

Biotech Daily

Friday August 14, 2020

Daily news on ASX-listed biotechnology companies

- * ASX, BIOTECH UP: MESOBLAST UP 39%; PATRYS DOWN 8%
- * DR BOREHAM'S CRUCIBLE: REGENEUS
- * FDA ODAC BACKS MESOBLAST REMESTEMCEL-L FOR KIDS GvHD
- * REDHILL H1 REVENUE \$31m, LOSS UP 60% TO \$46m; COSMO DEAL
- * PRESCIENT, PETER MAC WORK ON CAR-T FOR CANCER
- * CHINA PATENT FOR PAINCHEK PAIN ASSESSMENT
- * ATO RULES NOVA EYE'S \$42m CAPITAL RETURN NOT A DIVIDEND
- * MGC APPOINTS LYPHE UK MARIJUANA DISTRIBUTOR, ORDER
- * ZELIRA 25m DIRECTOR PERFORMANCE RIGHTS EGM
- * EMERALD PLANS NAME CHANGE TO EMYRIA
- * G MEDICAL APPLIES TO DELIST FROM ASX TO LIST ON NASDAQ
- * CEO DR ANDREAS FOURAS TAKES 24.5% IN 4D MEDICAL
- * VELOCIMETRY, HELEN FOURAS TAKE 51% OF 4D MEDICAL
- * JIMMY THOMAS, IVY PONNIAH REDUCE TO 5% OF STEMCELL UNITED
- * PHARMAXIS LOSES DIRECTOR EDWARD RAYNER
- * ALL CHANGE AT CRESO

MARKET REPORT

The Australian stock market was up 0.58 percent on Friday August 14, 2020, with the ASX200 up 35.2 points to 6,126.2 points. Twenty-eight of the Biotech Daily Top 40 stocks were up, seven fell and five traded unchanged. All three Big Caps were up.

Mesoblast was the best, following its FDA meeting (see below), up \$1.32 or 39.05 percent to \$4.70, with 42.8 million shares traded. Dimerix rose 15 percent; Universal Biosensors climbed 12 percent; Amplia was up 11.1 percent; Cynata and Kazia climbed more than eight percent; Medical Developments was up 6.6 percent; Compumedics and Prescient rose five percent or more; Pharmaxis and Polynovo improved more than four percent; Antisense, Imugene, Next Science, Optiscan and Pro Medicus were up more than three percent; Clinuvel, Impedimed, Nanosonics, Neuren, Orthocell, Resmed and Volpara rose two percent or more; Alterity, Avita, Genetic Signatures, Paradigm and Telix were up more than one percent; with Cochlear, CSL and Proteomics up less than one percent.

Patrys led the falls, down 0.1 cents or 7.7 percent to 1.2 cents, with four million shares traded. LBT lost 6.9 percent; Osprey and Uscom fell more than five percent; Nova Eye was down 3.2 percent; Actinogen shed 2.1 percent; with Starpharma down 0.5 percent.

DR BOREHAM'S CRUCIBLE: REGENEUS

By TIM BOREHAM

ASX code: RGS

Share price: 14 cents

Market cap: \$38.9 million

Shares on issue: 277,824,988

Chief executive officer: Leo Lee

Board*: Barry Sechos (chairman), Prof Graham Vesey (chief scientific officer), Dr John Chiplin, Dr Alan Dunton, Leo Lee

* Dr Glen Richards stepped down in June

Financials (June quarter 2020): receipts nil (\$1.64 million, year to June 30), cash burn \$376,000, debt \$1.1 million, cash on hand \$982,000, 10.3 quarters of funding

Identifiable major shareholders: AGC Inc 8%*, Vesey Investments 5.72%, Leo Yao Lee 4.86%, Thomas Mechtersheimer 2.21%

* AGC has not yet converted its contractual rights into ordinary shares but is expected to do so.

The roller-coaster of the emerging stem cell therapies sector was tumbling on Wednesday and soaring on Friday.

Sector leader Mesoblast suffered the Hump Day blues after the US Food and Drug Administration dissed the company's data supporting its approval application for its proposed graft-versus-host disease (and Covid-19) therapy Remestercel-L.

The shares lost a third of their value. But the week ended on a much happier note after the FDA's advisory committee voted nine to one in favor of approval.

