

Biotech Daily

Thursday December 20, 2018

Daily news on ASX-listed biotechnology companies

- * ASX, BIOTECH DOWN: PATRYS UP 15%; REVA DOWN 10.5%
- * 2018 BIOTECH DAILY'S YEAR IN REVIEW
- * STARPHARMA \$142m US VIVAGEL BACTERIAL VAGINOSIS DEAL
- * PATRYS: 'PAT-DX1 KILLS BREAST CANCER BRAIN METASTASES IN MICE'
- * QBIOTICS RAISES \$15.5m OF HOPED FOR \$26m
- * DIMERIX RECEIVES \$1.1m FEDERAL R&D TAX INCENTIVE
- * PHARMAXIS RESUBMITS US FDA APPLICATION FOR BRONCHITOL
- * UNIVERSAL BIOSENSORS \$6.3m US TAX LIABILITY; CUTS, STAFF GO
- * MEMPHASYS: COLORADO CENTRE TESTS FELIX SPERM DEVICE
- * MICRO-X REQUESTS CAPITAL RAISING TRADING HALT
- * NOXOPHARM RECEIVES \$3.3m R&D TAX INCENTIVE
- * CRESO HAILS US HEMP LAW CHANGE
- * NEUROTECH FOUNDER DR ATTARD TREVISAN BACK AS ADVISOR
- * ESENSE LOSES DIRECTOR KOBI ZECHARIA

MARKET REPORT

The Australian stock market fell 1.34 percent on Thursday December 20, 2018, with the ASX200 down 74.8 points to 5,505.8 points. Fourteen of the Biotech Daily Top 40 stocks were up, 19 fell, six traded unchanged and one was untraded. All three Big Caps fell.

Patrys was the best, up 0.4 cents or 15.4 percent to three cents with 44.8 million shares traded. Kazia climbed 8.6 percent; Paradigm and Proteomics rose more than five percent; Uscom improved 4.2 percent; Genetic Signatures, Medical Developments and Starpharma rose more than two percent; Avita, Clinuvel, Cynata, Opthea and Pharmaxis were up more than one percent; with Mesoblast up 0.5 percent.

Reva led the falls, down two cents or 10.5 percent to 17 cents with 89,088 shares traded. Immutep lost 9.4 percent; Benitec fell 7.1 percent; Nanosonics and Orthocell were down more than six percent; LBT shed 5.7 percent; Compumedics and Osprey fell more than four percent; Airxpanders, Antisense and Cyclopharm were down more than three percent; Dimerix, Neuren, Telix and Universal Biosensors shed more than two percent; with CSL, Ellex, Polynovo, Resmed and Volpara down more than one percent.

BIOTECH DAILY EDITORIAL: 2018 - THE YEAR IN REVIEW

The year started exceptionally well with Varian offering \$1.56 billion for Sirtex and while waiting for CDH China to raise the bid to \$1.9 billion, Merck bought Viralytics for \$502 million.

2018 was dotted with under-rated very good news, including Prana back in the clinic with PBT434 for Parkinson's disease, Patrys cleaning up its act to bring PAT-DX1 close to the clinic for brain and breast cancer, Benitec claiming a \$892m Axovant deal and Neuren winning Acadia as a \$630 million backer.

But along the way the sector played the roller-coaster with some bad news, some weird news and some news no one understood.

January saw a rush of medical marijuana announcements. The 15 or so companies on that particular bandwagon are starting to sort themselves out and we are beginning to weed the dope from the grass.

The pioneer, MMJ sans Phytotech, has become "an incubator" investing in other marijuana companies.

Cann Group is growing quite a lot of hooch in its facilities and IDT is turning the dried flowers into 'good manufacturing practice' actual pharmaceutical drugs.

