Biotech Daily

Friday November 17, 2023

Daily news on ASX-listed biotechnology companies

*** ASX, BIOTECH DOWN: COMPUMEDICS UP 22%; PATRYS DOWN 10%**

*** DR BOREHAM'S CRUCIBLE: PYC THERAPEUTICS**

*** LTR $7m SPONTAN ERECTILE DYSFUNCTION NASAL SPRAY IPO**

*** PRESCIENT 72% REM REPORT 1st STRIKE; PLACEMENT CAPACITY LOST**

*** RESONANCE WITHDRAWS 100% DIRECTOR FEE POOL INCREASE**

*** LITTLE GREEN OPENS $2m RIGHTS OFFER**

*** GOODBYE INCANNEX**

*** RADIOPHARM TO RELEASE 100m ASX ESCROW SHARES**

*** CANN GROUP TAKES 'CAPITAL RAISING' HALT TO SUSPENSION**

*** QBIOTICS 'REVIEW'; BOARD, MANAGEMENT CHANGES**

*** BIOXYNE LOSES JOINT-CEO NAM HOAT CHUA**

MARKET REPORT

The Australian stock market fell 0.13 percent on Friday November 17, 2023, with the ASX200 down 9.0 points to 7,049.4 points. Fifteen of the Biotech Daily Top 40 stocks were up, 17 fell, six traded unchanged and two were untraded.

Compumedics was the best, up 3.5 cents or 21.9 percent to 19.5 cents, with 42,990 shares traded. Resonance rose 17.65 percent; Actinogen climbed 13.6 percent; Starpharma was up 11.1 percent; Cynata improved eight percent; Atomo, Mesoblast, Opthea and Telix were up more than four percent; Proteomics rose 3.45 percent; Antisense, Emvision, Orthocell and Paradigm were up more than one percent; with Cochlear, CSL and Nanosonics up by less than one percent.

Patrys led the falls, down 0.1 cents or 10 percent to 0.9 cents, with 826,610 shares traded. 4D Medical lost nine percent; Imugene fell 8.25 percent; Cyclopharm, Impedimed and Pharmaxis were down six percent or more; Avita, Clinuvel, Genetic Signatures and Next Science were down more than three percent; Alcidion and Volpara shed more than two percent; Medical Developments, Polynovo, Prescient and Resmed were down more than one percent; with Neuren and Pro Medicus down by less than one percent.

DR BOREHAM'S CRUCIBLE: PYC THERAPEUTICS

By TIM BOREHAM

ASX code: PYC

Share price: 7.3 cents; **Shares on issue:** 3,732,867,135; **Market cap:** $272.5 million

Chief executive officer: Dr Rohan Hockings

Board: Alan Tribe (chair), Dr Hockings, Dr Michael Rosenblatt, Jason Haddock

Financials (September quarter 2023): Revenue nil, cash burn $11.7 million, cash of $21 million, quarters of available funding 1.8 (excludes an expected $16.1 million RDTI)

Major identifiable holders: Alan Tribe/Australian Land Holdings 33%, David Sietsma 7.7%, Malcolm McCusker 5.7%

While getting an early-stage drug to market is notoriously difficult and expensive, PYC Therapeutics Dr Rohan Hockings reckons the odds are in favor of the gene therapy house because it knows exactly what's causing the single-gene ailments it tackles.

Dr Hockings says the chances of success with such monogenic diseases are about five times greater than the usual seven to 10 percent odds of getting a phase I asset to market. Put another way, it's a 50:50 proposition.

By combining existing ribonucleic acid (RNA) drug design with its proprietary delivery platform, PYC says it is developing precision therapies for patients with genetic diseases that have no treatment options.

"The PYC program differs to others because all of the diseases are caused by a mutation to a single gene," Dr Hockings says. "We know exactly what is going wrong: they are missing one protein and one protein only."