On a more pleasant note, Regeneus shares soared as much as 82 percent on Tuesday, after Japanese partner Kyocera finally signed a licencing agreement for its stem-cell based knee osteoarthritis treatment, Progenza.

For Regeneus, the news follows the signing of a memorandum of understanding in March this year - but also more than a year of background discussions.

In demanding an exclusive negotiating period and heavy due diligence, Kyocera had committed to a decision by the end of September so - unusually - this one wasn't struck at the eleventh hour.

"This agreement ... provides a clear commercialization pathway for Progenza and [opens up] a significant market given osteoarthritis potentially affects more than 25 million people in Japan alone," says Regeneus chief Leo Lee.

Mr Lee says the company targeted Japan because in effect it has a "regulatory superhighway" for cell therapies.

"You only need one study and then you can get to market. That's why other companies are also targeting Japan."

These other parties include Mesoblast, which is marketing the graft-versus-host disease (GvHD) treatment Temcell (acquired from Osiris in 2013).

Also, Cynata and Japan's Fujifilm has struck a global worldwide deal to commercialize Cynata Therapeutics' GvHD treatment, Cymerus.

About Regeneus

Regeneus is all about fat-derived mesenchymal stem cells: or rather the secretions from these cells that have the ability to be clinically developed to treat multiple candidates.

Progenza is an off-the-shelf (allogeneic) treatment for osteoarthritis pain. Progenza cells secrete cytokines - a protein that regulates the cells and sends signals to them - and other growth factors.

Osteoarthritis pain is usually treated with non-steroidal anti-inflammatory drugs, which may induce side effects including stomach ulcers and gastrointestinal bleeding.

Regeneus focuses on a subset of secretions called exosomes - and your columnist need not explain what they are because we did so last week with our coverage of Exopharm.

In 2016, Regeneus entered a Japanese joint-venture alliance with stem-cell manufacturer AGC, an arm of Mitsubishi AGC Asahi Glass.

The idea was that AGC would manufacture the Regeneus cells, licence its technology and introduce a commercial partner.

As it happened, there was a carve-out provision that annulled the tie-up if a commercial partner wanted to manufacture the drug as well.

Then - lo and behold - Kyocera came along.

As part of the December 2019 divorce pact, AGC received \$US2.5 million for services rendered, convertible to Regeneus shares.

While Kyocera has not yet done the paper-work, it it's expected to avail itself of this option to pick up eight percent of the Regeneus register.

Board cleanout spells strategic shift

Regeneus was the brainchild of inventor Graham Vesey and was founded by Prof Vesey and Dr Benjamin Ross. Both have strong Macquarie University links.

The company was pursuing numerous human and animal health indications until early 2019, when the board decided to focus on the Progenza programs.

In January 2019 then chief executive John Martin resigned to pursue other opportunities, to be replaced by Mr Lee (an existing director).

Chairman (and biotech legend) Dr Roger Aston resigned shortly thereafter, to be replaced by fellow biotech legend Dr John Chiplin and the Florida-based Dr Alan Dunton.

Mr Lee had held numerous big pharma roles, including as regional head for Merck Sharp and Dohme.

He has lived in Japan for 10 years but spends about half his time in Sydney. Mr Lee went to Taiwan for a holiday in February and has been marooned there ever since, because both Japan and Australia closed their borders.

By the numbers

The Kyocera deal sees Regeneus receives \$US19m (\$A27 million) of upfront, development and regulatory milestones. This includes \$US9 million upfront, of which Regeneus received \$2 million at the signing of the memorandum of understanding.

The company also stands to pocket single to high double-digit royalties on sales.

Kyocera stumps up for all manufacturing, development and commercialization costs - which is likely to be at least equal to the \$27 million paid to Regeneus.

"From that perspective it was a significant vote of confidence in Regeneus from a multinational such as Kyocera," Mr Lee says.

In a phase I study in 2018, Progenza met all safety and efficacy endpoints. Under Tokyo's fast-track approval system, Kyocera should only need to carry out a phase II study.

Crucially, the deal pertains only to osteoarthritis in Japan: Regeneus can do deals with other parties outside Japan for Progenza.

Regeneus can also license Progenza for other indications in Japan, but Kyocera has first right of refusal.