Medlab Clinical, Botanix and Zelda all win points for running clinical trials for cancer pain, acne, eczema, psoriasis, insomnia, autism and opioid reduction. Esense wants to put traces of hooch into beer and honey and Lifespot has a vaporizer. Several others appear to be part of the growing, import-export, bit-of-this-and-that chain, but sadly for patients it is still near impossible – despite all approvals being in place – to actually go to your doctor and be given a script for any form of medical marijuana.

For a moment in January it looked like the former Biota shareholders were going to overthrow the then Aviragen management and stop the merger with Vaxart, but once the US-based shareholders won a few extra pennies in the deal, instead of mobilizing the 10,000 Australian investors done-over by the move to the US, they voted for the merger.

There was "trouble at mill" for several companies, with Medibio (formerly Bioprospect) losing chief executive officer Jack Cosentino, followed by the re-emergence of Leo 'The Gun' Khouri, formerly a major shareholder and director of Bioprospect, and a spill that ultimately failed but dampened enthusiasm for the company boasting a Kennedy (related to JF and RF, not Graham) and Olympic gold medallist Michael Phelps.

We were shocked to see Archie Fraser depart from Optiscan and then dismayed by a board spill that left the company winged, despite the Carl Zeiss contract continuing.

THC, formerly Hydroponics, also had a board spill with the old guard resuming control, but instead of pursuing equipment sales, joined the pack in growing and selling the much-vaunted medical marijuana.

Medical Developments spent much of the year announcing European – and other – approvals for its Penthrox methoxyflurane inhaled analgesic, just a short 20 years or so after the Victoria Ambulance Service accepted it as the first-line treatment for moderate to severe trauma pain.

In February, Psivida announced a second positive phase III trial of its Durasert for uveitis and in March made plans to delist from the ASX, acquire Icon Bioscience and become Eyepoint on the Nasdag.

Proteomics launched its Promarkerd for diabetic kidney disease, Sienna claimed its first European sale of its telomerase-based adjunct cancer test, Orthocell claimed its first European sales of Celgro for dental implants, Invitrocue launched its Onco-PDO personalized cancer test, Atcor changed its name to Cardiex to market wearable sensors and Uscom's Prof Rob Phillips continued expanding the company's product portfolio, wearing out shoe leather and frequent flyer points only to see the share price fall. LBT sold its first APAS Independence to Melbourne's St Vincents Hospital.

Innate became Amplia and, in a case of very bad timing, the US Justice Department and FBI began proceedings against former director Chris Collins in relation to share dealing during a trading halt.

In non-ASX news, MTP Connect announced a raft of small but important grants and collaborations, Johnson & Johnson opened innovation offices at Monash University and Queensland University of Technology, both the Victoria State and Federal Governments continued funding important research and facilities. Biocurate announced its first six grants combining early stage research from traditional rivals The Shop and The Farm – the University of Melbourne and Monash University.

Despite being impressed with Blamey Saunders half-price beautifully designed hearing aids, it is Nuheara which caught the Biotech Daily ear with its Iqbuds Boost for mild to moderate hearing loss. Very cheap and able to do the job of filtering sound without the cost of a proper hearing aid. The most recent announcement of a device that allows a hearing-challenged baby boomer to balance the television with the conversation in the room is a clear vote-winner.

Cochlear announced it was bringing back a fully implantable cochlear ear implant having conducted initial research in 2005. An 11-patient feasibility trial is underway.

In May the UK National Health Service was not NICE to Clinuvel and remained that way, despite the company's best endeavors. Compumedics announced a \$133 million deal with China Health 100, which fell over, but its China revenue stream continues.

In June, the little-known Melbourne-based Medicines Development for Global Health won US approval for oral moxidectin for River Blindness, the first not-for-profit to win an FDA approval and the first to win a "priority review voucher" worth north of \$100 million. Oh, and it has the potential to save millions of lives.

August began well, with Acadia offering \$630 million for the rights to Neuren's Trofinetide for North America, and the two companies are currently negotiating a deal for the rest of the world.