To date, PYC has focused on its lead program for the rare eye disease retinitis pigmentosa, as well as another uncommon optical disorder called autosomal dominant optic atrophy.

It also has a program for the crippling genetic childhood disorder Phelan-McDermid syndrome.

This week, PYC announced a foray into autosomal dominant polycystic kidney disease, the most prevalent monogenic disease in humans marked by extreme swelling of the organ.

"While it's not our most advanced program, it could be extraordinary because it has the potential to reverse the disease," Dr Hockings says.

Can we get a copy of this please

Normally, people are endowed with a copy for each gene on the two arms of a chromosome, but with the disorders in question there's a mutation in one of the copies that inhibits protein production.

"We are increasing the gene expression to compensate for the unstable protein, by making two units of the protein from the good copy of the gene," Dr Hockings says.

He says the industry is starting to understand that using RNA therapies to increase gene expression is a "really smart thing to do".

Unlike with DNA gene technologies, the protein can't be overexpressed.

"These are very dose sensitive genes: too little of it causes the disease, but too much of it causes the disease as well," he says.

"The RNA approach is the only way to leave ultimate control of protein expression under the endogenous regulation of the cell, so the cell is saying 'it is too much or not enough, I am going to make more of it or less of it'."

Useful pack of geysers

A spin-off from the not-for profit medical research body Telethon Kids Institute, the Perth-based Phylogica (now PYC) listed in March 2005, having raised $5 million at 20 cents apiece in the initial public offer (IPO).

The company's premise was to build a library of hundreds of billions of phylomers, active protein molecules with genetic material that stems from volcanoes, geysers and deep-sea vents.

Initially, the company tackled inflammatory diseases, led by Perth biotech movers and shakers Dr Stewart Washer and Harry Karelis.

Now retired Perth cardiologist Dr Bernard Hockings - Rohan's dad - joined the register in August 2012.

In 2019, the company rebranded itself as PYC Therapeutics.

Along the way Phylogica formed a joint venture called Vision Pharma with Lion's Eye Institute, a Perth not-for-profit research body.

In effect, Phylogica delivered the vehicle (the penetrating peptides) and Lion's Eye provided the molecule, known as an anti-sense oligo-nucleotide (a precision medicine that can whomp genetic defects).

Over time, the company had big-ticket collaborations with Pfizer, Medimmune, Johnson & Johnson, Astrazeneca and Roche/Genentech, but they went nowhere.

No more dud spuds

Polycystic kidney disease (PKD) affects one in 1,000 people, equating to somewhere between five million and 14 million globally. In the US, there are 160,000 sufferers - just under the threshold of a rare disease.

PYC assesses a $US10 billion a year market. There's one approved drug called Tolvaptan, but it is not tolerated by 85 percent of patients and carries an FDA 'black box' warning for liver failure.

PYC's therapy is targeted at the 80 percent of PKD patients with the PKD1 mutation, as opposed to - you guessed it - PKD2.

Dr Hockings says cysts form in the kidneys and they grow to the "size of a Sherrin" (for non-Australian Rules followers, that's the size of a football). More than half of patients with the disease will need a kidney transplant in their 50s.

On Monday, the company announced the results of work carried out by Denmark's Crown Biosciences, which involved growing a three-dimensional model of a kidney based on tissue removed from a patient with end-stage disease undergoing a kidney transplant.

The read-out supported the potential of the drug to address the root cause of the cysts that drive disease progression. The next step is monkey trials to establish safety, while an eventual registration trial would enrol about 250 patients, due to begin "by late next year".

He says the "gold standard" program tackles the dual problems of delivering to the target cell and modulating the target gene.

Eye see an opportunity

The retinitis pigmentosa mutation affects one in 100,000 people. Sufferers are usually diagnosed around six years old and first lose their night vision. In teenage years they lose their peripheral vision and become legally blind in their 40s or 50s.

