Biotech Daily

Friday October 22, 2021

Daily news on ASX-listed biotechnology companies

*** ASX FLAT, BIOTECH UP: ANTISENSE UP 11%; AMPLIA DOWN 5%**

*** DR BOREHAM'S CRUCIBLE: AVITA MEDICAL**

*** CHIMERIC 'ON THE PATH TO CDH17 CAR-T TRIAL'**

*** MEDADVISOR EXPANDS WALMART DEAL**

*** CLINUVEL DOSES 1st XERODERMA PIGMENTOSUM DNA REPAIR PATIENT**

*** NEUROTECH: 'MARIJUANA NTI164 BEATS CBD, THC FOR MS, IN-VITRO'**

*** GOODBYE SUDA, HELLO AROVELLA THERAPEUTICS**

*** PHARMAUST 14% OPPOSE INCENTIVE SCHEME REMUNERATION REPORT**

*** AUSTCO 2nd STRIKE, 80% DIRECTOR FEE POOL HIKE AGM**

*** MAYNE: $2m M-D SCOTT RICHARDS 'PERFORMANCE' RIGHTS AGM**

*** ACRUX: 6m M-D MICHAEL KOTSANIS RIGHTS AGM**

*** BTC 6m CHAIR DR RICHARD TREAGUS OPTIONS AGM**

*** VANGUARD TAKES 5% OF COCHLEAR**

*** COPIA TAKES 5.4% OF PROBIOTEC**

*** ALLAN GRAY REDUCES TO 6.5% OF IMPEDIMED**

MARKET REPORT

The Australian stock market was flat on Friday October 22, 2021, with the ASX200 up 0.1 points to 7,415.5 points. Seventeen of the Biotech Daily Top 40 stocks were up, 13 fell, nine traded unchanged and one was untraded. All three Big Caps were up.

Antisense was the best, up three cents or 10.7 percent to 31 cents, with 1.8 million shares traded. Prescient climbed 6.4 percent; Neuren was up 5.9 percent; Cyclopharm and Immutep improved four percent or more; Uscom was up 3.85 percent; Osprey, Pro Medicus and Universal Biosensors rose more than two percent; Cochlear, Genetic Signatures, Resmed and Telix were up more than one percent; with Clinuvel, CSL, Mesoblast, Next Science, Opthea, Orthocell and Volpara up by less than one percent.

Amplia led the falls, down one cent or 4.9 percent to 19.5 cents, with 43,804 shares traded. LBT and Resonance fell more than four percent; Cynata, Imugene and Patrys shed more than two percent; with Avita, Medical Developments, Nanosonics, Oncosil, Polynovo, Proteomics and Starpharma down by more than one percent.

DR BOREHAM'S CRUCIBLE: AVITA MEDICAL

By Tim BOREHAM

ASX code: AVH (Chess depositary instruments)

Nasdaq code: RCEL (American depositary shares)

Market cap: $574.5 million

Share price: AVH $4.61; RCEL: $US17.32

Shares on issue*: ASX 68,499,335; Nasdaq 11,225,251
***** Five CDIs equal one US common share (124,625,590 CDI equivalents)

Chief executive officer: Dr Mike Perry

Board: Lou Panaccio (chairman), Dr Perry, Jeremy Curnock Cook, Louis Drapeau, Prof Suzanne Crowe, James Corbett, Jan Stern Reed

Financials (year to June 30 2021): sales $US29.23 million (up 105%), loss of $US26.47 million (previous $US42 million deficit), cash holdings $US110.9 million (up 50 percent)

Identifiable major holders (CDI holders): Redmile Group/Jeremy C Green 6.7%, Vanguard Group 4.9%, Montgomery Investment Management 4.5%, Pura Vida Investments LLC 3.2%, Farallon Capital Management LLC 3.2%.

Is the burns care outfit on the cusp of discovering the elixir of youth? Not quite, but the work Avita is carrying out with the Houston Methodist Research Institute (HMRI) could be bigger than Texas.

