Biotech Daily

Friday February 10, 2017

Daily news on ASX-listed biotechnology companies

*** ASX, BIOTECH UP: ANTEO UP 15%, REVA DOWN 5%**

*** DR BOREHAM'S CRUCIBLE: VIRALYTICS**

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*** MACQUARIE GROUP TAKES 5% OF MMJ PHYTOTECH**

*** UNILIFE H1 REVENUE DOWN 47% TO $5m, LOSS DOWN 35% TO $44m**

*** MGC REQUESTS 'SLOVENIAN MARIJUANA EPILEPSY TRIAL' HALT**

*** BRENT CUBIS TO REPLACE COCHLEAR CFO NEVILLE MITCHELL**

MARKET REPORT

The Australian stock market climbed 0.99 percent on Friday February 10, 2017 with the ASX200 up 56.0 points to 5,720.6 points.

Eighteen of the Biotech Daily Top 40 stocks were up, eight fell, 12 traded unchanged and two were untraded. All three Big Caps were up.

Anteo was the best, up 0.6 cents or 15.4 percent to 4.5 cents with six million shares traded, followed by Dimerix up 14.3 percent to 0.8 cents with 200,000 shares traded.

Living Cell climbed 10 percent; Impedimed, Opthea and Uscom improved more than four percent; Actinogen, Orthocell and Universal Biosensors were up more than three percent; Medical Developments and Sirtex rose more than two percent; Acrux, Clinuvel, Cochlear, CSL, Mesoblast, Pharmaxis and Resmed were up more than one percent; with Compumedics, Pro Medicus and Starpharma up by less than one percent.

Reva led the falls, down 4.5 cents or 4.8 percent to 90 cents with 12,000 shares traded.

Factor Therapeutics lost 3.1 percent; Admedus, Bionomics, Ellex, Oncosil and Prana shed more than one percent; with Cyclopharm down by less than one percent.

DR BOREHAM'S CRUCIBLE: VIRALYTICS

By TIM BOREHAM

ASX code: VLA; **Market cap:** $256m; **Share price:** $1.06

Chief executive officer: Dr Malcolm McColl

Board: Paul Hopper (chairman), Peter Turvey, Dr Leonard Post, Dr McColl.

Financials for 2015-'16: revenue $513,000, loss of $9.06m (previously $4.25m); December quarter cash burn $3.78m; cash on hand $39.5m.

Major shareholders: BVF Partners (13.6%), Cormorant Global Healthcare (8.9%), Quest Asset Partners (7.5%), JCP Investment Partners (5%), Orbimed Advisors (5%).

Folk who believe winter sniffles have been a source of nothing but misery for human-kind have not cast their eyes over immunotherapy house Viralytics, which is pursuing a range of cancer indications with its proprietary Cavatak treatment, derived from the Coxsackie (common cold) virus.

Cavatak's mechanism of action is to target the receptors (called ICAM-1, seeing you asked) over-expressed in cancer tumors. Cavatak acts by directly killing tumor cells, as well as stimulating the body's own immune system to shrink other tumors. The virus can be delivered intravenously, or into the lesion itself.

Target indications include breast, lung, prostate, colorectal cancer and melanomas, a market estimated by Credit Suisse to be worth $US42 billion.

Viralytics, which has been listed for more than a decade, began its clinical work using Cavatak as a monotherapy to treat skin cancers, through the Calm, or Cavatak in late-stage melanoma, study. The melanoma skin cancer programs are the most advanced.

Cavatak evolved from the work of Prof Darren Shafren, associate professor of virology at the University of Newcastle and the company's chief scientific officer.

Viralytics' most advanced effort, the 57-patient phase IIb Calm study, showed an overall response rate of 28 percent, as well as a durable response rate of 21.1 percent six months after the advanced melanoma patients were treated.

Another mono-therapy program, the 16-patient, phase I systemic treatment of resistant metastatic disease, or Storm A, trial treated patients with melanoma, non-small-cell lung cancer, bladder and prostate cancer and has reported its results.

Part B of the Storm trial for advanced lung and bladder cancer has attracted big pharma Merck as a "collaborative partner", with Viralytics funding the programs but Merck providing know-how and (most importantly) access to its programmed cell death PD1 antibody checkpoint inhibitor Keytruda. The 80-patient study, also known by the Merck name of Keynote-200, is underway and the company expects results by the end of 2017.

