

Biotech Daily

Friday March 29, 2019

Daily news on ASX-listed biotechnology companies

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MARKET REPORT

The Australian stock market edged up 0.07 percent on Friday March 29, 2019, with the ASX200 up 4.6 points to 6,180.7 points. Seventeen of the Biotech Daily Top 40 stocks were up, 15 fell, five traded unchanged and three were untraded. All three Big Caps rose.

Oncosil was the best, up 1.4 cents or 35.0 percent to 5.4 cents, with 56.7 million shares traded. Both Orthocell and Volpara climbed 12.0 percent; Imugene was up 5.6 percent; Kazia improved 4.55 percent; Actinogen, Compumedics, Ellex, Mesoblast and Osprey were up more than three percent; Medical Developments, Polynovo and Universal Biosensors rose more than two percent; Avita, Nanosonics and Pharmaxis were up more than one percent; with Cochlear, CSL, Cynata and Resmed up by less than one percent.

Prescient led the falls, down 0.5 cents or 9.1 percent to five cents, with 1.5 million shares traded. LBT lost 7.3 percent; Optiscan was down 6.7 percent; Uscom retreated 5.6 percent; Patrys fell four percent; Proteomics was down 3.2 percent; Opthea shed 2.1 percent; Clinuvel, Dimerix, Genetic Signatures, Neuren and Telix were down more than one percent; with Paradigm, Pro Medicus and Starpharma down by less than one percent.

DR BOREHAM'S CRUCIBLE: IMMUTEP

By TIM BOREHAM

ASX code: IMM

Nasdaq code: IMMP

Share price: 3.3 cents

Market cap: \$111.7 million

Shares on issue: 3,383,598,296

Chief executive officer: Marc Voigt

Board: Dr Russell Howard (chair), Pete Meyers, Marc Voigt, Grant Chamberlain

Financials (December quarter): receipts \$146,000, loss of \$3.73 million, cash \$26 million, estimated current quarter outflows \$7.85 million

Identifiable major shareholders: Altium Growth 4-5%, Australian Ethical 4-5%, Marc Voigt 1.7%, Fredric Triebel 1.3%, Lucy Turnbull about 1%

Immutep said that following a placement in December it was not able to confirm some of the major shareholders at the time of publication.

Formerly known as Prima Biomed, the immuno-oncology outfit is working in an increasingly crowded - or popular - space.

Around the world in 2017, there were 21 clinical trials pertaining to Immutep's target of lymphocyte activation gene 3 (LAG-3), a protein that regulates immune responses.

At the start of this year, there were 47 LAG-3 trials involving 11,000 patients.

So, who is the global leader in the emerging field? "It's a company called Immutep," says Immutep CEO Mark Voigt.

Well he would say that, wouldn't he? But it's hard to argue the point, given that it was the French immunologist and Immutep chief scientific officer Dr Frederic Triebel who discovered LAG-3.

How Prima became Immutep

A potted history here: Dr Triebel in 2001 founded Immutep SA, with the name inspired by the Egyptian god of medicine Imhotep.

Prima Biomed in December 2014 acquired Immutep for \$US10.8 million upfront, \$US7.2 million in milestones and \$US3 million in Prima shares.

In May 2016, Prima divested its original CVac cancer vaccine program to Sydys Corp of the US, for 9.8 percent of Sydys and \$400 million of potential milestones and royalties. The US entity had \$US800 in the bank at the time.

Let's just say this one is not mentioned in Immutep's dispatches these days.

Immutep has excelled in destroying shareholder value in the past, but this year could prove a turning point with multiple trial updates scheduled.

Immutep's busy slate

Immutep has been running two advanced trials off its own bat, but is also collaborating with multiple big-name pharma partners: Novartis, Glaxosmithkline, Merck Inc of the US, Merck of Germany, Pfizer and China's EOC Pharma (an arm of Eddingpharm).

Immutep's lead product is IMP321, also known as eftilagimod alpha (or efti to friends).

The company has four LAG-3 based product candidates, three of them in clinical development.

The most advanced trial, the active immunotherapy with paclitaxel, or Aipac, is in phase IIb for evaluating IMP321 in metastatic breast cancer. The trial is part way through patient recruitment and is expected to report progression-free survival data this calendar year.