The company says the upfront payments will provide "sufficient cash runway" until Progenza's commercial launch in Japan.

The company raised \$5.54 million a year ago in a placement and rights issue at eight cents apiece.

On the debt side, Regeneus owes \$1.1 million to Mr Lee and also has a \$4 million loan facility from Mr Lee and Paddington Street Finance, an entity linked with chairman Barry Sechos.

The debt will be repaid - and the facility retired - when the Kyocera funds roll in.

Regeneus stock peaked at 60 cents in November 2013, shortly after listing at 25 cents a share.

The shares hit a record low of five cents in March, during that infamous Covid-19 meltdown when investors should have been buying as if there were no tomorrow.

It certainly felt like it.

What's next?

The company is keen to carry out a phase II trial for knee osteoarthritis in the US, funded by the Kyocera cash.

Firstly, it needs to build a factory to make the stem cells, which should take 12 months or so.

Mr Lee says the company is also keen on running an Australian proof-of-concept study for neuropathic pain, such as back pain and a face condition called trigeminal neuralgia.

"The company has interesting data round neuropathic pain," he says. "We just have to pick the right disease area and we will be doing that in the near future."

Mr Lee says the company has had "good discussions" with the deep pocketed US National Institutes of Health about lower back pain and other ailments currently treated with opioids.

"We believe there will be a lot of interest in accelerated therapies and we see funding coming through the NIH," he says.

Covid-19, acne and other stuff

Meanwhile, Regeneus is engaged in "ongoing discussions" with potential European partners.

In the US the company wants to carry out a phase II study before partnering.

The company, by the way is interested in Covid-19, but does not have an active program. A recap: most Covid-19 victims who die do so because of acute respiratory distress syndrome (Ards), which is the body's inflammatory immune over-reaction to the virus.

Mr Lee says the company's stem cells are just as applicable to stem cells as any other's (read Mesoblast's or Cynata's platforms).

"But there are already hundreds of clinical studies out there," he says. "It's always harder catching up with a trend than to develop something that will have high unmet needs in future."

Regeneus also has a second-string drug candidate called Sygenus, which is slated as a topical acne treatment. Mr Lee says Sygenus has "tremendous potential" but work is at an early stage and progress has been, well, spotty.

Meanwhile, the company's cancer vaccine and animal health businesses are for sale to the highest bidder.

Mr Lee should take this as a compliment: he wouldn't make for a good used car salesman as he admits that cancer vaccine science has been superseded by immune stimulation therapies.

"But with animal health we are still talking and there's a 'for sale' sign on it."

Dr Boreham's diagnosis:

The beauty of the Kyocera deal is that it delivers Regeneus the up-front folding stuff without significant ongoing costs.

Thus, the deal will fund the manufacturing of the drug and the extension programs.

We shouldn't gloss over the fact that Progenza is not yet approved in Japan.

But with the local Kyocera doing the paperwork, the chances of communication or cultural misunderstandings are greatly reduced.

On industry numbers cited by Regeneus, the Japanese osteoarthritis market is worth \$US350 million (\$A490 million) a year.

Mr Lee estimates a specific Progenza addressable market of five million patients in Japan, 4.5 million in the US and five million in Europe.

Hang on! How can Japan (population 126 million) be a bigger market than the US (330 million) and on par with Europe (500 million)?

The answer is that US patients are younger and more likely to undergo knee surgery or resort to short term pain relief, rather a stem cell treatment.

Last September Dr Chiplin promised your columnist that in five years' time the company would be in a range of well-advanced pain and inflammation products - presuming the company had not been acquired in the interim.

We won't forget!

Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. The truth be told, he probably will forget.

MESOBLAST

Mesoblast says a US Food and Drug Administration committee voted nine to one in favor of remestemcel-L for paediatric steroid-refractory acute graft-versus-host disease.

Mesoblast said that the Oncologic Drugs Advisory Committee voted that the available data supported the efficacy of remestemcel-L, or Ryoncil.

Mesoblast chief medical officer Dr Fred Grossman said that steroid-refractory acute graftversus-host disease was "an area of extreme need, especially in vulnerable children under 12 years old where there is no approved therapy".

The company said the Committee was "an independent panel of experts that evaluates efficacy and safety of data and makes appropriate recommendations to the FDA". Mesoblast said the FDA would consider the recommendation of the panel, but "the final decision regarding the approval of the product is made solely by the FDA, and the recommendations by the panel are non-binding".

