



Biotech Daily

Monday December 13, 2021

Daily news on ASX-listed biotechnology companies

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MARKET REPORT

The Australian stock market was up 0.35 percent on Monday December 13, 2020, with the ASX200 up 25.8 points to 7,379.3 points. Fourteen of the Biotech Daily Top 40 stocks were up, 21 fell, four traded unchanged and one was untraded. All three Big Caps fell.

Compumedics was the best, up two cents or 5.3 percent to 40 cents, with 10,245 shares traded. Actinogen, Dimerix, Nanosonics, Neuren and Uscom climbed four percent or more; Antisense, Cynata, Genetic Signatures, Next Science, Optiscan and Starpharma rose more than two percent; with Immutep and Imugene up by one percent or more.

Prescient led the falls, down 1.5 cents or 6.5 percent to 21.5 cents, with 1.2 million shares traded. Alterity, Oncosil, Opthea and Pharmaxis fell more than four percent; Osprey lost 3.1 percent; Clinuvel, Cyclopharm, Mesoblast, Nova Eye, Patrys and Volpara shed more than two percent; Cochlear, Paradigm, Polynovo, Proteomics and Telix were down one percent or more; with Avita, CSL, Kazia, Medical Developments, Orthocell, Pro Medicus and Resmed down by less than one percent.

[ANOTHER YEAR IN THE GRASS - WITH SHROOMS & E](#)

By **PETER OLSZEWSKI**

(AKA Jay Jerilderie McRoach, former Nation Review Marijuana Columnist)

It's been a year of smoke and mirrors for the 22 companies comprising Biotech Daily's Cannabis Corner.

While the sector closed November with a collective market capitalization of \$1,941 million, following an all-time high of \$1,973 million in May, the sobering reality is that despite all the hype and hope, it has only just caught up with where it was, albeit briefly, on July 31, 2019 with a record high of a \$1,913 million, or the "illusory high" as Biotech Daily defined it, when there were only 18 companies in Cannabis Corner, four less than today.

The smoke started on January 20, 2015, when Phytotech was the first medical marijuana company to list on the ASX, claiming it would be "the Berkshire Hathaway of cannabis". Seven years later, the company is MMJ Group Holdings and trades at 6.7 cents. As for Berkshire Hathaway, the Motley Fool reported in February that "Warren Buffett and cannabis stocks go together like orange juice and toothpaste. In other words, they don't."

More smoke on January 3, 2018, when the Australian Broadcasting Corporation trumpeted: "Australia aims for global domination of the medicinal cannabis market."

Four years later, the ASX-listed medical marijuana movers simply hope for higher domestic returns and for investors to stop being grumpy and asking about the projected boom that didn't, in a year that went well but was marred perceivably by over-excited first quarter predictions

For example, in August, Stockhead announced: "It's certainly the case that medicinal cannabis more broadly is having a bumper year."

Also in August, Freshleaf Analytics predicted that 2021 total product revenues were expected to exceed \$200 million, with active patients at 60,000. By November active patents had increased to 111,000. In contrast, 2020 ended with just over 35,000 active patients and \$100 million in product revenue.

Sounds good, but Stockhead added qualifications to its upbeat assessments. "But why aren't we seeing the promised boom in 2021?" it asked. "And when will we see it?"

Experts agree that investors may have jumped prematurely, perhaps becoming over-excited by the February Australian Therapeutic Goods Administration declassification, when low-dose cannabis became available over-the-counter at pharmacies.

Cann Group chief executive officer Peter Crock told Stockhead that the 2021 boom predictions based on the February 1 declassification were, well, a bunch of crock.

"Yes, people did jump on prematurely in terms of what they thought that would mean," he said.

Cannabis Corner's Scenic Railway

2021 was a bumpy ride with highs and lows in between potholes (see chart below).

Cannabis Corner opened 2021 well, following a slack 2020 which saw savage mid-year lows when, according to Biotech Daily's editor, "the sector was recovering from the realization that - despite the claims - marijuana wouldn't cure coronavirus".