The two active immune-therapeutics in melanoma, or Tacti-mel, study is a phase I trial evaluating IMP321 in melanoma patients. The trial was expanded in November 2017 after encouraging interim results, supported by further positive data.

In a new tie-up with Merck Inc, the company is testing IMP321 as a combination therapy with Merck's Keytruda, for a number of solid tumors.

This phase IIb trial kicked off in early 2019.

Following a successful investigational new drug application with the US Food and Drug Administration, this trial will include US sites - a key precursor to any eventual US approval.

Meanwhile, Immutep has entered separate trial collaborations with Pfizer and Merck Germany - a separate entity to Merck Inc - in relation to a Tacti-002 trial. This alliance will test how well the therapy works on patients with advanced solid malignancies, when combined with the existing immunotherapy drug avelumab.

To round out Immutep's repertoire - or totally confuse things - Immutep has existing LAG-3 related partnerships with Glaxosmithkline, Eddingpharm and Novartis. Targets include metastatic breast cancer, melanomas, small cell lung cancer and head and neck and shoulder cancer.

Meanwhile, Novartis has carried out five out-licenced trials, covering 1,000 patients across indications including blood cancer, triple negative breast cancer, melanomas and solid tumors.

Management has been racking up its frequent flyer points, having presented Tacti-mel data at the World Immunotherapy Conference in San Diego, while also showcasing IMP761 data at the European Crohn's and Colitis Organisation's pow-wow in Copenhagen.

What happens on the trip doesn't necessarily stay on the trip: next Wednesday, Mr Voigt will update the market about what the company told the boffins about Tacti-mel.

Don't' forget about immune suppression

Mr Voigt says the overlooked aspect of the checkpoint mechanism of action is suppressing, rather than stimulating, the immune system to treat conditions such as rheumatoid arthritis, irritable bowel disease and multiple sclerosis.

"With cancer you want the immune system to be active, but with auto-immune diseases you want to modify it," he says.

With IMP321, Glaxosmithkline is carrying out preclinical programs for ulcerative colitis and a phase I program for psoriasis. With ulcerative colitis, Glaxosmithkline is working towards a clinical proof of concept study in 2020.

A second program, IMP761 is in preclinical development. "The good news is we have product candidates in auto-immune and we will talk more about autoimmune diseases in future," Mr Voigt says.

Finances and performance

Immutep is sitting on \$26 million of cash following a \$13.16 million placement and share purchase plan in March 2018, which attracted the support of notables such as Australian Ethical and former chair Lucy Turnbull (Ms Turnbull resigned from the board in November 2017, but if she did it to help hubbie Malcolm's political career, she needn't have bothered).

In December 2018, the company raised a further \$5.2 million on the Nasdaq. The company says the cash balance will satiate its needs until 2020, although the forecast current (March) quarter outflows of \$7.85 million implies the company is burning funds at a decent clip.

Immutep listed on the Nasdaq in April 2012, which in hindsight was too early in the company's evolution.

While the company certainly didn't win the share rating it expected, the Nasdaq foray was not all in vain because US investors now account for 33 percent of the register, compared with five percent previously.

From a 12-month low of 2.2 cents in February 2018, Immutep shares peaked at 5.6 cents in October 2018.

Dr Boreham's diagnosis:

The strategy of choosing a single product for a single target has gone awry in recent years, with Innate Therapeutics and Factor Therapeutics coming a cropper in their programs for multiple sclerosis and wound healing, respectively.

While many of Immutep's programs are early stage and/or subject to the whims of the big pharma partners, Immutep can't similarly be accused of putting all its eggs in one basket. To mangle metaphors, it has multiple shots at popping one of these eggs through the goals.

By ascribing a modest market valuation of \$100 million, Immutep investors are waiting for the chickens to come home to roost. Bear in mind the company's been around for a while, having listed on the ASX in July 2001.

This year investors can expect updates about Tacti-mel (final data from the 24-patient trial) and the Tacti-002 program, as well as first progression-free survival data from the Aipac trial.

The company also refers to "potential milestone payments from clinical partners as trials progress".

