

Monday October 14 – Friday October 18, 2019

All the news on ASX-listed agriculture and veterinary companies

- * OCT 18: ASX DOWN, AVW-42 UP: AP HEMP, AVECHO UP 25%;
 NANOLLOSE DOWN 8%
- * PALLA 'UNDERWRITTEN' \$31m PLACEMENT, RIGHTS OFFER
- * CLEAN SEAS NOTES TO RAISE \$15m
- * TASSAL APPROVED TO EXPAND QUEENSLAND PRAWN FARM
- * TERUMO HANDS BACK AVECHO (PHOSPHAGENICS) TPM-PROPOFOL
- * ROOTS, CLEARVUE TO BUILD SUSTAINABLE GREENHOUSES
- * ROOTS COOLING BOOSTS CANNABIS FLOWERS 118%
- * SEAFOOD INDUSTRY AUSTRALIA DIRECTIONS CONFERENCE; AWARDS
- * ANATARA BROMELAIN GARP EFFECTIVE FOR IBD, IBS, IN MICE
- * REGENEUS RECEIVES \$1.5m FEDERAL R&D TAX INCENTIVE
- * CANNPAL TO RELEASE 50m ESCROW SHARES
- * WIDE OPEN AGRICULTURE HEMP SEED TRIAL
- * RIDLEY 1.1m M-D PERFORMANCE RIGHTS AGM
- * REGENEUS CEO LEO LEE 15m OPTIONS AGM
- * ALTHEA COMPLETES CANADA PEAK ACQUISITION
- * CRESO DELIVERS FIRST ORDER OF 10% CBD OIL TO MEDLEAF NZ
- * THC RECEIVES S4, S8 NARCOTICS LICENCES FOR MARIJUANA
- * VANGUARD TAKES 5% OF BEGA
- * SCHRODER TAKES 5% OF COSTA
- * MACQUARIE REDUCES TO 6% OF NUFARM
- * PERENNIAL TAKES ODD FELLOWS 13.6% OF NATIONAL VETERINARY
- * MARTINO, FANUCCI, DOMENAL TAKE 9% OF FOOD REVOLUTION
- * MERCHANT TAKES 11.5% OF AUSCANN AT 15c; CANOPY CEASES
- * MERCHANT TAKES 12% OF AUSCANN AT 30c
- * PHARMAUST COLIN LA GALIA EPICHEM CEO; DR KEENAN DIRECTOR

MARKET REPORT

The Australian stock market was down 0.52 percent on Friday October 18, with the ASX200 down 35 points to 6,649.7 points. Sixteen of the AVW-42 stocks were up, 13 fell, nine traded unchanged and four were untraded.

Both Australian Primary Hemp (formerly Alchemia) and Avecho were the best, up 25 percent to 27.5 cents and 0.5 cents, respectively, with 1.1 million shares and 11.8 million shares traded, respectively.

Pharmaust climbed 13.6 percent; Apiam, Food Revolution and MGC were up more than five percent; Althea and Murray Cod improved more than three percent, Ecofibre and Tassal rose more than two percent; Clover, Memphasys, National Veterinary and Synlait were up one percent or more; with Bubs and Select Harvests up by less than one percent.

Nanollose led the falls, down 0.7 cents or 7.9 percent to 8.2 cents, with 8,843 shares traded.

Nufarm lost 5.5 percent; Cann Global, Cann Group and Elders fell three percent or more; Anatara, Costa and THC shed two percent or more; Bega, Clean Seas and Creso were down more than one percent; with A2 Milk and Elixinol down by less than one percent.

PALLA PHARMA (FORMERLY TASMANIAN POPPY INDUSTRIES ENTERPRISES)

Palla Pharma says it hopes to raise \$8.4 million in a placement and \$22.7 million in a "fully underwritten" two-for-five entitlement offer at 70 cents a share.

Palla said the record date for the non-renounceable entitlement officer would be October 21, with the institutional entitlement offer opening today October 17 and closing on November 18, 2019 and the retail entitlement offer opening on October 23 and closing on November 11, 2019.