PYC is addressing a sub-type retinitis pigmentosa type 11 (RP11) which is only two to three percent of total cases, or 4,000 to 8,000 people in the Western world. Still, the company estimates a $1 billion-a-year addressable market.

Recently granted US Food and Drug Administration fast-track status, PYC's program aims to stop progression of the disease.

"You get one set of retinal cells and once they are dead, they're dead," Dr Hockings says. "In theory, the drug will restore the missing protein in the retina so the disease should not get any worse."

In early November, PYC said it had completed dosing the second of three cohorts of its candidate VP-001, in a phase I trial called Platypus.

Pending a safety analysis, the single ascending dose trial should be followed by a multiple ascending effort in early 2024, with a fourth cohort if there are no signs of adverse effects.

The US phase I study involves nine to 12 patients. The Australian phase II effort will enrol 30, randomized to two active groups and a sham cohort. Phase II is expected to kick off in February next year, with a primary efficacy readout in early 2025.

Will ADOA be a goer?

The blinding eye disease autosomal dominant optic atrophy (ADOA) affects about one in 50,000 people. As with RP11, there are no drugs or more advanced clinical programs and the company estimates a $2 billion-a-year market.

ADOA stems from insufficient levels of the OPA1 gene, which inhibits normal development of retinal ganglion cells that convey visual stimuli to the brain. This causes cell death and eventual blindness.

The company recently had a chat with the FDA about the trial pathway and hopes to lodge an investigational new device application in the first half of 2024.

Finances and performance

While there is no current treatment for the diseases targeted by PYC, the company assumes a median orphan price of $US200,000 per patient per annum. This could be conservative, given Neuren Pharmaceuticals has managed $US375,000 for its Rett syndrome drug trofinetide, approved by the FDA as Daybue, this year.

At the end of September, PYC had $21 million in the bank, having burnt almost $12 million in the September quarter. With a $16.7 million Federal Research and Development Tax Incentive imminent, the company hopes to be funded until the second half of 2024.

Management hopes a capital raising can be avoided with a decent out-licencing transaction.

How about one like the $US170 million upfront paid by Glaxosmithkline for the oligonucleotide assets of Wave Life Sciences, or the $US224 million collaboration between Vertex and Nasdaq gene therapy peer Entrada?

The former owner of Ikea’s Perth franchise, Alan Tribe accounts for a chunky one-third of the PYC register. Having been a loyal supporter in past capital raisings, Mr Tribe is confident of things coming together at the company somewhat more smoothly than a flat-pack desk with Swedish instructions.

Over the last 12 months, PYC shares have traded between 5.0 cents (mid-October 2023) and nine cents (mid-March this year). The stock peaked at 58 cents in early 2006.

More than monkey business

As an aside, the life sciences world is still suffering from a Covid-induced shortage of the main species of monkey used in their research.

The ape in question - the cynomolgus monkey, better known as the crab-eating macaque - is valued for infectious disease research and thus was highly in demand for Covid vaccine and therapy work.

Dr Hockings says supply and demand is normalising.

The trouble is, the monkeys need to be between three and five years old for toxicology studies, so while breeding has picked up there's still a time lag.

In the meantime, the FDA is more amenable to toxicology studies being carried out on dogs or pigs instead.

Mr Hockings says PYC is okay, because it booked its slots - and secured its simians - years in advance.

Dr Boreham's diagnosis:

Despite being afflicted with Covid this week and craving a cure, Dr Hockings was effervescent about PYC's prospects despite investor concerns the company has taken rather a long time to get to the pointy end of things.

"We are operating a platform technology on a scale unlike that of any other Australian life sciences company," he says.

"We have a 50 percent shot of curing childhood blindness for our first trick, reaping millions and becoming the next CSL."

When we last covered PYC in November 2019, Dr Hockings was blunt about the drug delivery outfit's "scattergun" approach.

"We were chasing all the rabbits and catching none," he says. "Investors were saying: 'You have this nice delivery system but what are you going to do with it?'"