Ultimately Immutep's endgame involves partnering, partnering and partnering: more licencing deals to fund the pointy phase III stuff or perhaps an outright transaction that sees Immutep go the way of erstwhile ASX immunotherapy play Viralytics (taken over by Merck Inc for \$502 million).

"But strategically it's important we have the data to form the basis of a transaction," Mr Voigt says. "We are working on a lot of things."

Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. If he's misunderstood any of the science, he claims immunity.

GI DYNAMICS

GI Dynamics says an English 12-patient study of Endobarrier shows a statistically significant reduction of weight, HbA1c and sleep apnoea, from baseline, at 12 months. GI Dynamics said the study, led by Sandwell and West Birmingham Hospital's Dr Robert Ryder, titled 'One-year results of the Association of British Clinical Diabetologists (ABCD) sponsored Endobarrier in Type 2 Diabetes/Pre-Diabetes with Obstructive Sleep Apnoea (OSA) study' was presented at the Diabetes UK Professional Conference In Liverpool, March 6 to 8, 2019.

The company said Endobarrier for type 2 diabetes and obesity showed a reduction in weight (p < 0.001), body mass index (BMI) (p < 0.001), HbA1c (p < 0.023) and obstructive sleep apnoea (p < 0.002).

GI Dynamics said 12 patients using continuous positive airway pressure (CPAP) to treat moderate obstructive sleep apnoea were treated with Endobarrier for 12 months at the Birmingham City Hospital.

The company said eight patients had type 2 diabetes and four had pre-diabetes. GI Dynamics said 10 of the 12 patients saw their apnoea hypopnea index fall below the moderate obstructive sleep apnoea threshold, allowing them to discontinue the use of CPAP for sleep apnoea.

The company said one patient discontinued CPAP after 18 months and one partially discontinued CPAP at nine months.

Dr Ryder said the one-year results were "very encouraging".

"Discontinuing the use of CPAP is not only beneficial for patients in terms of significant clinical and lifestyle benefits, but also is financially beneficial for health services," Dr Ryder said.

GI Dynamics chief executive officer Scott Schorer said, "the outcomes we have seen from Dr Ryder's studies show promising results, reducing associated health risks for patients with obstructive sleep apnoea, type 2 diabetes and obesity".

"This study represents the first prospective obstructive sleep apnoea study of Endobarrier, and the results are highly encouraging for future analysis," Mr Schorer said.

GI Dynamics was up 0.2 cents or 10.5 percent to 2.1 cents.

MICRO-X

Micro-X says it has begun a \$13.7 million proceedings against Allora Services and its managing-director Mark Brydon for breach of contract and misleading and deceptive conduct.

Micro-X said that proceedings at the Federal Court related to a contracted with Hydrix Services, now Allora Services, in 2015 for \$19 million in engineering design services for its DRX Revolution Nano.

The company said it withheld \$1.8 million in invoices in 2016, following disputes over overcharging, project cost overruns and design defect costs.

Micro-X said that last year it demanded about \$13.7 million from Allora for loss and damages from the contract breach and misrepresentations made by Allora regarding price and capability of its engineering design services.

The company said Mr Brydon aided and abetted Allora in the misleading and deceptive conduct.

Micro-X said it expected Allora to lodge a cross claim for unpaid invoices with interest in the Federal Court proceedings.

Micro-X fell 0.75 cents or 2.7 percent to 26.75 cents.

RESAPP HEALTH

Resapp says it has completed recruitment for its 956-patient Breathe Easy study and documentation for its de-novo US Food and Drug Administration submission.

Resapp said it completed recruitment for its adult, prospective, double-blind Breathe Easy study for the diagnosis of lower respiratory tract disease, pneumonia, asthma exacerbations and chronic obstructive pulmonary disease exacerbations.

The company said it was yet to finalize 11 subjects in clinical adjudication for the study and was currently undergoing quality assurance, with top-line results expected within three weeks.

Resapp said that the documentation had been completed for its de-novo submission for the Resappdx mobile telephone cough diagnostic for the US Food and Drug Administration.

The company said it would take two weeks to review the submission, before submitting it to the FDA.

Resapp was up 1.4 cents or 19.4 percent to 8.6 cents with 2.1 million shares traded.

