Biotech Daily

Wednesday April 2, 2014

Daily news on ASX-listed biotechnology companies

*** ASX UP, BIOTECH DOWN: ATCOR UP 15%, CIRCADIAN DOWN 13%**

*** EDITORIAL: TRIALS, TRIBULATIONS AND TRANSPARENCY**

*** PATRYS GROWS HUMAN IgM ANTIBODY IN PLANTS**

*** ADVANCED SURGICAL LICENCES SR-HT-GAHNITE FOR BONE GRAFTS**

*** GI DYNAMICS RESPONDS TO TGA ADVERTISING COMPLAINT**

*** SUDA APPOINTS 4 EXPERTS FOR ARTIMIST EXPANSION TRIAL**

MARKET REPORT

The Australian stock market rose 0.26 percent on Wednesday April 2, 2014 with the S&P ASX 200 up 14.1 points to 5,403.3 points.

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

Atcor was the best, up 1.5 cents or 15 percent to 11.5 cents with 338,499 shares traded.

Neuren climbed 7.3 percent; IDT was up 6.7 percent; Bionomics rose 5.45 percent; Anteo, Avita, Oncosil and Patrys were up four percent or more; Prima rose 2.6 percent; Clinuvel, Phosphagenics and Resmed were up more than one percent; with CSL and Sirtex up by less than one percent.

Circadian led the falls, down three cents or 13.3 percent to 19.5 cents with 900 shares traded, followed by Reva down 12.1 percent to 14.5 cents with 2.0 million shares traded.

Prana lost a further 9.1 percent to 25 cents with 12.9 million shares traded; Antisense fell 8.3 percent; Starpharma fell 4.05 percent; Living Cell and Viralytics were down more than three percent; Osprey, Tissue Therapies and Universal Biosensors shed more than two percent; Ellex, Pharmaxis and QRX were down more than one percent; with Acrux, Alchemia, Cochlear and Mesoblast down by less than one percent.

BIOTECH DAILY EDITORIAL

To fail one phase II trial is unfortunate, to fail two phase II trials (and change technologies while losing 40 staff) appears to be carelessness.

It has been a rough three weeks for Australian biotechnology, as Jessica Gardner put it in Melbourne's The Age, today: "biotech stocks are hitting the wall at the rate of one a week".

Thankfully biotechnology success is measured in decades, not weeks and there have been far more high-level successes than failures.

While some of the Biotech Daily Top-20 companies have stumbled, few have fallen and most have performed extremely well.

The BDI-20 companies that have had major technology failures – that is non-significant phase II or III trial results - or have discontinued programs, include Metabolic, Avexa, Neuren, Novogen, Phosphagenics, Prima, Virax, Progen, Pharmaxis, QRX, Starpharma, Bionomics and now Prana. Other companies have failed to commercialize products like Ventracor, Cathrx, Healthlinx, Impedimed, Phylogica and Resonance, with the last three still very much in the game.

In the case of the drug developers, Bionomics chief executive officer Dr Deborah Rathjen has created a broad portfolio, so that if BNC105 is ditched as the evidence indicates it should be, the company has a pipeline supporting its share price.

Neuren overcame the glypromate failure by having NNZ2566 in already-funded programs. Pharmaxis, for all its non-significant results and regulator rebuffs, has both Aridol and Bronchitol on sale, while QRX continues to take the regulatory fight to the US FDA.

Phosphagenics originally claimed that its tocopheryl phosphate mixture or phosphorylated vitamin E crème technology was able to carry large molecules, like insulin, through the skin. Basic anatomy says the skin is a barrier to keep things that do not belong in, out. The lure of replacing daily insulin injections for diabetes with a patch was a very lucrative proposition, except the company never demonstrated it could do it. TPM-insulin was very quietly dropped, while a range of other, already transdermally available, drugs were highlighted, along with cosmetics that don't earn much money and the fat-busting AOD9604 that doesn't. It is hard to understand how Phosphagenics will compete with the big guns in the already saturated transdermal opioid market. Insulin anyone?

Which brings us to transparency. In February 2007, Metabolic's AOD9604 failed its 536-patient, phase II trial for obesity and in August the company shelved the development of its lead drug candidate ACV1 for neuropathic pain (BD: Feb 21, Aug 14, 2007). Former chief executive officer Dr Roland Scollay made the announcements very clear and as he later said to Biotech Daily when asked about the failed trials: "Oh no, David. Our trials were very successful. They showed our drugs don't work."