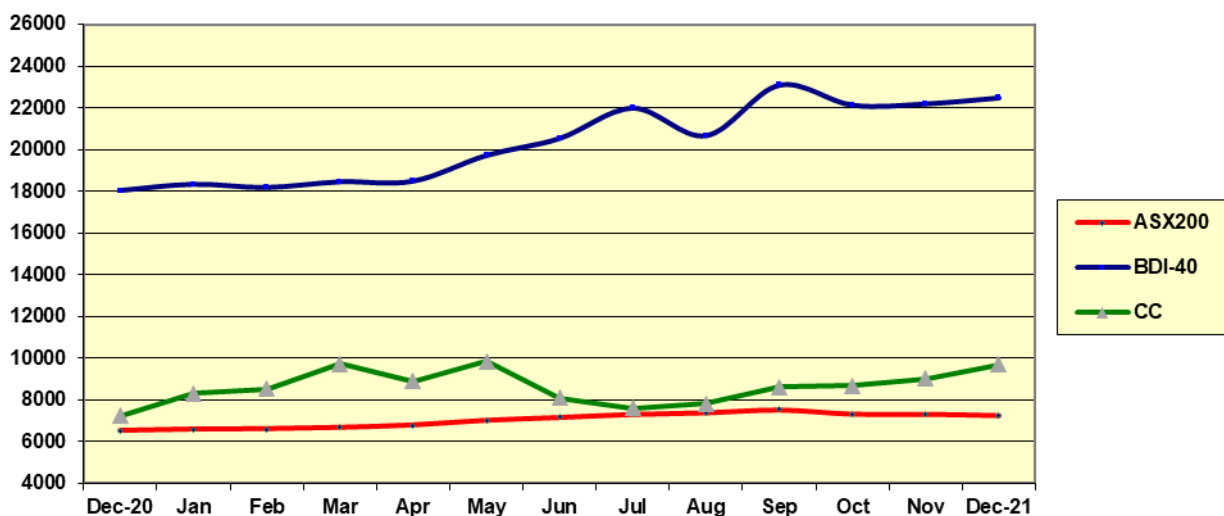
Enter 2021. January's collective market capitalization jumped 2.7 percent to \$1,660 million, then crept up to \$1,705 million in February, partly boosted by TGA Special Access Scheme (category B) medical cannabis approvals hitting an all-time high of 8,057. And there was more good news when the CSIRO said that a new licence would allow it to support the industry and partner with manufacturers to develop new cannabis drugs.

March hit a record market cap of \$1,945 million, beating the July 2019 high, coinciding with TGA approvals hitting 9,959 approvals, but April fell 8.5 percent to \$1,780 million, while TGA scheme B approvals also nose-dived from the previous month, down to 6,682. May rebounded to a record market cap high of \$1,973 million, with TGA approvals also hitting a new peak of 9,965, and the approvals went gangbusters for the next four months, with each month a new record, culminating in September's whopping 13,666 approvals.

June cracked ten thousand TGA approvals (10,415), while the collective market cap lost 17.8 percent to \$1,621 million, up 55.8 percent for the financial year to June 30, 2020.

July fell to \$1,521 million, a record low for the year, while TGA approvals reached 10,755, but August saw Cannabis Corner up 10.3 percent to \$1,724 million, with Incannex starring, up 66.3 percent to \$454 million. TGA approvals were up slightly to 10,791. September approvals jumped to 13,666, while Cannabis Corner rose 0.75 percent to \$1,737 million, rising again by 3.97 percent in October to \$1,806 million, but October approvals eased to 12,206. November's TGA approvals rose to 12,508, with the collective market cap up 7.5 percent, to a near-record high of \$1,941 million.

Cannabis Corner (\$m x 5) v BDI-40 (\$m), S&P ASX 200: Year to Nov 30, 2021



But it was smoke and mirrors time again, as Biotech Daily pointed out, only five Cannabis Corner companies were up in November, with three unchanged and fourteen down. The falls were mainly countered by three companies: Incannex up \$200 million or 40.9 percent to \$689 million, Cronos up \$19 million (237.5%) and Emyria up \$42 million (110.5%).