In partnership with the god-fearing academic medical centre, Avita is exploring a novel skin rejuvenation approach that would reverse the ageing of cells.

HMRI has the relevant patented technology that involves genetically-modifying cells to deliver the anti-ageing enzyme telomerase. The Institute has already demonstrated reversal in progeria (accelerated ageing) in young patients.

Avita notes a $US16 billion ($A22 million) market for aesthetic procedures in the US alone, with 10 million injectable cosmetic procedures performed in 2019.

"Consumers are seeking a natural, more youthful appearance and there is a 'white space' in the market for a minimally invasive procedure that provides meaningful results," Avita says in its US regulatory filing.

Avita chief executive Dr Mike Perry describes the prospect of personalized skin care as "very promising" and a multi-billion-dollar market opportunity. The rejuvenation work is one of several sidelines Avita is working on to expand its 'spray on skin' technology beyond burns, with a string of announcements expected in coming months.

Who Wood have thought?

Avita's Recell technology evolved from the pioneering work done by legendary Perth burns surgeon and Australian of the Year Prof Fiona Wood, and was famously tested on Bali burns victims after the 2002 terrorist attack.

Then known as Clinical Cell Cultures, the company was founded in 1992 and listed on the ASX in August 1993. The Avita name was adopted in 2008. Initially, Avita's American depositary shares traded on the over-the-counter exchange, and then on the Nasdaq from October 2019. Recognizing the importance of the US market, in June last year the company redomiciled to Bidenland.

Over time, Avita has had a revolving door of CEOs, including a former war correspondent (Adam Kelliher). The incumbent, Dr Perry, is a former Novartis executive who joined the Avita board in 2017.

In September 2018, the US Food and Drug Administration granted approval to use Recell for burns and the company started selling there in January 2019.

Progress to date

Recell involves taking a biopsy from any part of the body and mixing the cells into a liquid spray. It's ready for use in 30 minutes and can cover 80 times the area of a skin graft with the same amount of material. Because the nerves are usually damaged in the biopsy, the grafts - rather than the burns - create the most pain.

Avita thus far has treated 10,000 patients, 4,000 of them in the US. Clinical studies have involved more than 2,000 patients.

"We have been very pleased with the adoption of Recell in the US, we have realized in in excess of $US42 million since approval," Dr Perry says.

Recell is approved in Europe and Australia for burns and broader indications, but until the company secures adequate reimbursement it won't sell actively in these markets (surgeon requests are supplied on demand). This year, Avita won FDA assent to treat paediatric burns, which is a significant expansion given 25 percent of burns patients are kids.

The US burns fraternity is cosier than a White House situation room, with 75 percent of the circa 53,000 in-house patients treated at one of 137 burns centres, by one of 300 burns surgeons. Of these medicos, about 80 percent are certified (they have completed at least one procedure).

The company says just under 500,000 Americans seek treatment for burns. Of these, an estimated 25,000 patients are "Recell eligible" - a $US260 million a year market.

Meanwhile, Avita has applied to the FDA to extend the use of Recell from burns to soft tissue trauma, such as motor accident injuries and even the gruesome wounds inflicted by flesh-eating bacteria.

The company estimates that 4.5 million US patients present to hospitals with open wounds each year. Of these, 65,000 would be eligible for Recell - a potential market of $US450 million a year.

The company is currently recruiting for the pivotal trial, with 43 patients of the targeted 65 enrolled across 17 sites.

BARDA be prepared for the worst

Avita is backed by the Biomedical Advanced Research and Development Authority (BARDA), the US agency that stockpiles medicine and medical equipment for use in a disaster.

BARDA has committed to up to $US80 million of funding for Avita's burns trials and also plans to stockpile the product, and kindly stumped-up to fund an economic study, which showed that Recell would save healthcare dollars for any patients with bodily burns of 10 percent or greater. (ASX peer Polynovo also has a BARDA burns contract.)