The addition of the kidney program shows PYC is still chasing rabbits, but given the common monogenic focus across all its efforts the company is not haring about in random directions.

Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. But he's a good geyser who can still pull a rabbit out of a hat when he's not erupting.

LTR PHARMA

LTR Pharma says it hopes to raise $7 million at 20 cents a share to list on the ASX under the code ‘LTP’ to commercialize its Spontan intra-nasal spray for erectile dysfunction.
LTR said if it raised the maximum amount of $7 million it would have an indicative market capitalization of $27.9 million following the initial public offer, and hoped to be quoted on the ASX on December 11, 2023.
The company said Spontan was the “already proven, effective and regulatory-cleared PDE5 inhibitor” vardenafil, marketed by Bayer as Levitra, but with an intra-nasal mechanism of action, rather than an oral tablet.
LTR said the composition and intra-nasal dosing method was designed to “bypass first-pass metabolism associated with many oral PDE5 medications … with efficacy often impacted by the consumption of food and beverages”.
The company said the nasal cavity was a highly vascular part of the body which supported “even and rapid absorption of the drug [which allowed] it to work within 10 minutes” compared to current oral tablets, such as Viagra, which could take up-to one hour to become effective.
LTR said it had approval from the Bellberry human research ethics committee to conduct a bio-equivalence clinical trial comparing its intra-nasal Spontan to orally dosed vardenafil.
The company said that the proposed trial would compare the pharmaco-kinetics, safety and tolerability of vardenafil following administration of Spontan spray compared to Levitra tablets in healthy male adults, and it would use $1.35 million of the funds raised for the trial.
LTR executive chair Lee Rodne said the trial was expected to begin in February 2024, and begin recruiting patients at trial sites in Sydney and he expected that results would be available by July 2024.
Mr Rodne said that the Australian Therapeutic Goods Administration review would take six to nine months and he hoped Spontan would be available through a special access scheme from mid-2024, with full approval in 2025.
LTR said it was planning to apply for expedited US Food and Drug Administration 505(b)(2) regulatory approval, which governed a change of route in administration of an already approved drug.
The company said its Mr Rodne was the former chief executive officer of Allied Medical then Admedus and now Anteris, with former Avexa chief executive officer, Admedus chief operating officer and current Cann Group chair Dr Julian Chick and Maja McGuire as non-executive directors.
LTR said that Danny Zanardo would be the head of commercial operations.
The company said the offer opened on November 10 and would close on November 24, 2023, unless the maximum subscription was reached earlier.
The company said that Alpine Capital was the lead manager of the offer and the prospectus was available at: https://www.ltrpharma.com/investor-centre/.

LITTLE GREEN PHARMA

Little Green Pharma says it has opened its public rights offer at 20 cents a share to raise $1,000,000 for its psilocybin business Reset Mind Sciences.
Last week, Little Green said an extraordinary general meeting would vote to separate its Reset psychedelics business, reduce capital, have an in-specie distribution of shares and offer 10,000,000 shares at 20 cents a share, to raise up to $2,000,000, with existing investors having a priority for up-to 5,000,000 shares (BD: Nov 11, 2023).
Little Green traded unchanged at 13 cents.

PRESCIENT THERAPEUTICS

Prescient says its annual general meeting voted 72.2 percent against the remuneration report, with the 10 percent placement capacity defeated by 59.7 percent.
Prescient said the remuneration report was opposed by 75,456,262 votes (72.22%) against with 29,021,539 votes (27.78%) in favor.
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 if passed the directors must stand for re-election within 90 days.
The company said the 10 percent placement facility was opposed by 63,167,641 votes (59.71%), with 42,619,000 votes (40.29%) in support.
Prescient said the 1,415,000 options issue, the election of directors Dr Allen Ebens and Dr Ellen Feigal were opposed by 25.1 percent, 20.6 percent and 20.4 percent, respectively.
According to its most recent filing, Prescient had 805,319,793 shares on issue, meaning that the 75,456,262 votes against the remuneration report amounted to 9.4 percent of the company, sufficient to requisition extraordinary general meetings.
Prescient fell 0.1 cents or 1.45 percent to 6.8 cents.