Yesterday, Prana executive chairman Geoffrey Kempler won credit for at least making the bad news clear: "Prana's PBT2 did not meet its primary endpoint". But Biotech Daily was concerned that the timing of Prana's trading halt and subsequent media release at 8.55pm and conference call at 11pm was directed at its new US investors and not its long-suffering Australian founders.

Last month, Bionomics came out of a trading halt, announcing a 9.30am conference call at 8.30am, and did not say clearly that BNC105 missed its primary endpoint for renal cell carcinoma, instead minimizing the negative and emphasizing the data-mining positive.

Even the acknowledgment of failing to meet its primary endpoint looked positive: “Primary endpoint showed a similar proportion of patients in both treatment arms free of progression at 6 months in the unselected patient population” with a slightly more informative paragraph on the second page of the five-page release.

Starpharma has been unable to commercialize Vivagel for projects including HIV in Africa, precautionary use against rape-related pregnancy and HIV in the highlands of New Guinea and has had a phase III trial for ‘cure’ of bacterial vaginosis and a phase II trial for prevention of bacterial vaginosis, that despite barracking from analysts on conference calls, did not meet their primary endpoints.

The drop-off of activity in data presented in the prevention trial underlined the failure to ‘cure’ in the first trial. But an earlier and completely separate study by the Melbourne Sexual Health Centre, co-authored by Dr Jackie Fairley’s brother Dr Christopher Fairley showed that the risk of bacterial vaginosis recurrence was “halved with use of oestrogen-containing contraceptives”. The proposed phase III trial of Vivagel for bacterial vaginosis recurrence does not appear a wise investment of shareholders’ funds.

Starpharma chief executive officer Dr Fairley has been effective in winning major company investigations of the dendrimer technology for agricultural and other potential uses, but so far none have resulted in a major deal. The Vivagel condom-coating deals are yet to generate significant revenues. Biotech Daily was always of the view that the dendrimer drug delivery that Starpharma first intended to develop was its most exciting project and the company should put more focus on the dendrimer-docetaxel studies and less on changing its name.

It is hard to understand what really went wrong at Reva Medical. The board and management appear to be as ‘switched-on’ as any in the sector, but the great idea of a bioresorbable, x-ray-visible, drug-eluting stent seems to have been overtaken by faster competitors. Investors are clearly upset that the Rezolve and Rezolve 2 have been shelved and suddenly the Fantom is the main game. Something clearly went wrong and a decision was made to ditch the previous generation, but it certainly did not look like an elegant transition to a better model.

Biotechnology is a difficult industry for investment with long lead-times and huge risks. Biotech Daily is not surprised that some very promising technologies do not deliver as expected. That’s why we have rigorous trials. But investors should have the right to expect the results of those trials to be announced clearly and concisely.

If a company was successful it would say in the headline and first sentence of its media release to the ASX that drug XYZ-123 was effective against its target. If the drug fails to meet its primary endpoint, that should be equally prominent, too.

David Langsam
Editor

PATRYS

Patrys says it has produced PAT-SM6 human immunoglobulin M (IgM) antibody “in an easy-to-grow plant manufacturing system”

Patrys said that researchers used the Australian tobacco relative nicotiana benthamiana to express the same IgM antibody in a plant instead of a mammalian production cell line.

The company said that a research paper on the production, entitled ‘Expression and glycoengineering of functionally active hetero-multimeric IgM in plants’ was published in the Proceedings of the National Academy of Sciences with an abstract available at: http://www.pnas.org/content/early/2014/03/26/1320544111.abstract.

Patrys said that the study was the result of a research collaboration with the Vienna-based University of Natural Resources and Life Sciences and focused on developing an alternative production system for the manufacture of IgM antibodies, using PAT-SM6, which might significantly reduce production costs while maintaining the quality and functionality of the antibody products.

The company said that the study found that relatively high quantities of PAT-SM6 IgM antibody could be made in an easy-to-grow plant manufacturing system and that functionality of antibodies very often depended on the attached sugars.

Patrys said that it was shown that by modulating the properties of the plants, a process called in-planta glycol-engineering, this plant expression system could produce fully functional antibodies that are similar to the antibodies generated by the human body.

The company said that the study demonstrated the novel plant-based process could be applied to generate high yield, functional, human-like IgM antibodies.

Study co-author and Patrys research and development vice-president Dr Frank Hensel said that the data shows “for the first time, that functional IgM antibodies can be made efficiently, quickly and highly cost-effectively in a plant-based system”.