Bad skin can Beat It

Avita is in early-stage work with vitiligo, the genetic disorder that results in loss of pigmentation and skin turning white. It's also known as white leprosy or the Michael Jackson disease. The affliction is caused by the malfunction of pigment producing cells, called melanocytes.

Current therapies include phototherapy or melanocyte transplants, which are either ineffective, long and/or expensive. The Avita treatment is a "one and done" procedure for most patients. (The ASX-listed Clinuvel has also turned its Scenesse attention to vitiligo.)

"In essence we provide a lab in a box via the Recell system to re-pigment patients and restore original skin texture," Dr Perry says.

In the US, 50,000 vitiligo patients are currently seeking therapy, from a total of three million to 6.5 million people with vitiligo. There are about 70 million vitiligo sufferers globally. The company estimates a total assessable vitiligo market of $US5 billion and a serviceable market of $US750 million across 1.3 million sufferers.

Avita currently has a clinical trial running across 15 sites, involving 23 patients. This patient cohort was reduced from 84 by focusing on one donor skin concentration, rather than three.

Meanwhile, Avita is also exploring a spray-on gene cell therapy for epidermolysis bullosa, in partnership with the Gates Center of Regenerative Medicine in Colorado.

A nasty rare genetic disease, epidermolysis bullosa causes the top dermis not to be connected properly to the bottom one, resulting in skin blistering, chronic wounds and even cancers.

There are no FDA-approved treatments, only palliative ones at a cost of $US300,000 to $US500,000 per patient. The research involves “gene editing for precise correction of the disorder and cell banking of the corrected cells”.

Japan beckons

Avita has a marketing distribution agreement with Japanese company Cosmotec, a subsidiary of the giant M3 Group, which is seeking approval for Recell from the country’s medical gatekeeper. Consent is expected by the end of this year, with commercialization expected next year.

Dr Perry sizes up Japan as a $US60 million a year market, across 6,000 eligible burns patients. But there’s a further 22,000 soft trauma patients and two million vitiligo patients.

Cosmotec funds the commercialization, with Avita pocketing a 40 percent revenue share.

Finances and performance

Avita more than doubled Avita commercial revenue in the 12 months to June 2021, to $US29.2 million. Of this amount, $US21.5 million derived from commercial sales and $US7.5 million from BARDA inventory requests.

Total revenue including the BARDA contract was up 72 percent to $US31.3 million, while Avita’s June quarter revenue increased 165 percent year-on-year, to $US10.3 million.

Chief finance officer Mike Holder notes the Recell achieved a gross margin of 80 percent, which is “exceptional” for a medical device.

The company almost halved its loss to a still-chunky deficit of $US26 million.

Avita has racked up $US42 million from sales since 2018, as well as $US7.6 million from holding inventory on behalf of BARDA. The Recell kits sell for $US7,500 each, with each unit covering 10 percent of the body.

The company has $US111 million of cash, having raised $US69 million in March 2021 by issuing just over 3.2 million US shares.

Over the last 12 months Avita’s ASX listed shares have traded between $4.42 (early June 2021) and $7.67 (mid-October 2020).

Pay attention guys

Shareholders should avoid the temptation to nap as they might miss out on a number of events in coming months.

There’s the expected Japanese approval for burns and, possibly, soft tissue repair.

With epidermolysis bullosa, by the end of this year the company expects to deliver initial proof of concept results for delivering genetically modified skin cells in suspension.

With rejuvenation, Avita expects to unveil some proof-of-concept (mice) results this side of Christmas.

The last patient in the vitiligo trial is expected to be enrolled by the end of the year, with a commercial launch slated for late 2023.

Meanwhile, the last patient for the soft tissue trauma trial is expected to be enrolled in the second half of 2022, with commercial lift-off in 2024.

Avita is also awaiting FDA approval of a Recell device that is easier to use in out-patient applications, with this assent expected in the first half of 2022.

And if that's not enough, Avita is also developing an automated Recell iteration, for use in dermatology practices and by plastic surgeons.