But August was the month the Liberal-National Party - at the behest of Murdoch publications and a little man on Sydney radio - dumped the Prime Minister for Innovation Malcolm Turnbull, who promised to put innovation at the centre of his Government, but instead implemented cuts to the R&D Tax Incentive and had five different Innovation Ministers in three years.

At least Malcolm told us the lies we wanted to hear and his wife Lucy was a biotech chair for some years. The current mob wouldn't know their descending colon from an iron ore mine (apologies to Randy Newman).

Not that we think that Federal Labor has much more to offer – there was a terrific Bill Shorten statement on the importance of science and research, but until we see the funding and policies, that has as much value as Malcolm's innovation statement.

It was also the month that Innate's Chris Collins felt the long arm of the law. If only ASIC and the ASX had the investigative powers of the US regulators ...

Dr Greg 'Hercules' Collier has cleaned out the Invion stable, acquiring a light sensitive cancer treatment, and packaged the Dr Mitch Glass respiratory assets he inherited into a new company, along with Dr Glass, leaving Invion free to focus on cancer.

Biotron had good news that it downplayed with BIT225 showing "significant benefit" for HIV, while Bionomics anti-anxiolytic BNC210 showed no benefit for post-traumatic stress disorder. Kazia (formerly Novogen) started its long-awaited glioblastoma trial, while Avita and Volpara both won US regulatory approvals, as did Optiscan's Carl Zeiss microscope and Resonance Health's Ferrismart.

Resapp claimed success in its US Smartcough-C-2 trial, despite having missed its stated first primary endpoint, saying that its smartphone algorithm was better than the doctors with stethoscopes. The market disagreed.

As recently as September 30, in a Biotech Daily Top 20 "first" we had four companies worth more than \$1 billion each in the BDI-20. But negative announcements in October and November, the time came to "rebalance" - as the S&P Indices calls it - the BDI-40.

November gave us many much unwanted "firsts".

At 9.01am on Monday November 12, we started the week with the News Flash that Phosphagenics had lost its hoped-for \$415 million Mylan case.

Seven minutes later we posted the news buried after the market closed the previous Friday that Bionomics would lose long-standing chief executive officer Dr Deborah Rathjen and review its assets.

And if that wasn't a bad enough start to the day at 11.17am a third News Flash went out that Mesoblast's much heralded end-stage heart failure trial had missed its primary endpoint. We rarely post two news flashes in a week, let alone three in one day.

And, yes, we know. Now that the trial showed the stem cells don't work for the endpoint cited, we all know it was not actually a Mesoblast trial but an independent investigator-led study, funded entirely by the US Government, and results that had never been mentioned previously about gastro-intestinal bleeding could be why the FDA approves the stem cells.

But it didn't stop there. Just when you thought it was safe to go back into the biotech waters, on Wednesday November 14, Factor Therapeutics missed its phase II venous leg ulcer endpoint.

Four sets of bad news in three days. Not the record we wanted.

Unlike the Morrison Government, the Australian Biotech sector has seriously talented depth and replacing the demotees and departees of Admedus, Bionomics, Factor and ITL with the promotees of Antisense, Kazia, Patrys and Proteomics was not difficult.

It is also a very clear message that what goes down can go up, with three of the four returning to the Top 40 having had a brief vacation while finding new technologies or further developing existing ones.

And the mice and rats we've cured, can't be believed. There's never been a better time to be rat with cancer. Meanwhile, the Walter and Eliza Hall Institute has taken mouse models a step further developing mice that can be bred with specific human cancers.

Democracy Asleep

We are always amazed at how many companies can issue their directors and management options and so-called performance shares without raising the ire of shareholders who are paying to be diluted.

But the most amazing failure of shareholder activism has to be the acquisition of Sirtex by CDH. While 99.7 percent of votes at the meeting backed the \$1.9 billion deal, a staggering 92.6 percent of shareholders didn't bother to vote for their \$33.60 a share.

Valuations

A number of CEOs and directors have complained to Biotech Daily of what they consider to be poor valuations or a lack of understanding of the work of the company.