“We believe that such a manufacturing system holds real promise for the future and further work in this area is ongoing,” Dr Hensel said.

Patrys chief executive officer Dr Marie Roskrow said that her company was “the first company to be credited with the development of IgM antibodies in human PER.C6 cells”.

“We are very excited that our lead product PAT-SM6 is once again at the forefront of new discoveries and the results of this collaboration prove that the IgM class of antibodies, that Patrys is focused on, can become the immunotherapy of choice in the near future with the possibility of using different antibody production platforms,” Dr Roskrow said.

Patrys was up 0.2 cents or 4.8 percent to 4.4 cents with 3.5 million shares traded.

ADVANCED SURGICAL DESIGN AND MANUFACTURE

Advanced Surgical says it has licenced the Sr-HT-Gahnite composite bio-compatible ceramic material from the University of Sydney for veterinary and orthopaedic indications.

Advanced Surgical chief executive officer Tom Milicevic said that existing synthetic bone substitute materials were unable to be used to treat bone loss in load-bearing applications, so bone autograft and allografts and/or metal implants were required.

“In preliminary studies, Sr-HT-Gahnite has duplicated the mechanical strength, elasticity and bioactivity of bone,” Mr Milicevic said. “Importantly, it is 100 times mechanically stronger than synthetic bone substitute materials in clinical use”.

The University of Sydney’s commercial development and industry partnerships director Andrew Tindell said the materials technology was “the culmination of 22 years of world leading research and it is always rewarding when the University sees the outputs of its work taken up by industry, developing products and bringing them to the market”.

Advanced Surgical was up half a cent or 11.1 percent to five cents.

GI DYNAMICS

GI Dynamics says it disputes a complaint to the Therapeutic Goods Administration about an advertisement for its Endobarrier obesity and diabetes treatment.

GI Dynamics said that the anonymous complaint related to an advertisement placed in an Australian newspaper in September 2013 and the TGA complaints resolution panel made a determination "regarding certain aspects of the advertisement, including recommending certain sanctions regarding the content of any future advertisements in Australia".

GI Dynamics said it "strongly disagrees with many of the findings of the [panel] and is currently considering avenues to have the determination reviewed and has reserved all of its rights in this regard".

Hawkesbury Partners principal David Allen who represents GI Dynamics in Australia told Biotech Daily that the TGA required advertising to provide a balanced view including alternatives such as diet and exercise regimes, as well as potential risks and side-effects.

Mr Allen said that the TGA wanted a retraction and apology but "GI Dynamics disagrees with the complaint and is in discussions with the TGA".

GI Dynamics also said it had expanded the availability of its Endobarrier therapy to the Adelaide Obesity Surgery and the Perth-based Upper GI West.

GI Dynamics was unchanged at 54 cents.

SUDA

Suda says it has appointed four malaria experts, Prof Tim Davis, Prof Ric Price, Prof Kevin Marsh and Dr Stephen Rulisa, to its clinical advisory board.

Suda said the four would provide advice and guidance on the expansion of the market for Artimist beyond severe paediatric malaria.

The company said the clinical advisory board met on March 27, 2014 "to discuss the design of a pivotal phase III trial of Artimist as an early interventional treatment in the pre-referral setting".

In April 2013, Suda said that its 151-paediatric subject, phase III trial of sub-lingual Artimist had shown significant superiority to intravenous quinine and the company later said it expected to complete licencing talks later that year (BD: Apr 30, May 31, 2013).

Suda chief business officer Nick Woolf told Biotech Daily that Suda would develop the trial protocol for a World Health Organisation-funded trial to expand the Artimist indication from severe malaria to use as an early interventional treatment for paediatric malaria in a village setting.

Mr Woolf said that once the protocol had been developed, the company would approach the World Health Organisation.

In a media release, Suda said that the WHO and philanthropic funds had indicated an interest in supporting further clinical evaluation of Artimist.

The company said that Prof Davis was a professor at the University of Western Australia and Prof Price was a professor at Oxford University's Centre of Tropical Medicine and the Menzies School of Health Research at the Royal Darwin Hospital.

Suda said that Prof Marsh was the chair of the WHO Malaria Policy Advisory Committee and director of the Kenya Medical Research Institute Wellcome Trust Research Programme and Dr Rulisa was the principal investigator for two clinical trials of Artimist as well as the University of Rwanda's head of obstetrics and gynaecology.

Suda fell 0.1 cents or 1.5 percent to 6.6 cents with 3.7 million shares traded.