The company said it was advised by Arnold Bloch Leibler and KPMG, with Morgans Corporate and Shaw and Partners joint lead managers and underwriters. Palla chief executive officer Jarrod Ritchie said the raising would strengthen the company's balance sheet, reduce debt and position the company "for future growth through expansion of both its Australian and Norwegian operations".

Palla was in a trading halt and last traded at 90 cents.

CLEAN SEAS SEAFOODS

Clean Seas says it hopes to raise \$15,403,078 through a one-for-six rights issue of convertible notes at \$1.00 each, with an interest rate of eight percent per annum. Clean Seas said the three-year notes would be issued at an eight percent discount to the market's volume weighted average price.

The company said the record date would be October 24, the offer would open on October 29 and close on November 11, 2019.

Clean Seas said there was no minimum subscription.

Clean Seas chairman Terry O'Brien said the funds would be used to "increase kingfish production in support of future sales growth, and ongoing capital works aimed to deliver scale and efficiency of operations".

Clean Seas was down one cent or 1.2 percent to 81.5 cents.

TASSAL GROUP

Tassal says it has all major approvals from the Whitsunday Regional Council and Queensland Government for the third stage of its prawn farm expansion.

Tassal said the expansion would add 80 hectares of production ponds and new hatchery infrastructure to the Proserpine, Queensland farm, with the total 350-hectare facility, becoming the largest prawn water treatment area in Australia, expected to be ready for stock by June 30, 2021.

The company said it had begun seeking approvals for its fourth stage expansion, which would add additional pond infrastructure by June 30, 2022.

Tassal chief executive officer Mark Ryan said the company could "now commence investing \$30 million to build 80 hectares of additional pond and new hatchery infrastructure for production next financial year that will create 50 new jobs and support our target of generating \$25 million in [earnings before interest, tax, depreciation and amortization] from prawns [by June 30, 2021]".

Tassal was up 11 cents or 2.7 percent to \$4.19 with 1 million shares traded.

AVECHO BIOTECHNOLOGY (FORMERLY PHOSPHAGENICS)

Avecho says Tokyo's Terumo Corp has handed back its tocopheryl phosphate mixturepropofol injectable and will not progress development of the drug in Japan.

Last year, Avecho said its alliance with Terumo, initially designed to explore tocopheryl phosphate mixture (TPM) patches, would focus on injectables, after its one-day TPM-oxymorphone patch agreement with Terumo was terminated (BD: Mar 20, 2018).

Today, the company said that the propofol general anaesthetic was used for sedation during surgical procedures, propofol, and had been combined with TPM for a joint patent application and toxicology program with Terumo.

Avecho said toxicology studies found the TPM-propofol combination to be safe for the induction and short-term maintenance of anaesthesia, "the vehicle used for the TPM-propofol formulation did not prove safe for a complete 24-hour infusion".

The company said it attributed the toxicity to the inclusion of a combination of commonly used injectable co-surfactants, polysorbate 80 and 20.

Avecho said continuous 24-hour exposure increased the administered amounts above those used routinely, which would restrict the labelled indication for the TPM-propofol product to the induction and short-term maintenance of anaesthesia.

Avecho said Terumo was unwilling to launch a propofol product with a restricted indication in Japan.

Avecho chief scientific officer Dr Paul Gavin said it was "important to note that the observed toxicity was not caused by the TPM".

"Pilot toxicology studies in this larger program demonstrated that TPM was safe for injection at amounts exceeding those currently used in all other injectable formulation programs utilizing TPM," Dr Gavin said.

Avecho executive chairman Dr Greg Collier said the partnership with Terumo had "provided considerable expertise and funding towards multiple TPM projects".

"While it is obviously disappointing to see it draw to a close, it is important to recognize how our technology and programs have advanced through our partnership with Terumo," Dr Collier said.