The company said the Ryoncil had been accepted for priority review by the FDA with a Prescription Drug User Fee Act (PDUFA) action date of September 30, 2020.

Mesoblast said that if approved, it planned to launch Ryoncil in the US this year. Duke University Medical Centre paediatric transplant physician Prof Joanne Kurtzberg, said that graft-versus-host disease was a "devastating condition, has an extremely poor prognosis and there are no FDA-approved options for children under the age of 12 [years]".

"The clinical studies I have directed have demonstrated the potential for this treatment to fill a significant unmet medical need," Prof Kurtzberg said.

The day-long Oncologic Drugs Advisory Committee meeting considered three questions including trial design, the importance of previous studies and whether the available data supported the efficacy of remestemcel-L in paediatric patients with steroid-refractory acute graft-versus-host disease.

On the design of the Mesoblast MSB-GVHD001 trial, members of the committee said that given the disease, a randomized trial might not be possible and that a 70 percent response rate was encouraging, with consumer representative Dr Sandra Finestone saying she would not want to see a randomized trial in this indication.

"Clearly this drug has some activity and you have some responses," Dr Finestone said. "At the end of the day we make think of what the options are for the patient and the clinician," Dr Finestone said.

The committee questioned the toxicity of remestemcel-L to other available treatments. On the question of the trials undertaken by Osiris, prior to 2013 the Mesoblast acquisition, Dr Anthony Sung said that Mesoblast had "refined the product and they apparently came up with a better result, so I consider that a strength in something that should be commented on for persisting".

The one Committee member to oppose remestemcel-L, Dr Christian Hinrichs, said that he found the Osiris randomized trials "compellingly negative".

Another Committee member commented that "the product is in a black box" and there was a need to look at biomarkers to measure a response.

Mesoblast's Dr Grossman said the company had further planned trials for adults with graft-versus-host disease.

The Committee was asked by chairman Dr Phillip Hoffman to vote on the question: "Do the available data support the efficacy of remestercel-L in paediatric patients with steroid-refractory acute GVHD?"

Initially, patient advocate Diana Pearl voted with Dr Hinrichs against approval, but changed her vote, taking the final vote to nine in favor and one against.

Mesoblast was up \$1.32 or 39.05 percent to \$4.70 with 42.8 million shares traded.

REDHILL BIOPHARMA

Redhill says revenue for the six months to June 30, 2020 rose 565.3 percent to \$US21,955,000 (\$A30,713,720) with net loss after tax up 59.8 percent to \$US33,204,000 (\$A46,442,850).

In 2010, Israel's Redhill bought Myoconda (RHB-104), Heliconda (RHB-105) and Picoconda (RHB-106) from Sydney's Giaconda (BD: Aug 17, 2010).

Today, Redhill said the majority of revenue came from US sales of Movantik for opioidinduced constipation, acquired from Astrazeneca for \$US50 million in February, 2020, and Talicia, formerly Heliconda for Helicobacter pylori infections, which was approved by the US Food and Drug Administration in 2019 (BD: Nov 5, 2019, Feb 26, 2020).

The company said that diluted loss per share was up 28.6 percent to 9.0 US cents, compared to 7.0 US cents in the previous corresponding period.

Redhill said it had cash and cash equivalents of \$US22,272,000 at June 30, 2020. Separately, the company said it had licencing and manufacturing agreement with Dublin's Cosmo Pharmaceuticals for multiple products including Movantik and RHB-204 for pulmonary non-tuberculous mycobacteria infections.

Redhill said that it would pay Cosmo EUR5.5 million (\$A9.1 million) for technology transfer, formulation and development work with Movantik and RHB-204.

The company said Cosmo would finance the planned phase III trial of RHB-204 and in turn, Redhill would pay Cosmo \$US5 million on the signing of the agreement and \$US7 million in two milestone payments, as well as 15 percent in royalty payments.

Redhill said it would work with Cosmo to co-develop treatments for the eradication of Helicobacter pylori infections.

The company said that Cosmo would receive European rights to the resulting drug, and Cosmo would pay Redhill \$US7 million upon the signing of the agreement, plus \$US2 million on European approval and 30 percent in royalties.