Pop it all in the diary, folks!

Dr Boreham's diagnosis:

One positive fallout from the pandemic is that the travel and recreational restrictions resulted in a plunge in burns-related hospital admissions.

In normal years, Avita's US addressable markets for burns, soft trauma and vitiligo amounts to about $US1.5 billion.

As we said, the rejuvenation market could be worth many billions more but we stress the anti-ageing stuff is at a youthful stage.

We would like to able to say that investors have rewarded Avita for growing its burns revenues and pursuing so many near-term expansions - but they haven't.

The shares have lost about 30 percent of their value over the last year and in September they were booted from the S&P/ASX 300 index.

How rude!

Still, it's not the first time that the market has ascribed a lesser value to a de-risked revenue-producing biotech, than one with only 'blue sky' promises.

We dare say it won't be the last time. But if Avita achieves only some of what it expects, the valuation should look after itself.

Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. But he knows the elixir of youth does not come in a beer can or wine bottle.

CHIMERIC THERAPEUTICS

Chimeric says it has completed manufacturing for CHM2101 research-grade plasmids, “a critical first step” for its CDH17 chimeric antigen receptor (Car) T-cell program.
Chimeric chair Paul Hopper told Biotech Daily that plasmids were “small DNA molecules that carry genetic instructions and are an important early step for making Car-Ts”, with CDH17 the target on the cancer cell.
In July, Chimeric said it had an exclusive licence to a University of Pennsylvania chimeric antigen receptor (Car) T-cell therapy for solid tumors, with CDH17 Car-T showing “the complete eradication of tumor cells with no evidence of toxicity in preclinical studies” and a phase I trial planned for 2022 (BD: Jul 28, 2021).
The company said at that time that the therapy targeted CDH17 an oncogenic factor associated with poor prognosis and metastasis in neuroendocrine tumors as well as the most common gastro-intestinal tumors including colorectal cancer, pancreatic cancer and gastric cancer.
Last year, Chimeric said it had licenced chlorotoxin chimeric antigen receptor T-cells (CLTX-Car-T) from California’s City of Hope and begun an about 20-patient trial for glioblastoma.
Chimeric said at that time that the chlorotoxin chimeric antigen receptor T-cells used a peptide derived from scorpion toxin to direct T-cells to target glioblastoma in a phase I trial at City of Hope, with the first patient recently starting treatment (BD: Sep 22, 2020).
Today, the company said that manufacturing of Car-T therapies depended on plasmids and viral vectors that held the genetic instructions for each specific Car-T product.
Chimeric said that with the University of Pennsylvania, “all of the research grade helper and transfer plasmids for the CDH17 Car T have been completed and released”.
“The achievement of this first step in Car-T manufacturing enables progression to research vector manufacturing, [good manufacturing practice] plasmid and vector manufacturing and advancement of technical operations in readiness for the CDH17 Car-T phase I clinical trial”.
Chimeric said that as well as starting the CDH17 Car-T phase I trial in 2022, it was progressing its CLTX Car-T phase I trial in glioblastoma at The City of Hope.
Chimeric was up half a cent or 1.6 percent to 31.5 cents.

MEDADVISOR

Medadvisor says its US subsidiary Adheris LLC is expanding its relationship with Walmart to “improve health outcomes” for the retailer’s customers.
Medadvisor said it would provide the full suite of its prescription drug adherence products including digital, in-pharmacy print and direct mail to customers.
Medadvisor was up four cents or 12.1 percent to 37 cents with 1.9 million shares traded.

CLINUVEL PHARMACEUTICALS

Clinuvel says it has dosed its first of up to six xeroderma pigmentosum patients with afamelanotide in its CUV156 DNA repair program pilot study.
Clinuvel said the adult patients would receive up to six doses of afamelanotide and the study would evaluate the safety and effect of afamelanotide treatment on reducing and repairing ultraviolet-provoked DNA damage.
Clinuvel head of clinical operations Dr Pilar Bilbao said the company was the “first to administer a systemic drug in a DNA repair program”.
Clinuvel was up two cents or 0.05 percent to $39.19 with 71,994 shares traded.