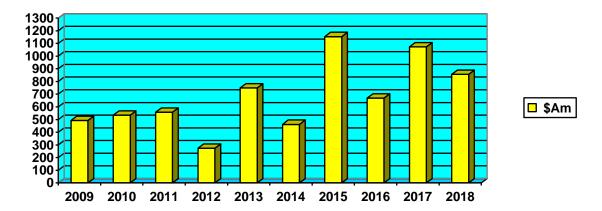
The Four Rules of Australian Biotech Valuations are quite simple:

- i) When a company announces good news, the share price goes down;
- ii) When a company announces bad news, the share price goes down;
- iii) When a company announces no news, the share price goes down;
- iv) From time to time, for no apparent reason whatsoever, the share price goes up.
- ... and this proves that the market is always right.

Nevertheless, despite all the shocks, for the year to November 30, 2018 the benchmark ASX200 has only marginally outperformed the Biotech Daily Top 40, with the ASX200 down 5.1 percent and the BDI-40 down 5.9 percent.

In October, Telix made an announcement each day for four days in a row, with three and six percent rises. The day it didn't make an announcement, the share price went up 12.8 percent.

Capital Raising Chart 2009 -2018



While the total funds raised by the ASX-listed biotechs for human health was down 23.3 percent from last year at \$855.7 million so far, it was the third highest on record and well above the 10-year average of \$677 million.

Kamikaze of the Year

Unfortunately, there have been several contenders for the ignoble prize, again.

The marijuana companies have not been backward in coming forward, with Esense's internal brawling making it sound more like Nonsense, not to mention THC (formerly Hydroponics) having similar but faster results. Can someone tell MGC it doesn't have to have a trading halt every time a board member passes wind?

Optiscan was clearly in the mix, having been rebuilt by Archie Fraser only to be brought undone by senior staff resignations and the board spill, and is now trying desperately to maintain the Zeiss contract. Talk about self-inflicted wounds ... and they were far from microscopic.

But for all 'round "we have no idea what you are doing and don't think you do either" the award has to go to Admedus and former chairman and current chief executive officer Wayne Paterson for taking a Top 20 company and putting it in a suspension for four months for a recapitalization, having taken the Prof Ian Frazer blue-sky virus vaccine business and spun it into a private company, majority-owned by Hong Kong, and having made himself chairman for "at least five years".

Most of the December \$18.9 million capital raising appears to be at rates of 12.5 percent and possibly even 25 percent. The company has had three chief financial officers and four company secretaries in 12 months and that almost equals the Bruce Mathieson Karmelsonix/Isonea/Respiri record of four chief executive officers in 12 months.

Admedus is a train wreck, only paralleled by the Morrison Federal Government.

Worse, the promising anti-virus vaccines have now gone to Mr Paterson and his Hong Kong friends. Where are the PLA and Triads when you need them?

Chairman of the Year

This award gives credit to those admirals of the fleet who give strategic directions to the captains of their ships. If the objective is unclear, the mission will fail.

While tribute must always be paid to "Chairman Mel", Dr Mel Bridges of Too Many Companies to List, and we acknowledge last year's inaugural winner, David Williams, this year's award was pretty much decided in February.

Paul Hopper signed the \$502 million Merck acquisition of Viralytics and both Imugene and Prescient (of which he is a mere director) are Top 40 companies working on cancer trials. Well done, Paul

CEO of the Year

This is always the hardest decision.

We are blessed with some very hard-working chief executive officers and deciding who wins is difficult.

The Pharmaxis twins Gary Phillips and David McGarvie have scores on the board, despite the lack of valuation. Uscom executive chairman Prof Rob Phillips, Antisense managing director Mark Diamond and Rhinomed's Michael Johnson are three tireless Eveready batteries constantly on the road keeping their companies ticking over and Cellmid's Maria Halasz has worked exceptionally hard to keep Cellmid keeping on.