All up, the year played out with positive developments for Cannabis Corner shares, with a combined market capitalization for the year to November 30 of \$1,941 million. And yet there was the overhanging pall of increasing investor impatience, partly due to the realities of not much local product being manufactured – actually none at all – and not all that much product grown.

Fresh Leaf Analytics noted the number of cannabis medications had virtually doubled annually since 2018, with 190 products available for prescription as of July 2021. But not one of those products can be marked as made in Australia.

Who does what? Good question

So, what are the medical companies doing? Some, it is suspected, are simply playing the waiting game, waiting for the real bonanza, when cannabis the drug - a.k.a. recreational marijuana - is legalized.

Research consultants Prohibition Partners estimate that the Australian cannabis market could reach \$US1.5 billion by about 2025, noting that changes to regulations in addition to medical cannabis “have some companies salivating at the prospect of a recreational market opening in the future”. Cannabis Corner itself houses some so-called medical cannabis companies that have provided no real evidence that they are working on medicines for human health.

But creating a medication in Australia that gets through clinical trials is expensive, risky and tedious, with only a miniscule success rate. The biotech dictum is that one has a 50 percent chance of taking an idea from lab bench to mice or rats, a further one in two probability of going on to phase I, and again a 50 percent chance to phase II, the same odds to phase III and again a toss of the coin for registration, which does not necessarily mean sales. That multiplies out to about a 1.6 percent chance of “success”.

And to be fair there are a swag of companies desperately battling the notorious local red tape entanglements and eagerly vying to be among the first Australian companies to actually manufacture a cannabidiol (CBD) medication, although no company among the many working on submissions has one ready to go. As of yet, apparently. The word is that lots of local product will appear on pharmacy shelves, later in 2022. Hopefully.

Green and black markets

Both producers and cultivators are also under attack from a burgeoning black market which, with its red-tape-free, prescription-free environment and low prices - especially the low prices - threatens to erode the legit industry profitability unless stamped out, which is easier said than done considering that un-stamped-out, illicit marijuana cultivation has been with us since the early 1960s, especially in northern New South Wales.

In July, the Australian Institute of Health and Welfare's National Drug Strategy Household Survey reported that about 2.7 percent of the population, or 690,000 people in Australia above 14 years of age, used cannabis for medical purposes in the previous 12 months. But roughly only 3.9 percent of them, or approximately 27,000 people obtained cannabis medications legally through the medical system.

In August, the ABC's Landline program investigated the illegal medical cannabis market in New South Wales, and Elixinol Wellness founder and non-executive director Paul Benhaim told the program that some licenced hemp growers were producing CBD products for the wellness market, adding that this was common knowledge in - where else - northern New South Wales. He estimated Australia's medicinal cannabis black market was about "about 10 times larger" than the legal, prescription market.

Finally, after poking around 2021's nooks and crannies, there are a couple of overviews at play that haven't been given much reportage.

Firstly, there's the argument that the market might soften as medical cannabis comes out of its faddishness phase. (Merriam-Webster defines "fad" as a practice or interest followed for a time with exaggerated zeal.)

But possibly not with sales, as evidenced last month in Bangkok when The Pizza Company promoted its "Crazy Happy Pizza" topped with a cannabis leaf which generated a frenzied media buzz but not much in terms of sales, as the manager Panusak Suensatboon, confirmed.

And keep an eye on Thailand as it rapidly embraces medical marijuana.

Secondly, there's been a lot written about whether marijuana-based medications work, but there doesn't seem to be any analysis of whether those medications are as good as, or better than, what's already available at the pharmacies in the non-cannabis department.

Not to mention pricing.

In October, the Western Australian Government investigated medicinal cannabis concerns that it is too hard to access, with advocates claiming patients struggle to find doctors to prescribe it - despite medicinal cannabis being legal in WA since 2016.

Up bobbed Mark Duncan-Smith, president of the Australian Medical Association Western Australian branch who said what others had failed to say: simply that there were better, more effective, and more evidence-based drugs available in pharmacies than medical marijuana.

Oils ain' oils

Then there's competition from other "natural" substances.

Last year, Biotech Daily revealed that Elle magazine asked if CBD oil skincare really works, and the answer was not really.