Avecho said it was yet to determine if it would continue to develop the existing TPM-propofol for acute use only or optimize the formulation for further toxicology studies. Avecho was up 0.1 cents or 25 percent to 0.5 cents with 11.7 million shares traded.

ROOTS SUSTAINABLE AGRICULTURAL TECHNOLOGIES

Roots says it has an agreement with the Perth-based Clearvue Technologies to collaborate on the production of solar-powered, temperature-regulated greenhouses. Roots said the greenhouses would use Clearvue's clear-glass solar-paneled windows, in conjunction with Root's root zone temperature optimization and irrigation-by-condensation technologies, when sufficient power was generated.

The company said a demonstration greenhouse would be built at its research hub in Beit Halevi, Israel, with construction expected to be completed within 12 months, after which Roots and Clearvue could use it for customer demonstrations and display purposes. Roots said it would also work with Clearvue to use its temperature optimization technology at Clearvue's greenhouse, currently being constructed at Murdoch University in Perth, Western Australia.

Roots was unchanged at 5.5 cents.

ROOTS SUSTAINABLE AGRICULTURAL TECHNOLOGIES

Roots says its root zone temperature optimization cooling system has increased dry cannabis flower yield up-to 118 percent in a climate-controlled greenhouse. Roots said the Southern California-based cannabis producer Canndescent had used its temperature optimization technology, alongside wet mattresses and fans, to keep cannabis plant roots at an optimal temperature of 21 degrees Celsius, despite a greenhouse air temperature of 30 degrees and an outside temperature of 43 degrees. The company said 400 plants of one cannabis strain had increased their yield by 30 percent, while 200 plants of a second strain had increased their yield by 118 percent. Roots chief executive officer Dr Sharon Devir said the results "demonstrate the effectiveness of our root zone cooling technology when used in conjunction with traditional air-cooling systems."

SEAFOOD INDUSTRY AUSTRALIA

Seafood Industry Australia says that more than 400 people attended its Seafood Directions Conference in Melbourne, October 9 to 11, 2019.

Seafood Industry Australia said that there were more than 70 participants at the Women in Seafood Australasia Power Up Breakfast, and the Federal Assistant Minister for Fisheries Senator Jonathon Duniam opened the conference and launched the 'National Fisheries and Aquaculture Industry Contributions Study 2017-2018' which documented the \$5.3 billion contribution the seafood industry makes to Australia's economy.

Seafood Industry Australia said the 2019 Seafood Industry Awards included the Primary Producer Award which went to the Portland, Victoria-based Yumbah Aquaculture, the Large Business Award was won by the Werribee, Victoria Mainstream Aquaculture Group and the Small Business Award went to Fremantle, Western Australia's Fins Seafood. Seafood Industry Australia said the Safety Award was won by Darwin's Paspaley Pearling Company and the Research, Development and Extension Award went to the Dowsing Point, Tasmania, Australian Seafood Industries.

The industry organization said the Environment Award, sponsored by Cooper Energy, went to Fremantle's Mendolia Seafoods, with the People Development Award, sponsored by the Australian Maritime Safety Authority, won by the Torres Strait, Mabuiag Island's Flora Warrior, with the Industry Ambassador Award to outgoing Sydney Fish Market general-manager Bryan Skepper and the Young Achiever Award to Geraldton, Western Australia's Justine Arnold.

ANATARA LIFESCIENCES

Anatara says its pineapple, bromelain-based diarrhoea treatment has shown statistically significant efficacy in mice.