Starpharma's Dr Jackie Fairley, Opthea's Dr Megan Baldwin, Immutep's Marc Voigt, Genetic Signatures Dr John Melki, Volpara's Dr Ralph Highnam and Proteomics' Dr Richard Lipscombe have all impressed in 2018.

But only one has built their company into a billion dollar biotech from just \$114 million four years ago.

This year's winner is unequivocally Dr Sam Hupert for taking Pro Medicus into the billion dollar club, firstly with a technology he co-developed, acquiring the synergistic Visage Imaging and then landing the contracts to use the technologies.

Regulation

A few tips for making your media release make sense:

1. Give all finance figures in Australian dollars. Constant currency, head winds, tail winds and cross winds just sound like data mining, whether you are CSL or Start-Up From Nowhere.

The Anteo debacle of reporting in Euro for 12 months meant that no one believes any of their figures.

2. AGM results: People who don't vote don't count. It's very simple. Give the total number of ALL votes on ALL resolutions and say what the resolutions were and the percentage required to pass. And then provide the total number of shares on issue.

If the opposition is less than 25 percent in the room on the day you will win the remuneration report and any special resolutions, but if it is more than five percent of the total on issue you could face expensive and time-consuming extraordinary general meetings.

3. Make sure your company's substantial shareholders understand the Corporations Act. Hiding behind "nominee" companies makes most people think they are crooks; and failing to state how much they paid for shares is a breach of the Corporations Act. Filing illegible or unreadable forms is also failing to comply with the Act.

Biotech Daily was very pleased to learn during the course of this year that we have been directly responsible for a number of changes to ASX regulations and/or guidelines.

Previously, Listing Rule 3.1 allowed companies themselves to decide what was "material" making a mockery of the Rule. This has been changed to "the reasonable person test" and we believe that is ... reasonable.

Other changes include the disallowance of hiding multiple news items in announcements or providing vague headlines such as "Investor Letter" or "Quarterly Report" when the real headline should be "Drug Fails, Board Quits, Sails to Venezuela".

Biotech Daily continues to encourage both the ASX and ASIC to enforce their existing regulations, as well as develop additional ones, such as disclosing the real identity of people hiding behind nominee companies.

Summer holiday publishing schedule

Biotech Daily will shut down for the long, hot, Australian Summer tomorrow, December 21 and be back on deck refreshed and recharged on Monday January 21, 2019.

Australia is on holidays, so DO NOT put out any announcements - that no-one will read anyway - for the next month. Go to the beach.

That said, we shall monitor all announcements and publish a Summer Holiday Catch-Up edition, highlighting any companies posting bad news after the market closes on Christmas Eve (Monday) and New Year's Eve.

Biotech Daily would like to thank its team of advisers: Prof George Fink, Dr Stuart Garrow, Marc Sinatra and Michael Ibbott for invaluable wisdom, insights and cautions throughout the year.

We wish everyone an excellent Southern Hemisphere Summer break, a Merry Christmas, a Happy Hogmanay/New Year and see you all in 2019.

STARPHARMA

Starpharma says it has a more than \$142 million licence deal for Vivagel BV for bacterial vaginosis with the Berwyn, Pennsylvania-based ITF Pharma.

Starpharma said that a \$US20 million (\$A28 million) fee was pending US Food and Drug Administration (FDA) regulatory approval and that under the agreement it was eligible for a further \$US81 million (\$A114 million) in commercial milestone payments.

The company said the US licence with ITF Pharma would continue until the later of either 10 years or until patent expiry, in at least 2030 with potential extensions out to 2033. Starpharma said that bacterial vaginosis was "the most common vaginal infection in the world and twice as common as thrush".

The company said there was a high prevalence of bacterial vaginosis in the US, and that one third of US women had bacterial vaginosis and that two of these women had recurrent episodes of bacterial vaginosis.

Starpharma said the global market for bacterial vaginosis was estimated to be \$US750 million (\$A1.054 billion) and the market for the prevention of recurrent bacterial vaginosis to be worth about \$US1 billion (\$A1.4 billion).