Now, an Australian Indian sandalwood supplier, Quintis, is giving CBD oil a run for its money in the skincare sector, especially following the ban of CBD oil use in China's cosmetic industry.

The Perth-based Quintis conducted a review of existing scientific studies to assess the benefits of sandalwood and CBD oil, and the findings showed that Indian sandalwood oil has more scientifically proven benefits than CBD oil, especially in skincare with wound healing and anti-inflammatory properties.

How was the trip?

And then along came psychedelics, including lysergic acid diethylamide (LSD), 3,4-methylene-dioxy-meth-amphetamine (MDMA, ecstasy or E) and psilocybin, following a script eerily similar to that of medical cannabis development, but at a much-accelerated rate with bigger touted potential revenue figures.

Companies quickly incorporated psychedelics with their medical cannabis business, and an early Australian starter was Creso Pharma which made history in March this year as the first ASX-listed psychedelics stock, but is also billed as "a cannabis and psychedelics company".

When Creso acquired Canadian psychedelics and psilocybin purveyor Halucenex Life Sciences, opening the door to the much hyped: "**\$US100 billion dollar market in psychedelic medicines**", its ASX market capitalization hit \$200 million and on December 2, its ASX shares shot up 6.25 percent on news that Halucenex had secured approval to produce more psychedelic substances.

In July, two psychology academics from Melbourne's Swinburne University and the Western Sydney University founded the Psychae Institute with \$40 million from an unnamed "North American biotechnology company" to research psychedelics for mental health disorders. They did name the South American psychoactive plant, ayahuasca, which is quite popular among the in-crowd in California. After a brief flurry of media appearances all went silent.

Two more ASX-listed companies, Incannex and Emyria, are pursuing psychedelics, as is an unlisted company going by the more than politically correct name of Woke Pharmaceuticals.

As for 2022, stand by for a weeding out of the sector with some companies falling by the wayside, some merging and some actually making something ... including, possibly, profit.

Maybe.

The writer was the co-founder of the Australian Marijuana Party and stood as Senate candidate JJ McRoach in the 1977 Australian Federal Election. Biotech Daily editor David Langsam was his campaign director.

CSL

CSL “confirms that it is in discussions with Vifor Pharma Ltd regarding a potential transaction”.

“At this time there remains no certainty that any transaction will result and, if a transaction does result, when such a transaction would occur,” CSL said.

Earlier this month, in an announcement titled ‘Response to speculation’, CSL said it “regularly assesses strategic opportunities that can improve its business, improve the health of people around the world and provide value to shareholders” (BD: Dec 3, 2021).

The Australian Financial Review reported that CSL was allegedly raising money to acquire the St Gallon, Switzerland Vifor Pharma and according to Six Swiss Stock Exchange Vifor had a current market capitalization of CHF8,160,750,000 (\$A12,549,508,400).

Vifor’s website said Abbas Hussain was the company’s chief executive officer since August 2021 and was previously a director of CSL.

CSL fell \$1.04 or 0.35 percent to \$297.27 with 462,208 shares traded.

IMUGENE

Imugene says the US Food and Drug Administration has approved a phase II HER-Vaxx trial for cancer and a phase I safety and dosing study for Vaxinia for cancer.

Imugene said that the ‘Nextherizon’ 30-patient, phase II trial would be an open-label, signal-generating study of HER-Vaxx in combination with chemotherapy or pembrolizumab, in patients with metastatic HER-2/neu over-expressing gastric or gastro-oesophageal junction adenocarcinomas who had previously received trastuzumab and progressed on that treatment.

The company said the study would have two arms of 15 patients each, with the first to receive 50µg HER-Vaxx in combination with chemotherapy (irinotecan or paclitaxel), while the second would receive 50µg HER-Vaxx in combination with pembrolizumab.

Imugene said that the primary objectives were to evaluate the safety and tolerability of HER-Vaxx in combination with chemotherapy (irinotecan or paclitaxel) or pembrolizumab and evaluate the overall response rate of HER-Vaxx in combination with chemotherapy or pembrolizumab.