Redhill said it would pay 70 percent of the cost of the clinical trials for regulatory approval in the US and Europe for the new Helicobacter pylori infections drug, with Cosmo covering the remaining 30 percent.

On the Nasdaq, Redhill fell 82 US cents or 8.92 percent to \$US8.37 (\$A11.70) with 922,013 shares traded.

PRESCIENT THERAPEUTICS

Prescient says it will collaborate with Melbourne's Peter MacCallum Cancer Centre to develop cell therapy technologies, including chimeric antigen receptor cell therapies. Prescient said chimeric antigen receptor (CAR-T) reprogramed the immune cells of a cancer patient to recognize and destroy cancer.

The company said the cell therapy research program would be led by the Centre's head of cancer immunotherapy Prof Phillip Darcy, who was appointed to Prescient's scientific advisory board last week (BD: Aug 7, 2020).

Prescient said that it would own any resulting intellectual property from the research. Prescient chief executive officer Steven Yatomi-Clarke said "we are working against time for many cancer patients, so joining with the world-leading experts in this field at Peter Mac will greatly enhance our collective efforts to advance these new treatments and get them to patients who will potentially benefit".

"Prescient is the only ASX-listed company developing CAR-T programs and this is an important strategic initiative to complement our programs in cell therapy enhancements," Mr Yatomi-Clarke said.

Prescient was up 0.3 cents or five percent to 6.3 cents with 16.0 million shares traded.

PAINCHEK

Painchek says it has Chinese Patent Office approval for its smartphone pain assessment and monitoring application.

Painchek said the patent, titled 'Pain Assessment Method and System' would protect its intellectual property until August 18, 2035.

The company said the China patent followed the receipt of similar patent protection in the US, Japan and Australia (BD: Jul 24, 2019; Jan 19, May 8, 2020).

Painchek fell half a cent or 4.35 percent to 11 cents with 12.2 million shares traded.

NOVA EYE MEDICAL (FORMERLY ELLEX MEDICAL LASERS)

Nova Eye says the Australia Tax Office has ruled that the \$41.6 million return to shareholders will not be classified as a dividend.

Last month, Nova Eye said it had paid \$61 million to shareholders, including \$41.6 million at 29 cents a share and \$19.4 million in a fully franked dividend at 13.5 cents a share, following the Lumibird acquisition of its laser and ultrasound business for \$97.4 million in June (BD: Jun 30, Jul 29, 2020).

Today, the company said "the final class ruling confirms that no portion of the return of capital payment will be deemed to be a dividend".

Nova fell one cent or 3.2 percent to 30 cents.

MGC PHARMACEUTICALS

MGC says it has appointed Lyphe Group to distribute its marijuana-based products in the UK and has an order for 900 units from its Mercury Pharma line.

MGC said the London-based Lyphe would prescribe and dispense MGC's Mercury Pharma medicinal marijuana products under Lyphe labels to patients at its clinics, "while reporting real-world anonymized data investigating efficacy, safety, quality of life, and patient-reported outcomes".

The company said the distribution agreement had no minimum order volumes. MGC said Lyphe had received its first prescriptions for MGC products, and which put the company in "a strong position" to achieve its stated target of 5,000 prescriptions a month by April 2021.

MGC was up 0.1 cents or 4.2 percent to 2.5 cents with 11.2 million shares traded.

ZELIRA (FORMERLY ZELDA) THERAPEUTICS

Zelira says shareholders will vote to issue 25,000,000 performance rights to chairman Osagie Imasogie and director Lisa Gray.

Zelira said it proposed to issue Mr Imasogie and Ms Gray with 12,500,000 performance rights each, 6,250,000 of which would convert to shares if the company or its subsidiaries received \$US1,000,000 (\$A1,401,055) in revenue before December 23, 2024, and the remaining would convert with \$US2,500,000 (\$A3,502,638) received in revenue before December 23, 2024.

The company said the meeting would be held at the Blackwall Legal Boardroom, Level 26, 140 St Georges Terrace, Perth on September 17, 2020 at 9am (AWST).

Zelira was up 0.3 cents or six percent to 5.3 cents with 3.8 million shares traded.

EMERALD CLINICS

Emerald Clinics says it will seek shareholder approval to change its name to Emyria but the ASX code of EMD would remain the same.