Anatara said that the product it called gastro-intestinal re-programming or Garp was a "dietary supplement designed to restore and maintain a healthy human gut and microbiome" and was being developed to target inflammatory bowel disease (IBD), including ulcerative colitis and Crohn's disease, and irritable bowel syndrome (IBS). The company said that "pharmaceutical treatments have high failure rates and severe side-effects, leading to over 50 percent of IBS and IBD patients trying complementary and alternative medicines in the hope of effectively managing their chronic bowel condition ... [and] patients are willing to spend significant amounts of money on these therapies". Anatara said the treatment approach with IBD was "to suppress the inflammation with the goal of inducing and maintaining remission, while in the case of IBS, gastroenterologists primarily treat the symptoms of abdominal pain, bloating and alternating constipation and diarrhoea ... [and] these therapeutic approaches have high treatment failure rates". The company said that Garp addressed "the dysbiosis of the microbiome by inhibiting the attachment and invasion of pro-inflammatory bacteria, obtained from IBD and IBS patients, into healthy gut cells [in mice] by more than 95 percent (p = 0.002)". The company said the product "reduced gut inflammation by 85 percent by significantly

reducing the production of pro-inflammatory proteins (p < 0.001)". Anatara said that daily treatment with Garp "demonstrated a therapeutic benefit by significantly reducing the key disease indicators of colitis in mice ... [and] compared to a

placebo control, Garp reduced the combined disease characteristics of colon inflammation and disrupted bowel habits by 2.5-fold (p = 0.012).

The company said that the product promoted mucosal healing by increasing mucin genes by a factor of five to seven-fold (MUC2 and MUC6, p < 0.001) and both genes had been shown to be significantly reduced in both IBD and IBS patients.

Anatara said that through increasing the genes, it expected that the proteins which produced gut protecting and healing mucins would also increase, which in turn might promote mucosal healing.

The company said it expected to begin human clinical study activities in late 2019, with a view to partnering in the second half of calendar 2020.

Anatara chief executive officer Steven Lydeamore said the completion of the pre-clinical program "provided strong scientific proof that the Garp dietary supplement has the potential to be game changing".

"This is a major milestone for Anatara's Garp development program bringing us closer to partnering," Mr Lydeamore said.

Anatara was down 0.5 cents or 2.3 percent to 21 cents.

REGENEUS

Regeneus says it has received \$1,491,498 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program.

Regeneus said the rebate related to research and development expenditure for the year to June 30, 2019.

Last year, the company said it had an up to \$2 million research and development tax incentive loan facility with Paddington Street Finance (BD: Jun 28, 2018).

Today, Regeneus said the rebate would enable the company to repay in full the \$1.3 million Paddington Street loan and associated interest.

Regeneus was unchanged at 8.1 cents.

CANNPAL ANIMAL THERAPEUTICS

Cannpal says that 49,990,405 shares will be released from ASX escrow on October 25, 2019.

According to the company's most recent Appendix 3B new issue announcement, Cannpal had 43,145,595 shares on issue.

Cannpal chief executive officer Layton Mills told Ag & Vet Weekly that following the release of escrow shares, the company would have 93,136,000 shares available for trading.

The company said 10,750,000 unquoted options and 1,875,000 unquoted performance rights would be released from escrow on October 25.

Cannpal was unchanged at 13 cents.

WIDE OPEN AGRICULTURE

Wide Open Agriculture says it has planted a trial crop for 12 of its industrial hemp seed variations in Pingrup, 361km south-east of Perth, Western Australia.

Wide Open Agriculture said the trial site was part of a state-wide trial supported by Hempgro and the Western Australian Department of Primary Industries and Regional Development.

The company said the hemp trial and data analysis, expected to be completed by March 2020, would help determine the most suitable industrial hemp seeds for Western Australia's climate and soil.

Wide Open Agriculture director Dr Ben Cole said the trial was "vital for evaluating hemp production to progress and potentially unlock Western Australia's role in meeting the immense and growing demand for industrial hemp seed and fibre-based products." Wide Open Agriculture said industrial hemp produced a high protein seed that could be used in food, non-dairy milk and oil production, and that the company's sales website Dirty Clean Food had identified various hemp products to be used in potential new food and beverage products.

Wide Open Agriculture was untraded at 13.5 cents.

RIDLEY CORP

Ridley says its annual general meeting will vote to issue managing director Quinton Hildebrand 1,133,488 performance rights.