NEUROTECH INTERNATIONAL

Neurotech says its marijuana-based NTI164 “significantly” suppresses multiple sclerosis biomarkers interleukin-12 (IL-12) and tumor necrosis factor (TNF) alpha, in-vitro.
Neurotech said the study conducted by the Royal Melbourne Institute of Technology and Monash University showed NTI164 was more effective than cannabidiol (CBD) alone and CBD in combination with tetrahydrocannabinol (THC) by up to 2.5 times.
The company said NTI164 reduced the inflammatory cytokine interleukin-12 by 44 percent, compared to CBD alone (15%) and a CBD and THC combination (19%).
Neurotech said NTI164 reduced the inflammatory cytokine TNF-alpha by 42 percent, outperforming CBD alone (29%) and the CBD and THC combination (25%).
Neurotech said these studies were an expansion of the earlier findings where in May, In May, the company said in-vitro testing showed that its Dolce marijuana strains were “significantly more potent” than cannabidiol alone for multiple sclerosis neuro-markers (May 25, 2021).
Neurotech chair Brian Leedman said the results were “very exciting developments and more importantly re-confirm the potency and the uniqueness of our low THC medicinal cannabis strains”.
“Current therapies have many unwanted side effects, so to have the opportunity to develop naturally-derived low-THC strains is a great commercial opportunity for our company,” Mr Leedman said.
Neurotech was up 0.4 cents or 8.7 percent to five cents with 1.3 million shares traded.

SUDA PHARMACEUTICALS (FORMERLY EASTLAND MEDICAL SYSTEMS)

Suda says subsequent to yesterday’s annual general meeting it has formally changed its name to Arovella Therapeutics.
Suda said Arovella would trade under the ASX code ALA from October 25, 2021.
The company said all resolutions were passed easily at its annual general meeting.
In 2012, Eastland Medical Systems shareholders voted to become Suda Pharmaceuticals (BD: Oct 29, 2012)
Suda was unchanged at 4.8 cents with 1.55 million shares traded.

PHARMAUST

Pharmaust says its annual general meeting approved all resolutions but with more than 14 percent opposition to the remuneration report and employee incentive scheme.
Pharmaust said that 13,615,575 votes (14.74%) opposed the issue of up to 30,000,000 shares under the employee incentive scheme, with 78,722,986 votes (85.26%) in favor.
The notice of meeting said that eligible beneficiaries included staff, directors and contractors, but did not specify who would receive how many shares.
The company said that the remuneration report was opposed by 13,412,927 votes (14.42%) with 79,614,418 votes (85.58%) in favor.
Pharmaust said that the 10 percent placement capacity was approved with a wider margin, but it attracted the largest number of votes against 14,553,576 (11.61%).
The company said the election of directors Sam Wright and Neville Bassett passed easily.
The company’s most recent Application for quotation of securities said that Pharmaust had 316,912,383 shares on issue meaning that the vote against the placement capacity amounted to 4.59 percent of the company’s total shares on issue, not sufficient to requisition extraordinary general meetings.
Pharmaust was unchanged at 9.6 cents.

AUSTCO HEALTHCARE (FORMERLY AZURE HEALTHCARE)

Austco says its annual general meeting will vote on a potential remuneration report second-strike board spill and an 80 percent director fee pool to $450,000.

Last year, the then Azure annual general meeting voted a remuneration report 'first strike' with 73,196,758 votes or 36.19 percent against the report, with similar dissent defeating the 10 percent placement capacity.

Under the Corporations Amendment (Improving Accountability on Director and Executive Remuneration) Act 2011 any company sustaining a vote of 25 percent or more against the remuneration report in two successive annual meetings is required to vote on a board spill and at the later meeting and if passed by more than 50 percent of votes the directors must stand for re-election at a subsequent meeting within 90 days.