Emerald chief executive officer Dr Michael Winlo said the company had "developed a trusted brand within Australia that resonates with clinicians and patients, but ... it has become clear that a rebrand was the best way forward to help communicate the breadth of what we do and our global aspirations."

"Emyria speaks to our mission to use a myriad of data to provide individualized care beyond the physical confines of a clinic," Dr Winlo said.

Emerald was up 1.8 cents or 29.5 percent to 7.9 cents with 10.5 million shares traded.

G (GEVA) MEDICAL INNOVATIONS

G Medical says it has made a formal application to delist from the ASX in preparation to list on the Nasdaq by 2021.

G Medical said the ASX advised that it was "likely to agree to the company's request for removal from the official list, subject to the company satisfying certain conditions ... [and] the approval of the company's shareholders".

Last year, G Medical said it hoped to raise \$US17,000,000 (\$A24,570,907) to list on the Nasdaq, and later said it would withdraw its Nasdaq registration and pursue an Over-The-Counter Quality Exchange second board, as the Nasdaq listing and capital raising was not in the best interest of is shareholders (BD: May 20, Aug 26, 2019).

Today, G Medical said it expected "that a listing on the Nasdaq would provide a more favorable valuation as opposed to being listed on the ASX" (BD: Nov 19, 2015). G Medical fell 0.8 cents or 15.7 percent to 4.3 cents with 45.4 million shares traded.

4D MEDICAL

4D Medical chief executive officer Dr Andreas Fouras says he has become a substantial shareholder in the company with 64,838,000 shares or 24.49 percent.

The Los Angeles, California-based Dr Fouras said that Melbourne's Velocimetry Consulting Pty Ltd, in which Fouras has more than 20 percent voting power, was a registered holder of the shares.

4D Medical was up 11 cents or seven percent to \$1.675 with 2.6 million shares traded.

4D MEDICAL

Velocimetry Consulting Pty Ltd and Helen Fouras say they have become substantial in 4D Medical with 134,541,408 shares or 50.82 percent of the company.

Melbourne's Velocimetry and the Los Angeles-based Ms Fouras said that between July 6 and August 6, 2020 they acquired 68,853,408 shares as part of ASX and mandatory and voluntary escrow arrangements.

Velocimetry said it held more than 20 percent voting power in 4D Medical, and Ms Fouras said she held more than 50 percent voting power in Velocimetry.

In a separate substantial shareholder notice signed by company secretary Charlene Stahr, 4D Medical said it held 134,541,408 shares or 50.82 percent in itself.

STEMCELL UNITED

Jimmy Thomas and Ivy Ponniah say they have reduced their substantial holding in Stemcell United from 42,011,092 shares (6.55%) to 33,990,000 (5.3%).

The Melbourne-based Mr Thomas and Ms Ponnia said that on July 23, 2020 they sold 8,021,092 shares for \$105,066 or 1.3 cents a share.

Stemcell United fell 0.1 cents or 7.7 percent to 1.2 cents with 1.1 million shares traded.

PHARMAXIS

Pharmaxis says that non-executive director Edward Rayner has resigned, effective from August 14, 2020.

Pharmaxis said Mr Rayner was appointed a director in conjunction with a placement to London's Arix Bioscience in September 2018 (BD: Aug 6, Sep 18, 25, 2018).

The company said Mr Rayner had left Arix earlier this year and had started a new executive position with a UK life science technology company.

Pharmaxis did not disclose whether Arix would have a replacement director.

Pharmaxis was up half a cent or 4.8 percent to 11 cents with 1.7 million shares traded.

CRESO PHARMA

Creso says Adam Blumenthal will take over as executive chairman replacing Boaz Wachtel and chief executive officer Dr Miri Halperin Wernli.

Creso said that founder Dr Halperin Wernli would continue as a director and be head of technology, innovation and distribution, with her annual salary reduced from \$US280,000 (\$A391,825) to \$US120,000 (\$A167,925).

The company said Mr Watchel would continue as a non-executive director, while "Dr" James Ellingford would move from non-executive to executive director.

Creso said it had appointed Jorge Wernli and Gian Trepp to executive management positions in its Swiss division.

Creso was unchanged at 4.5 cents with 13.3 million shares traded.