Ridley said the first tranche of rights would vest completely if the company achieved an earnings before interest, tax, depreciation and amortization to funds employed ratio of 30 percent or more by December 31, 2019, with a ratio of 19 to 30 percent resulting in 50 to 100 percent of rights vesting, and a ratio lower than 19 percent resulting in a cancellation of the rights.

The company said the second tranche would vest completely if the company achieved a total shareholder return of more than 70 percent by December 31, 2019, with a return between 30 and 70 percent resulting in 25 to 100 percent of rights vesting, and a return lower than 30 percent resulting in a cancellation of the rights.

Ridley said the meeting would vote on the remuneration report and the re-election of directors David Lord and Ejnar Knudsen.

The meeting will be held at KPMG, Level 36, Tower 2, Collins Square, 727 Collins Street, Melbourne, on November 25, 2019 at 11am (AEDT).

Ridley was unchanged at \$1.08.

REGENEUS

Regeneus says it will vote to issue chief executive officer Leo Lee 15,000,000 options for his appointment and a restructure of his remuneration.

Regeneus said it would vote to ratify the issue to Mr Lee 5,000,000 options, granted in four tranches and vesting on performance conditions to January 31, 2021.

The company said 2,500,000 options were exercisable at 20 cents a share and the balance at 25 cents a share, within five years.

Regeneus said it would vote to issue Mr Lee 10,000,000 options as part of the restructure of his remuneration, vesting in three tranches pending performance conditions, 3,500,000 exercisable at 10 cents a share, 3,500,000 exercisable at 15 cents a share and 750,000 each exercisable at 20, 25, 30 and 35 cents a share.

Regeneus said it would vote to ratify the prior issue of 29,250,000 shares, approve an additional 10 percent placement capacity and re-approve its share option plan.

The company said it would vote to adopt its remuneration report and o re-elect directors Dr John Chiplin and Alan Dunton.

The meeting will be held at the offices of Dentons Australia, Level 16, 77 Castlereagh Street, Sydney on November 21, 2019 at 3pm (AEDT).

ALTHEA GROUP HOLDINGS

Althea says it has completed the acquisition of Canada marijuana extraction and contract manufacturing business Peak Processing Solutions.

In July, Althea said it had raised \$30 million in a placement and would give former Peak director Greg Battersby and employee shareholders \$C4.1 million (\$A4.5 million) in cash and 25,851,846 shares to fund the acquisition (BD: Jul 25, 2019).

Althea was up 2.5 cents or 3.9 percent to 66 cents.

CRESO PHARMA

Creso says it has delivered the first order of its 10 percent cannabidiol oil to the Auckland, New Zealand-based Medleaf Therapeutics.

In August, Creso said it had appointed Medleaf to distribute its Canneqix 50 for chronic pain and its cannabidiol (CBD) oil in New Zealand (BD: Aug 6, 2019).

Today, the company said Medleaf CBD oil was now available via prescription.

Creso fell half a cent or 1.7 percent to 29 cents.

THC GLOBAL GROUP

THC says its Southport and one of its Bundaberg manufacturing facilities have received schedule four and schedule eight licences from the Queensland Department of Health. THC said it would now be able to manufacture, distribute and sell schedule eight controlled medicines and schedule four pharmacy medicines, including medical marijuana. The company said the licences would enable it to use its on-site analytical lab equipment for medical marijuana and other schedule four and eight substances.

THC said it now held all licences required to supply medical marijuana produced at its Southport facility to Australian patients, which it expected to commence in early 2020. The company said it expected to complete product validation this year for pharmaceutical certification from the Australian Therapeutic Goods Administration for its 'Bundy' facility. THC was down one cent or 2.5 percent to 39 cents.

BEGA CHEESE

The Malvern, Pennsylvania-based Vanguard Group says it has become a substantial shareholder in Bega, with 10,750,689 shares or 5.02 percent of the company. Vanguard said it bought and sold shares between June 14 and October 14, 2019, with the single largest purchase 91,953 shares on July 25 for \$413,789, or \$4.50 a share. Vanguard said registered holders of the shares included Brown Brothers Harriman, BNY Mellon, JP Morgan Chase Bank, State Street Bank and Trust, and various others. Bega was down six cents or 1.3 percent to \$4.45.