Today, Austco said shareholders would vote to increase the director fee pool from $250,000 to $450,000.

The company said shareholders would vote on the issue of 1,350,000 options to chief executive officer Clayton Astles, exercisable at 21.5 cents each by September 24, 2025, the re-election of director Brett Burns, the additional 10 percent placement capacity, the amendment to the company constitution, and pending the remuneration report vote, the conditional spill resolution.

The virtual meeting will be held on November 24, 2021, at 9.30am (AEDT).

Austco fell half a cent or 3.3 percent to 14.5 cents.

MAYNE PHARMA GROUP

Mayne Pharma says its annual general meeting will vote to issue $2 million worth of performance rights to managing-director Scott Richards.

Mayne said in the last two years, Mr Richards' 2015-'17 loan share grants lapsed "as they did not meet vesting conditions or expired unexercised as they were 'out of the money'".

The company said 20 percent of the performance rights would vest for compound annual absolute total shareholder return growth of eight percent and the balance for growth of 15 percent.

Mayne said shareholders would vote on the re-election of directors Frank Condella, Ian Scholes, Patrick Blake and Dr Carolyn Myers and the remuneration report.

The virtual meeting will be held on November 23, 2021, at 9am (AEDT).

Mayne was up two cents or 6.15 percent to 34.5 cents with 8.8 million shares traded.

ACRUX

Acrux says its annual general meeting will vote to issue six million rights to managing-director Michael Kotsanis under its Omnibus Equity Plan.

Acrux said the rights would expire seven years after being granted and would vest in four equal tranches over four years, pending a 10 percent or more "total return to shareholders" over the 12-month period prior to the vesting date.

The company said the rights that do not vest would be rolled over into the next year but would be subject to an additional 10 percent total return of shareholders hurdle and each tranche could be rolled over up to three times.

Acrux said shareholders will vote on the election of Dr Timothy Oldham and Don Brumley as directors, the remuneration reports, the approval of a 10 percent placement capacity and the issue of rights to director Don Brumley.

The virtual meeting will be held on November 23, 2021, at 10am (AEDT).

Acrux was unchanged at 12 cents.

BTC HEALTH

BTC Health says its annual general meeting will vote to issue 6,000,000 million unlisted options to executive chair Dr Richard Treagus.
BTC said the options were exercisable at the greater of 12 cents each or a 30 percent premium to the 10-day volume weighted average price (VWAP), within five years.
The company said the options would vest in three equal tranches, following the meeting and on November 23, 2022 and November 23, 2022.
BTC said shareholders would vote on the remuneration report, the re-election of director Bruce Hewett, the approval of the employee share option plan, the replacement of the company constitution and the approval of the 10 percent placement capacity.
The virtual meeting will be held on November 23, 2021 at 2pm (AEDT).
BTC Health was unchanged at 8.8 cents.

COCHLEAR

The Malvern, Pennsylvania-based Vanguard Group says it has become a substantial shareholder in Cochlear with 3,289,139 shares or 5.001 percent.
Vanguard said between June 18 and October 19, 2021, it bought and sold shares in more than 250 traded at prices ranging from $212.80 to $257.63 a share.
Cochlear was up $2.79 or 1.3 percent to $222.75 with 108,374 shares traded.

PROBIOTEC

Melbourne's Copia Investment Partners says it has become a substantial shareholder in Probiotec with 4,201,731 shares or 5.36 percent.
Copia said that between August 25 and October 18, 2021 it bought shares at prices ranging from $2.076 to $2.22 a share.
Probiotec fell three cents or 1.4 percent to $2.15.

IMPEDIMED

The Sydney-based Allan Gray Australia says it reduced its shareholding in Impedimed from 132,414,519 shares (8.88%) to 97,306,655 shares (6.5%).
The company said between May 27 and October 19, 2021, it sold 38,285,271 shares for $6,384,532 or 16.7 cents a share.
Impedimed was unchanged at 17 cents with nine million shares traded.