The company said ITF was focussed on prescription women's health products and was the US subsidiary of the Milan-based Italfarmaco SpA.

Starpharma said that when launched, Vivagel BV would "become ITF Pharma's top priority women's health product".

The company said that ITF was expanding its women's health salesforce to 60 specialized representatives with a "team of dedicated telemarketing and digital marketing professionals who will complement its sales representatives in the field".

Starpharma said that under the agreement it would be responsible for regulatory activities for Vivagel BV, while ITF Pharma would be responsible for all commercialization activities including "product launch, market pricing, reimbursement, marketing, promotion and sales".

The company said that the US regulatory process for Vivagel BV was already well-advanced and undergoing FDA priority review under fast track status, following acceptance of the new drug application in July, 2018 (BD: Jul 9, 2018).

The company said that initially it would be responsible for supplying Vivagel BV to ITF Pharma but that "in the future, Italfarmaco may apply for FDA approval of its own manufacturing facility".

Starpharma chief executive officer Dr Jackie Fairley said the company was "delighted to licence Vivagel BV to ITF Pharma for the US".

"ITF Pharma is an organization with a strong pedigree in women's health, a high calibre commercial team and a great deal of sales and marketing experience in the category," Dr Fairley said.

"There are currently no approved products in the US for prevention of recurrent BV, and feedback from clinicians and patients indicate a strong interest in new BV therapies," Dr Fairley said.

"Following approval and launch of Vivagel BV, these patients will finally have an effective, non-antibiotic BV treatment and an approved product for recurrent BV," Dr Fairley said. ITF chief executive officer Dennis Willson said that Vivagel BV "has been described as life-changing by [bacterial vaginosis] patients in the US".

"We think it's a breakthrough product in the management and prevention of [bacterial vaginosis]," Mr Willson said.

Starpharma was up four cents or 2.95 percent to \$1.395 with 3.95 million shares traded.

PATRYS

Patrys says mice treated with PAT-DX1 for brain metastases from triple-negative breast cancer had 93 percent less brain cancer than controls and 86 percent outlived all controls. Patrys said that in the Yale School of Medicine study by Dr James Hansen and Dr Jiangbing Zhou brain metastases were generated by injection of luciferase-labelled, brainseeking triple-negative breast cancer cells directly through an intracardiac injection. The company said that one week later, the presence of brain metastases was confirmed and treatment with PAT-DX1 was initiated by tail vein injection, with the ability of PAT-DX1 to reduce the breast cancer brain metastases "seen after just one week of treatment". "After four weeks of treatment with PAT-DX1, treated mice showed 93 percent less brain metastasis than untreated mice, quantified by luminescence intensity," Patrys said. "PAT-DX1 also significantly improved survival, with 86 percent of the mice [six of seven] treated with PAT-DX1 still alive after all control mice had died," the company said. Patrys said that no toxicity associated with PAT-DX1 treatment was observed. The company said that brain metastases developed in up to 50 percent of patients with metastatic triple-negative breast cancer, and they had "devastating effects on neurologic function and survival", with new therapeutic approaches that target and treat triplenegative breast cancer (TNBC) brain metastases needed.

Patrys chief executive officer Dr James Campbell said that the company's previous work had "shown promising activity of PAT-DX1 against TNBC, the most therapeutically challenging form of breast cancer".

"Doctors Hansen and Zhou at Yale are leading the efforts to use PAT-DX1 against malignancies of the brain, and they previously showed that PAT-DX1 crosses the blood-brain barrier to suppress [glioblastoma multiforme] tumors," Dr Campbell said. "Their new demonstration of PAT-DX1 single agent activity against TNBC brain metastases has important implications for the potential applications of PAT-DX1 in the treatment of a wide range of brain tumors," Dr Campbell said.