RESONANCE HEALTH

Resonance says it has withdrawn its resolution to double its aggregate director fee pool from $250,000 to $500,000, at its annual general meeting.
Last month, Resonance said its annual general meeting would vote to increase the total directors pay pool due to the appointment of two additional directors (BD: Oct 12, 2023).
At that time, the company said that the increased level of directors' fees ensured it maintained its capacity to remunerate existing and any further directors, remunerate directors "appropriately for the expectations placed upon them" and had the ability to attract and retain directors.
Resonance said that if the was "not passed, the company will not be able to pay more than the currently approved collective quantum of $250,000 [per annum] in directors' fees, which could limit the company's ability to attract and recruit high quality persons to serve on the company's board".
Today, Resonance said all other resolutions passed by more than 98 percent of the vote.
Resonance was up 0.9 cents or 17.65 percent to six cents.

INCANNEX HEALTHCARE

Incannex says it will be suspended from trading by the ASX at the close of trading today after receiving shareholder and court approval to delist and list on the Nasdaq.
Yesterday, Incannex said the Federal Court approved its scheme of arrangement to redomicile and delist, effective on November 28, 2023 (BD: Nov 17, 2023).
Incannex closed down 0.5 cents or 10.9 percent at 4.1 cents with 68.9 million shares traded.

RADIOPHARM THERANOSTICS

Radiopharm says it will release 100,000,000 shares from ASX escrow on November 25, 2023, and according to its most recent filing, following the release from escrow, it would have 339,313,037 shares on issue, with no further shares held in ASX escrow.
Radiopharm traded unchanged at 7.5 cents.

CANN GROUP

Cann Group says it has requested a suspension following Wednesday's trading halt pending an announcement regarding "capital raising activities" (BD: Oct 15, 2023).
Cann Group said it expected to release the announcement by November 20, 2023.
Cann Group last traded at 11 cents.

QBIOTICS GROUP

Qbiotics says Dr Sue Foden has been appointed chair, managing-director Dr Victoria Gordon becomes an executive director and Dr Steven Ogbourne has left the board.
Qbiotics said it was currently conducting a "strategic review [of its board] to guide future growth and development".
The company said that it implemented the first stage of this process by appointing Dr Foden as executive chair to "achieve a smooth transition".
Qbiotics said that Dr Foden had more than 20 years' experience as a director of companies in the UK, Norway, Germany and Belgium, including Ventura Group Plc as and Neurocentrx Pharma Ltd.
The company said that Dr Foden was currently the chair of Evgen Pharma Plc and a director of Laverock Therapeutics Ltd.
According to the Qbiotics annual report, Dr Foden was previously deputy chair and held a Bachelor of Arts, a Master of Arts and a Doctor of Philosophy from Oxford University.
The company said Dr Gordon had stepped down as chief executive officer but would continue as the executive director of strategic alliances and investor relations.
Qbiotics said Dr Gordon would focus on corporate alliances and partnering, clinical trial outcomes and analyst and investor relations.
The company said it would begin a search for a replacement chief executive officer.
Qbiotics said following its annual general meeting director Dr Ogbourne would step down after six years on the board and would continue in his executive role.
Qbiotics is a public unlisted company.

BIOXYNE

Bioxyne says joint chief executive officer Nam Hoat Chua has resigned following today's annual general meeting.
Bioxyne chair Tony Ho said he thanked Mr Chua "for his contribution to the Bioxyne Group as chief executive officer and managing-director since 2017, and wish him well in his future endeavors".
The company said Sam Watson would continue as sole chief executive officer and managing director.
Bioxyne traded unchanged at 1.2 cents with one million shares traded.