The company said that the secondary objective was to evaluate additional efficacy and survival measures including overall survival, progression-free survival and duration of response of HER-Vaxx in each arm.

Imugene said the about 62-patient, phase I trial would be an open-label, dose-escalation, safety and tolerability study of Vaxinia for metastatic or advanced solid tumors in multiple solid tumor type patients.

The company said that Vaxinia, or CF33-hNIS, would be administered intra-tumorally or intra-venously either as a monotherapy or in combination with pembrolizumab to adult patients with metastatic or advanced solid tumors.

Imugene said that the trial would involve a dose escalation, before it expanded to up to 10 patients at the final monotherapy and combination dose.

Imugene managing-director Leslie Chong told Biotech Daily that there would be four monotherapy cohorts and three combination cohorts for each administration, and then a 10-patient expansion for each at the highest dose.

Ms Chong said that receiving the two investigational new drug (IND) application approvals was “a crucial step forward”.

“To achieve two INDs for our programs ... concurrently is an outstanding result for the team,” Ms Chong said.

Imugene was up half a cent or one percent to 52 cents with 36.8 million shares traded.

[AROVELLA THERAPEUTICS \(FORMERLY SUDA PHARMACEUTICALS\)](#)

Arovella says it has licenced a monoclonal antibody directed against a DKK1 peptide from the University of Texas MD Anderson Cancer Center.

Arovella said the antibody was the first monoclonal antibody directed against a DKK1 peptide found with human leukocyte antigen A2 (HLA-A2) on the surface of cancer cells. The company said up-front fees would be funded through its existing cash reserves.

Arovella said that DKK1 was a target found in many cancer types, including blood cancers and solid tumors, 40 percent to 50 percent of the population HLA-A2 positive, "meaning that this technology may be applicable across a wide spectrum of cancers that affect a significant proportion of the population".

The company said that the antibody could be used as a chimeric antigen receptor for the treatment of blood cancers and solid tumors and the DKK1-Car-mAb had the potential to target a wide cancer spectrum and large population.

Arovella said that higher levels of DKK1 in cancer patients might be a prognostic biomarker for cancers such as multiple myeloma, head and neck squamous cell carcinoma, pancreatic adenocarcinoma and lung squamous cell carcinoma.

The company said that higher DKK1 production had been observed in bladder cancer and increased production of DKK1 might assist non-small cell lung carcinoma cell invasion and migration, it had been suggested that increased DKK1 levels might cause resistance to chemotherapy in cancers such as ovarian cancer.

Arovella managing-director Dr Michael Baker said "the data that we have seen for the DKK1-Car is compelling".

"We see a lot of promise in combining DKK1-CAR with our [invariant natural killer T]-cell therapy platform and expect synergistic effects for the treatment of certain cancers," Dr Baker said. "The next steps are to confirm the specificity, safety and proof-of-concept data in animal models before advancing this into manufacturing."

Arovella said it had agreed to pay MD Anderson licence fees, development milestones and single digit royalty payments based on net sales.

Arovella was up half a cent or 14.3 percent to four cents with 1.8 million shares traded.

[OSTEOPORE](#)

Osteopore says it will contribute \$1.8 million to an \$18.7 million Singapore project to work on dental implants over the next three years.

Osteopore said the project would be primarily funded by the Singapore Foundation and would be conducted with Singapore's National Dental Centre, the Institute for Molecular and Cell Biology and the Institute of Manufacturing Technology which were both part of the Singapore Agency for Science, Technology, and Research (Astar).

The company said the project intended to develop "a combination product with patented biological additives and polymer compound to enhance the bone regeneration capability and clinical outcomes".

Osteopore said the expected outcomes included shorter surgical procedures and faster recovery time for patients.

The company said the project had milestones including in-vivo implantations of its magnesium composite, and biological additives and polymer compounds would be combined and tested for any adverse reactions, any osteogenic differentiation, indicating bone growth, and higher osteogenic differentiation, indicating faster bone growth.

Osteopore said the studies were designed "to demonstrate the safety and efficacy of the novel material combination".

Osteopore was up 2.5 cents or 11.9 percent to 23.5 cents.