CLINUVEL PHARMACEUTICALS

Clinuvel says it will host meetings with in Europe on March 29 and April 5, 2019 to evaluate its Scenesse treatment for erythropoietic protoporphyria.

Clinuvel said the meetings would be held in Berlin and Florence with clinicians and medical staff from erythropoietic protoporphyria (EPP) expert centres to discuss clinical treatments, safety study results, Scenesse treatment findings and the development of a treatment protocol for EPP in children.

Clinuvel fell 36 cents or 1.45 percent to \$24.49 with 53,206 shares traded.

ONCOSIL MEDICAL

Oncosil says its Conformité Européenne (CE) mark file is on hold pending a meeting with the British Standards Institute and the Clinical Oversight Committee.

On Monday, Oncosil said the committee found "insufficient clinical benefit" to approve its pancreatic cancer radiotherapy, and said that it would work to overturn the decision (BD: Mar 25, 2019).

Today, the company said a meeting would be held "as soon as practicable" with a date to be confirmed by the British Standards Institute.

Oncosil said its submission 'meets all requirements for CE mark certification as per BSI directives, [Active Implantable Medical Devices Directive] regulations and [European Medical Device Vigilance System] requirements".

Oncosil was up 1.4 cents or 35.0 percent to 5.4 cents with 56.7 million shares traded.

ALCHEMIA

Alchemia says it has requested a voluntary suspension, pending an announcement regarding a proposed change to the nature and scale of the company's activities. Earlier this month Alchemia said that chief financial officer Melanie Leydin and Lynden Polonsky replaced chairman Simon Gennari and director Darren Book, effective from March 4, 2019 (BD: Mar 5, 2019).

The company said that director Cameron Petricevic would be appointed chairman and Michael Sapountzis would be appointed joint company secretary, from today.

Alchemia last traded up 0.1 cents or 10 percent to 1.1 cents with 6.7 million shares traded.

AIRXPANDERS

Airxpanders has requested a trading halt "pending notification to its lender of the anticipated breach of certain financial covenants in its debt agreement". Trading will resume April 2, 2019 or on an earlier announcement. Airxpanders last traded at 3.5 cents.

FACTOR THERAPEUTICS

The shareholders who called for a Factor board spill say they have reduced their shareholding from 208,183,121 shares (19.97%) to 129,183,121 (12.39%). Last month, the shareholders requested a board spill to replace chair Dr Cherrell Hirst and

directors Tim Hughes and John Michailidis with Bruce Lane and David Sanders, with the meeting due to be held on March 29, 2019 (BD: Feb 5, Feb 22, 2019).

On Wednesday, Factor survived the spill call with about 57 percent against and about 43 percent in favor (BD: Mar 27, 2019).

Today's notice said that David Neesham, Pamela Neesham, Alitime Nominees (Honeyham Family) and Stephen Scott Day "ceased to be an associate of the substantial holder" after the resolutions failed at the annual general meeting, but Pure Vida Energy, Freshero Pty Ltd, Canadian Nickel Corp "continue to be associates … but the nature of association has changed" following the meeting.

Factor was untraded at 0.35 cents.

TOTAL BRAIN

Total Brain says an extraordinary general meeting will vote on the placement of shares and issue of 1,920,810 options to director Ajay Arora.

Total Brain said it would vote to issue 1,920,810 options to non-executive director Ajay Arora as part of his remuneration package, vesting in four equal tranches; immediately and exercisable at eight cents a share, at one year and exercisable at 12 cents a share, and after two and three years and exercisable at 16 cents a share.

Total Brain said it would vote to issue 2,066,115 options to Blue Ocean Equities exercisable at 4.5 cents a share within two years, for its role as lead manager to the up to \$6.9 million capital raising (BD: Mar 18, 2019).

The company said it would vote to ratify the prior issue of 132,814,948 shares and issue 45,756,472 shares at 2.8 cents a share to institutional and sophisticated investors.

Total Brain said the meeting would be held at Blue Ocean Equities, Level 29, 88 Phillip Street, Sydney on April 29, 2019 at 10:30am (AEST).

Total Brain was up 0.2 cents or 7.7 percent to 2.8 cents with 1.9 million shares traded.