A separate study called Canon, or Cavatak in non-muscular bladder cancer, has enrolled all 16 patients at the UK's Royal Surrey Hospital and has also reported results.

While the stand-alone treatments recorded initial success in reducing the size and spread of tumors, Viralytics has expanded its focus to a combination treatment with the extant "immune checkpoint inhibitor" drugs Yervoy (ipilimumab) and Keytruda (pembrolizumab), the drugs that saved property tycoon Ron Walker in their experimental phase.

Two key combination trials have targeted advanced metastatic melanomas.

In the Keytruda, 30-patient, phase Ib Capra, or Cavatak and pembrolizumab in advanced melanoma, trial, Cavatak achieved a 100 percent disease control rate among the first 10 patients. Of these, seven showed an objective response, that is, shrinking tumors, while three were stable. More updates are expected as patients are treated through this year.

The phase Ib Yervoy combination study, entitled the melanoma intra-tumoral Cavatak and Ipilimumab, or Mitci, trial, showed that half of the 18 patients recorded tumor mass reduction at day-106, while three showed a complete response. A further five patients showed stable disease at day-106, also with more updates expected as patients are treated through this year.

Viralytics has a phase Ib intravenous Cavatak in combination with an anti-PD-1 drug trial for melanoma in the planning stages, along with combination trials for other solid cancers.

The company describes the results as "preliminary but encouraging" bearing in mind the patients had failed previous treatments.

Dr McColl says the existing treatments have already moved the survival timeline. Five years ago, survival rates for advanced patients after five years would have been in the low single digits, rather than 20 percent at present.

Of course the challenge of combination therapy is to boost these survival rates further and ultimately render these cancers a chronic disease rather than a fatal condition.

"We are trying to get a much higher response rate in late-stage patients," Dr McColl says.

With the ever-present danger of treatments attacking healthy tissues, another key aim of the Cavatak programs is to reduce the incidence of adverse events. Viralytics reports severe adverse events of six percent in its Cavatak-Yervoy patient cohort, compared with up to 55 percent for trials elsewhere (ipilimumab alone and other combination trials).

FINANCIALS:

Viralytics sits on cash of $40 million, by virtue of a $28 million capital raising and a $4 million share plan in early 2016. With a modest burn rate of $11 million last year (less a Federal grant of $3 million), Dr McColl says Viralytics should be able to fund its activities for the foreseeable future and management is keeping an open mind on whether to self-fund the more expensive pivotal (late stage) programs.

Dr McColl notes the potential to jump from the phase I/Ib stage (typically 20 to 30 patients) to phase III without the regulatory obstacles of yore.

“The Food and Drug Administration (the US regulator) says with the right data it will approve smaller studies,” Dr McColl says.

TIMETABLE:

Investors should look out for Storm data (metastatic bladder cancer) later this year.

If the results are pleasing, Viralytics might fund a single-arm pivotal study off its own bat. Otherwise it’s a case of following the global medical jamborees at which Viralytics is appearing, starting with the Leerink Global Healthcare Conference in New York next week. In political-speak, it always pays to rock up to these events with “announceables”.

INVESTMENT PROPOSITION:

While Viralytics is a one-drug play with Cavatak, the range of programs adds to both the potential of the story and the danger of investors simply being baffled. Arguably Viralytics has produced more data than any other ASX biotech, not that there’s anything wrong with that.

“It’s a pretty complicated story,” Dr McColl says.

A picture tells a thousand words. Viralytics presentations contain gruesome before-and-after shots of treated patients, which graphically highlight tumor shrinkage.

Just don’t look at them before dinner.

DR BOREHAM’S VERDICT:

Arguably Viralytics current market valuation balances the multi-pronged potential with the reality the programs are in the early stages.

The company’s register is replete with institutional backers, so the company should have few problems when the fund-raising fedora is next passed around.

Recent global immunotherapy deals imply a higher valuation. For instance, in September last year Boehringer Ingelheim entered a deal with the pre-clinical stage Vira Therapeutics in an options deal worth up to $US236 million.

Ultimately, Viralytics fortunes rest on a big-dollar big pharma partnership, or an outright sale of the company. The company’s corporate strategy is to “license, partner or sell at a key value point”.

In the meantime, don’t forget to Slip Slop Slap.

Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. Nor is he a licensed financial adviser.

CSL

CSL says a collaboration studying its 2H10 monoclonal antibody has prevented the progression of diabetic kidney disease in mouse studies of type 2 diabetes.
CSL said that based on prior work, staff investigated a new approach targetting the transport of fatty acids, or lipids, from the blood to tissues to treat diabetic kidney disease.
The company said that using 2H10, the researchers blocked signalling of vascular endothelial growth factor B (VEGF-B), a protein that affected the transport and storage of lipids in body tissue.
CSL said that elevated levels of VEGF-B were found in patients with diabetic kidney disease and it was thought to play a role in the development of diabetic nephropathy.
The company said that by inhibiting signalling by the VEGF-B protein, the researchers reduced the accumulation of lipid deposits within the kidney and moderated the progression of kidney disease in a number of models of type 2 diabetes.
CSL said that similar findings were also observed in a model of type 1 diabetes and mouse models treated with the 2H10 antibody showed improvements in blood pressure and insulin sensitivity.
The article, entitled 'Reducing VEGF-B Signaling Ameliorates Renal Lipotoxicity and Protects against Diabetic Kidney Disease' was published in Cell Metabolism, with the abstract at: http://www.cell.com/cell-metabolism/fulltext/S1550-4131(17)30039-6.
CSL research head Dr Andrew Nash said the work addressed an unmet medical need "and could lead to an entirely new approach to the treatment of type 2 diabetes".
Lead researcher, the Stockholm, Sweden-based Karolinska Institutet's Prof Ulf Eriksson said the study showed "some mechanistic understanding of the disease progression and challenges the hypothesis that diabetic kidney disease is simply the result of chronic elevated blood glucose".
"It is known that increased use of glucose-lowering agents and better glycaemic control has not resulted in a reduced prevalence of diabetic kidney disease, which instead has increased in parallel with diabetes," Prof Eriksson said.
CSL said the research was a joint effort by the team led by Prof Eriksson, researchers from Sweden's Uppsala University and CSL's Melbourne scientists.
The company said it had developed CSL346, a version of the 2H10 antibody that was suitable for use in humans, and would begin a phase I, first-in-human clinical trial, in Australia in 2017.
CSL said that the trials would focus on proof of biological concept with a view to unlocking the full therapeutic potential of the molecule.
The company said that type 2 diabetes was one of the fastest growing chronic diseases, affecting more than 420 million people globally.
CSL said that diabetic kidney disease was an often fatal, long-term complication of diabetes and the most common cause of severe renal disease, affecting about one third of people with type 2 diabetes.
The company said that there were few treatment options available that prevented the progressive loss of renal function for people with diabetic kidney disease.
CSL was up $1.17 or one percent to $114.37 with 635,457 shares traded.

MGC (MEDICAL GRADE CANNABIS) PHARMACEUTICALS

MGC has requested a trading halt pending an announcement "regarding commencement of Slovenian epilepsy clinical tests with medicinal cannabis".
Trading will resume on February 14, 2017 or on an earlier announcement.
MGC last traded at 3.9 cents.

ACTINOGEN MEDICAL

Actinogen says the UK Medicines and Healthcare Products Regulatory Agency has approved its Xanadu, phase II trial of Xanamem for mild Alzheimer's disease.

Actinogen said that the 174-patient, phase II, double-blind, 12-week, randomized, placebo-controlled study would assess the safety, tolerability and efficacy of Xanamem in subjects with mild dementia due to Alzheimer's disease, at sites in the UK, US and Australia.

The company said that the US Food and Drug Administration approved the trial last month (BD: Jan 22, 2017).

Actinogen said that Xanamem was designed to block the excess production of the stress hormone cortisol in the areas of the brain most affected in Alzheimer's disease, with raised cortisol associated with Alzheimer's disease and lowering cortisol in the brain a new target for treating Alzheimer's disease.

Actinogen scientific advisor, the University of Edinburgh's Prof Craig Ritchie, said that inhibiting the production of cortisol in the brain with Xanamem "could have a major impact on the well-being of people living with dementia as well as those at high risk of developing this condition".

Actinogen was up 0.2 cents or 3.45 percent to six cents with 1.4 million shares traded.