QRX PHARMA

QRX Pharma will ask its annual general meeting to approve a name change to Guardian Medical Solutions and double the directors fee pool to \$800,000 a year

QRX said the change of name to Guardian Medical Solutions was required under a heads-of-agreement or to “another name as decided by the board as part of the proposed series of transactions, subject to shareholder approval.

A letter from the chair Anthony Jefferies said that the directors had “identified an opportunity in the Vigo Technology (as defined in the Notice) that the board believes will be instrumental to the company’s ability to be relisted on ASX”.

The notice of meeting said that Vigo Technology was owned by Connected Care India Pvt Ltd (Vigo India) and was being assigned to its Singapore affiliate, Connected Care Pte Ltd (Vigo Singapore).

The company said the technology was “used for recording and relaying bio-signals of a patient using a biosensor or other patient device to a cloud-based computing system” and the data was then analyzed, generating clinical reports to be shared with treating doctors. QRX said that following trials in Australia, Vigo was “at a stage of development where it is, subject to [Australian Therapeutic Goods Administration] approval, ready for commercial exploitation in the fields of heart monitoring and multi-vital function monitoring” with further applications under development, including pregnancy monitoring which was expected to reach commercialization stage by mid-2022.

The company said it had agreements with Vigo India, Vigo Singapore, Guardian MS Pty Ltd and Dr Sekhar Chennupati, an inventor of the Vigo Technology to acquire the shares in Guardian, be granted sole and exclusive licence to the Vigo Technology in Australia and New Zealand, for five years with a five-year extension, and a first right to commercialize Vigo in South Africa, Singapore, Malaysia, the Philippines and other Asian and Oceania countries.

QRX said it would raise between \$2,000,000 and \$6,000,000 through a rights offer and apply to the ASX for re-admission, with the transactions to be completed by March 31, 2022 unless that date is extended.

QRX said that shareholders would vote on the remuneration report, to re-elect directors Mr Jefferies. Matthew Worner and Kevin Christensen, hold a 10-to-one share consolidation, and adopt a new constitution.

The meeting will be held virtually and at the Ground Floor Boardroom, Christie Spaces, 3 Spring Street Sydney and at <https://meetings.linkgroup.com/QRX22> on Friday January 7, 2022 at 11am (AEDT).

In September, QRX said it was reviewing its structure to continue as a viable company in the medical industry and hopes to re-list on the ASX (BD: Sep 10, 2021).

On May 25, 2007, QRX said it raised \$50 million to develop its Moxduo dual opioid combination drug for pain, with directors including Resmed founder Dr Peter Farrell, chief executive officer Dr John Holaday, Gary Pace, Michael Quinn and Peter Campbell.

In 2018, the ASX delisted QRX, which followed its failure to secure US approval for Moxduo and a subsequent period of voluntary administration (BD: May 23, 2018).

ARGENICA THERAPEUTICS

Argenica says it will release 1,635,000 shares from ASX escrow on December 17 and 1,687,500 shares from ASX escrow on December 31, 2021.

Argenica said that following the release, 22,625,752 shares would remain in ASX escrow, with 73,172,250 shares available for trading on the ASX.

Argenica fell 4.5 cents or 5.8 percent to 73.5 cents.

[NYRADA](#)

Nyrada says it will release 33,105,853 Chess depositary interest (CDIs) from ASX escrow on January 16, 2022.

Nyrada said that prior to the release it had 122,902,847 shares listed on the ASX, and that following the release it would have 156,008,700 shares available for trading.

The company said that 8,000,000 unlisted warrants, 18,000,000 performance shares, 29,6000 unlisted options would be released from ASX escrow on the same date.

Nyrada fell half a cent or 2.4 percent to 20.5 cents.

[PALLA PHARMA](#)

Palla has requested a trading halt “pending an announcement... in connection with the results of the review... of its strategy and operations”.

Trading will resume on December 15, 2021 or on an earlier announcement.

Palla last traded at 29.5 cents.

[MEDIBIO](#)

Medibio has requested a trading halt “to enable the company to prepare and release a market announcement regarding a capital raise”.

