthymone dose strengths, Forteo, or placebo.

The company said that the trial was an extension of a similar study conducted in 2012-'13 using lower doses that showed evidence of biological activity, confirming absorption after oral administration and an earlier study demonstrated the presence of parathyroid hormone peptide fragments in the bloodstream after oral administration of Capthymone. Bone said that the study aimed to confirm the finding, paving the way for further studies looking at long-term change in bone growth to engage early industry partnering interest. The company said that if intact parathyroid hormone peptides were detected in the blood, it could permit a faster, simplified development plan for Capthymone.

Bone chairman Rob Towner said that an oral treatment was "a long-unfulfilled goal of the pharmaceutical industry".

"If the current study is positive, our oral [parathyroid hormone] formulation could dramatically increase the ease of use of [parathyroid hormone] in the growing population of osteoporosis patients," Mr Towner said.

Bone said that results were expected in about three months.

Bone was up 0.2 cents or 10.5 percent to 2.1 cents with 6.2 million shares traded.

D3 MEDICINE

D3 Medicine says it will collaborate with Viroclinics Biosciences to provide integrated services for drug, biologicals, vaccines and diagnostics targeting viral infectious diseases. D3 chief operating officer Dr Leigh Farrell told biotech Daily that the partnership would "integrate both advisory and virology services" to customers.

In a media release D3 said that it was a biopharmaceutical strategic advisory company, while the Rotterdam, Netherlands based Viroclinics Biosciences was a virology service organization.

D3 said that the alliance leveraged the strengths of the two companies and would offer services that enabled biopharmaceutical customers to accelerate virological

investigational agents through preclinical and clinical development to market launch. The media release said that Viroclinics would provide a range of pre-clinical and clinical diagnostic services, including high through-put serology, virology and molecular assays, pheno-typing and geno-typing in both translational studies and phase I to IV clinical studies and clinical trial logistics services.

D3 said it would formulate integrated development, clinical pharmacology and translational medicine strategies to fast-track pre-clinical development and define customized pharmacometric and quantitative pharmacological approaches to improve decision-making and accelerate clinical and regulatory development.

D3 chief executive officer Dr Craig Rayner said that biopharmaceutical companies could use the alliance with Viroclinics "to develop and implement their pre-clinical, clinical and regulatory strategies when developing therapeutics, vaccines and diagnostics for viral infectious diseases".

D3 is a private company.

<u>CALZADA</u>

A Calzada extraordinary general meeting has overwhelmingly supported the issue of 10,000,000 options to recently appointed chairman David Williams.

Mr Williams received 139,499,919 votes (96.65%) in favor and 4,821,985 votes (3.35%) against the issue of the options.

In the notice of meeting Calzada said that 7,500,000 options were exercisable at nine cents each and 2,500,000 were exercisable at 20 cents each within three years of issue. Calzada has more than 418 million shares on issue.

Calzada was unchanged at 10.5 cents.

BENITEC BIOPHARMA

Benitec says it has established a share sale facility for the 1,034 unmarketable parcels worth less than \$500 each, at the June 30, 2014 record date price of \$1.15 a share. Benitec said that the unmarketable parcels comprised about 0.16 percent of the 4,585 holdings of shares in its register.

The company said the initiative was part of its capital management planning and the sale of unmarketable parcels would reduce the administrative costs associated with maintaining a large number of small shareholdings.

Benitec said that the shareholders would have until 5pm on August 18, 2014 to determine whether they wanted to opt out of the share sale facility by completing and returning the share retention form.

The company said it would arrange payment to holders of unmarketable parcels at their last recorded address.

Benitec was up three cents or 2.6 percent to \$1.17.

<u>ACUVAX</u>

Acuvax shareholders will vote on two resolutions relating to placements to acquire Activistic Pty Ltd and its funds collection system (BD: Jun 23, 24, 2014).

Acuvax said shareholders would be asked to ratify the placement of 340,000,000 shares at 0.05 cents a share to raise \$170,000, as well as approve the placement of

1,260,000,000 shares at 0.05 cents a share to raise up to \$430,000.

The meeting will be held at Suite 4, 16 Ord Street, West Perth, Western Australia on July 30, 2014 at 10am (AWST)

Acuvax was in a suspension and last traded at 0.1 cents.

ANTISENSE THERAPEUTICS

Jason and Catherine Constable have decreased their substantial shareholding in Antisense from 8,792,011 shares (6.1%) to 7,447,056 shares (5.167%).

The Ballarat Victoria based Mr and Ms Constable held 87,920,107 shares prior to the Antisense 10-for-one consolidation (BD: Sep 27, 2013).

The shareholder notice said that Mr and Ms Constable sold 1,344,955 shares for \$190,714 or 14.18 cents a share.

Antisense fell 0.5 cents or 3.6 percent to 13.5 cents.

BRAIN RESOURCE

Brain has requested a trading halt "pending a material announcement to the market concerning a capital raising". Trading will resume on July 4, 2014 or on an earlier announcement. Brain last traded at 25.5 cents.

BIOPROSPECT

Bioprospect says it has appointed "key shareholder and convertible note-holder" Kris Knauer as an executive director and Peter May has resigned.

The company said that Mr Knauer would be paid \$4,000 a month for his services. Bioprospect said that Mr Knauer had "a wealth of experience" in ASX listed companies and Bioprospect and had been a consultant and involved in the due diligence process, providing corporate and strategic advice on the acquisition of the Invatec heart rate technology to diagnose depression and other mental health conditions.

The company said that Mr Knauer had more than 15 years' experience in finance and corporate advisory services and was currently the executive director of equities at Novus Capital, executive chairman of Esperance Minerals, non-executive chairman of Astro Resources, a director of Greenvale Mining and a former director of Citadel Resource Group.

The company said that Mr Knauer held a Bachelor of Science degree Bioprospect said that director Peter May had resigned as a director effective from June 30, 2014, but would continue to be a consultant.

Bioprospect was untraded at 0.3 cents.