ALLEGRA (FORMERLY ADVANCED SURGICAL DESIGN & MANUFACTURE)

Allegra says that three-month histology and a 12-month radiographic evaluation from its on-going sheep study support its bio-ceramic Sr-HT-gahnite bone substitute.

Last year, Allegra said the Sr-HT-gahnite bone substitute collaboration with the University of Sydney's professor of bio-medical engineering Prof Hala Zreiqat had developed a ceramic scaffold to assist regenerate bone tissue and degrade as it was replaced by natural bone, with Prof Zreiqat and her team using three-dimensional printing technology to developed the ceramic, composed of strontium, hardystonite (a calcium-zinc-silicate) and gahnite (a zincaluminium-oxide), which the company described as Sr-HT-gahnite (BD: Jun 8, Sep 20, 2016).

Today, the company said that the three-month histology results demonstrated that the scaffold implants maintained their structure and were well-tolerated with no evidence of adverse tissue reactions.

Allegra said that 12-month radiographic evaluation results continued to be very encouraging, with the radiographs noting significant primary and secondary bone healing response.

The company said that there was radiographic evidence of degradation of the substitute and proliferation of new bone formation, as well as appropriate replacement of graft substitute with healthy new bone.

Allegra said that the studies demonstrated stable bone union in a difficult segmental fracture pattern, with no loss of internal fixation and no evidence of graft failure.

The company said that there was "very sound radiographic evidence of bone healing and modelling with the use of this bone graft substitute".

Allegra said it would continue to examine the Sr-HT-Gahnite development for other applications including, but not limited to, coatings to improve the long-term stability of implantable medical devices, drug delivery and skeletal tissue regeneration.

Allegra was untraded at 17.5 cents.

GI DYNAMICS

Hunter Hall Investment Management says it has reduced its substantial shareholding in GI Dynamics from 100,657,157 shares (18.46%) to 6,200,000 shares (1.11%).
Last December, Hunter Hall increased its holding from 81,523,123 shares (17.14%) to 100,657,157 shares (18.46%), with the single largest purchase 6,385,000 shares for 2.2 cents a share, the same price as the $1.5 million placement (BD: Dec 14, 22, 2016).
Today, the company said it sold 92,521,962 shares on February 8 at 2.5 cents a share.
GI Dynamics was untraded at 2.6 cents.

MMJ PHYTOTECH

The Sydney-based Macquarie Group says it has become a substantial shareholder in MMJ Phytotech with 9,652,632 shares (5.04%).
The Macquarie substantial shareholder notice was for the same number of shares as one filed by the Toronto, Ontario New York MM Asset Management earlier this week, which cited Macquarie Bank as the registered holder (BD: Feb 8, 2016).
MMJ was up half a cent or 1.75 percent to 29 cents.

UNILIFE

Unilife says revenue for the six months to December 31, 2016 fell 47.3 percent to $US4,053,000 ($A5,300,620), with net loss down 35.1% to $US33,282,000.
Unilife said that fall in revenue was “primarily related to timing of achievement of milestones under customer programs”.
The company said that the decrease in net loss was “primarily attributable to the decrease in operating expenses and change in fair value of financial instruments offset by a decrease in revenue and an increase in interest expense”.
Unilife said it had $US9,309,000 in cash and equivalents at December 31, 2016, compared to $US18,702,000 at June 30, 2016.
Unilife fell 0.6 cents or 12.5 percent to 4.2 cents with 5.1 million shares traded.

COCHLEAR

Cochlear says that Brent Cubis will replace long-standing chief financial officer Neville Mitchell from March 13, 2017.
Cochlear told Biotech Daily that Mr Mitchell started with the company in 1990.
Cochlear said that Mr Cubis had worked in various chief financial officer and finance roles at companies including the Packer-family owned Publishing and Broadcasting Limited Media, owners of Nine Network and Australian Consolidated Press Magazines, as well as Bankers Trust, Westfield and Sheraton Hotels.
The company said that for the last eight years Mr Cubis worked in the health sector, most recently as chief financial officer for the National Home Doctor Service and was previously Fitness First finance director and Chris O’Brien Lifehouse chief financial officer.
Biotech Daily would like to acknowledge the very significant contribution Mr Mitchell has made to the sector, his continuous assistance to our queries, both technical and substantive, and that he continues as a director of Osprey Medical.
Cochlear was up $1.73 or 1.3 percent to $134.04 with 222,094 shares traded.