Trading will resume on December 15, 2021 or on an earlier announcement.

Medibio last traded at 0.7 cents.

[NANOSONICS](#)

Selector Funds Management says it has increased its substantial holding in Nanosonics from 15,410,874 shares (5.11%) to 20,566,564 shares (6.82%).

The Sydney-based Selector said it bought 5,155,690 shares on market at “various” prices but did not provide detail as required under the Corporations Act 2001.

Nanosonics was up 29 cents or five percent to \$6.12 with 1.3 million shares traded.

[OPTISCAN IMAGING](#)

Optiscan says Prof Camile Farah will replace executive director and managing-director Darren Lurie, as managing-director effective from today, starting on \$385,000 a year.

In April, Optiscan said it had appointed Robert Cooke as non-executive chair, replacing executive chair Mr Lurie who continued as managing director (BD: Apr 19, 2021).

Today, the company said that Mr Lurie had been with Optiscan since 2018, was leaving “to pursue other interest” and thanked him for his contribution.

Optiscan said that Prof Farah was currently an adjunct professor at the Rockhampton-based Central Queensland University and was an executive director of the Australian Centre for Oral Oncology Research and Education.

The company said that Prof Farah had published 250 clinical and scientific articles and multiple textbooks on oral cancer and pre-cancerous pathology.

According to his LinkedIn page, Prof Farah held a Bachelor of Science from Monash University, a Bachelor of Dental Science from the University of Western Australia and a Master of Dental Science and a Doctor of Philosophy from the University of Queensland.

Optiscan was up half a cent or 2.9 percent to 17.5 cents.

RHYTHM BIOSCIENCES

Rhythm says it has appointed former CSL public relations officer Dr Rachel David as an independent non-executive director effective from December 15, 2021.

Rhythm said that Dr David had more than 25 years' experience and had worked for CSL, Johnson & Johnson, Wyeth and McKinsey and was currently Private Healthcare Australia's chief executive officer

Dr David's LinkedIn page said she held a Bachelor of Medicine and Bachelor of Surgery from the University of Adelaide and a Master of Business Administration from Macquarie University.

Rhythm fell half a cent or 0.3 percent to \$1.67.

CHIMERIC THERAPEUTICS

Chimeric says head of business and corporate development Dr Eliot Bourk has been promoted to chief business officer and head of external innovation.

Chimeric said that Dr Bourk would continue to lead business and corporate development while adding responsibility for early scientific strategy.

The company said it would appoint a head of clinical development in 2022.

Chimeric said that Dr Bourk previously worked for Celgene and Kite Pharmaceuticals and held a Doctor of Philosophy from the University of California.

The company said that 12-month chief medical officer Dr Syed Rizvi would leave the company "to pursue other opportunities" in January 2022.

Chimeric fell one cent or 3.6 percent to 26.5 cents.

LIVING CELL TECHNOLOGIES

Living Cell says it has appointed Dr Belinda Di Bartolo as its chief operating officer to lead planning and preparations for a third trial of NTCell for Parkinson's disease.

Living Cell said that the Sydney-based Dr Di Bartolo had 18 years' experience in health and medical research, and was previously a research fellow at the Kolling Institute at the University of Sydney.

The company said that Dr Di Bartolo held Bachelor of Medical Science and a Doctor of Philosophy from the University of Sydney.

Living Cell was up 0.1 cents or 16.7 percent to 0.7 cents.

KAZIA THERAPEUTICS

Kazia says it has appointed Karen Krumeich as its chief financial officer starting in early January 2022.

Kazia chief executive officer Dr James Garner told Biotech Daily that Ms Krumeich's role was previously undertaken by the finance director and the company secretary.

The company said that the Pennsylvania-based Ms Krumeich had more than 30 years' experience in life sciences corporate finance, and had worked for Granacare Inc, Bristol-Myers Squibb, Soligenix, and Theravectys.

Ms Krumeich's LinkedIn page said that she held a Bachelor of Science in Pharmacy and Accounting from the University of Toledo, Ohio.

Kazia fell one cent or 0.9 percent to \$1.13.