COSTA GROUP HOLDINGS

Schroder Investment Management Australia says it has become a substantial shareholder in Costa, with 18,282,615 shares or 5.7 percent of the company.

Schroder said the registered holders of the shares included BNP Paribas Securities Services, Citicorp Nominees Ltd HK, State Street Australia Limited, JP Morgan Custodial Services and National Nominees Ltd Melbourne.

The Sydney-based Schroder said that between June 15 and October 15, 2019, it bought 18,170,188 shares for \$69,831,624, or an average of \$3.84 a share.

Costa was down seven cents or 2.0 percent to \$3.45 with 5.5 million shares traded.

NUFARM

Macquarie Group says it has reduced its holding in Nufarm from 28,045,844 shares (7.38%) to 23,392,093 shares (6.16%).

The Sydney-based Macquarie said that between June 22 and October 10, 2019 it bought, sold and transferred shares at prices between \$4.33 and \$6.98.

Nufarm was down 36 cents or 5.5 percent to \$6.22 with 3,670,713 shares traded.

NATIONAL VETERINARY CARE

IOOF says it has ceased its substantial holding in National Veterinary, and Perennial Value Management says it has become substantial with 9,099,071 shares (13.58%). Last Friday, the Melbourne-based IOOF, formerly the Independent Order of Odd Fellows, told the stock market that it was divesting its holding in Perennial and, after the market closed, it issued 20 'Ceasing Substantial' notices.

Last night after the market closed, the Sydney-based Perennial said it had become substantial in National Veterinary and said it "ceased to be an associate of IOOF Holdings on October 10, 2019".

National Veterinary was up three cents or 1.3 percent to \$2.38.

FOOD REVOLUTION GROUP

Fanucci and Domenal Enterprises say they have increased their shareholding in Food Revolution from 64,847,918 shares (8.95%) to 65,437,918 shares (9.03%). In a substantial shareholder notice signed by director Sandra Martino, the Sydney-based Fanucci and Domenal Enterprises said they bought the 590,000 shares on-market between October 14 and 17, 2019, for \$44,795 or an average of 7.59 cents a share. Food Revolution was up 0.4 cents or 5.6 percent to 7.5 cents.

AUSCANN GROUP HOLDINGS

Merchant Funds says it has become a substantial shareholder in Auscann with 36,237,639 shares (11.43%), acquired from Canopy Growth Corp. The Perth-based Merchant Funds said it bought the shares through an off-market transaction on October 11, 2019 for \$5,435,645 or 15 cents a share. Separately, Auscann said that Canopy Growth has sold all of 42,087,639 shares (13.2%), with "the majority of the holding (11.43%) acquired by Merchant Funds Management. Auscann was unchanged at 27 cents with 2.7 million shares traded.

AUSCANN GROUP HOLDINGS

Merchant Funds Management says it has increased its substantial shareholding in Auscann from 36,237,639 shares (11.43%) to 39,400,000 shares (12.43%). The Perth, Western Australian-based Merchant said that between October 14 and 18, 2019 it bought and sold shares, with a single largest purchase of 2,687,639 shares for \$808,952 or 30.1 cents a share.

PHARMAUST

Pharmaust says Colin La Galia will replace Dr Martine Keenan as the chief executive officer of its subsidiary Epichem, who continues as a director and head of drug discovery. Pharmaust said Mr La Galia had more than 20 years' experience in drugs, devices and diagnostics and was previously employed at Abbott Rapid Diagnostics, Alere, Origin Healthcare, Hollywood Fertility Centre, Glaxosmithkline and Merck Sharpe and Dohme. Pharmaust was up 1.5 cents or 13.6 percent to 12.5 cents with 1.3 million shares traded.