"As whole brain radiotherapy is the current standard of care for breast cancer patients who develop brain metastases, Patrys and the Yale School of Medicine will undertake a follow-up experiment in the same metastatic mouse model of TNBC to determine whether PAT-DX1 in combination with radiation therapy might be even more effective than either treatment used alone," Dr Campbell said.

Patrys was up 0.4 cents or 15.4 percent to three cents with 44.8 million shares traded.

QBIOTICS GROUP

Qbiotics says it has raised \$15,558,376 in a share offer at 60 cents a share.

Qbiotics said that of the 304 applications "approximately two thirds of applications were received from existing shareholders and one third from new investors".

In November, the company said it hoped to raise \$26 million in its initial public offer for its tropical rainforest-derived anti-cancer and wound healing compounds (BD: Nov 6, 2018). Qbiotics is a public unlisted company.

DIMERIX

Dimerix says it has received \$1,073,62 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program.

Dimerix said the rebate related to research and development activities for the year to June 30, 2018.

Dimerix fell 0.2 cents or 2.3 percent to 8.6 cents.

PHARMAXIS

Pharmaxis says it has resubmitted its new drug application for Bronchitol for cystic fibrosis to the US Food and Drug Administration.

Pharmaxis said it had resubmitted its new drug application in response to issues raised by the FDA in March, 2013 and that it expected the FDA review of the resubmission to take six to 12 months (BD: Mar 19, 2013).

The company said the resubmission included the results of the phase III clinical trial it completed in 2017, conducted in consultation with the FDA (BD: Feb 23, 2017).

Pharmaxis said the Parma, Italy-based Chiesi Group was licencee for Bronchitol in the US and responsible for US regulatory approval and commercialization of Bronchitol.

The company said that pending FDA approval, it would receive a \$US10 million (\$A14.1 million) milestone payment for the commercial launch of Bronchitol in the US.

Pharmaxis chief executive officer Gary Phillips said "the resubmission of the Bronchitol [new drug application] concludes a substantial investment and effort by Pharmaxis and Chiesi over an extended period of time".

Pharmaxis was up half a cent or 1.9 percent to 27 cents.

UNIVERSAL BIOSENSORS

Universal Biosensors says it has a tax liability of up to \$US4.5 million due to US tax changes and was undertaking cost saving measures including staff changes. Universal Biosensors said the US Internal Revenue Service issued its first guidelines on its Global Intangible Low-Taxed Income and as a result it expected its US tax liability to be between \$US3.5 million (\$A4.9 million) and \$US4.5 million (\$A6.3 million).

The company said it was making cost saving measures that included the replacement of outgoing company secretary Cameron Billingsley with chief financial officer Salesh Balak and the resignation of the head of quality control and clinical Dr Adrian Oates who would continue in his role until March 19, 2019.

Universal Biosensors said it expected its Australian income tax liability to be "nil as the company has sufficient carry forward losses" but it would make the final determination of its Australian income tax liability once year end accounts were finalized.

The company said its plan and timing for the deployment of surplus cash arising from Johnson & Johnson subsidiary Lifescan's buy-out of its obligation to pay quarterly service fees for its Verio blood sugar test strips could "not be further addressed at this time given our pending implementation of the cost reduction actions described above and ongoing discussions with current and prospective business partners" (BD: Sep 26, 2018). The company said it was also reducing costs by suspending development spending on its in-house coagulation test device and redirecting the funds to its Siemens program development initiatives for its Xprecia Stride Coagulation Analyser whilst "other prospective partner developments are explored" (BD: Sep 9, 2011; May 8, 2017).

MEMPHASYS

Memphasys says the Denver-based Colorado Centre of Reproductive Medicine will undertake in-vitro assessments of its Felix sperm separation device.

Memphasys previously said the Stockholm, Sweden-based Anova Karolinska and France's Genetics, Reproduction and Development laboratory would also conduct in-vitro clinical validation of the Felix device (BD: Nov 22; Oct 22, 2018).

Memphasys was unchanged at 2.9 cents with 1.7 million shares traded.

Universal Biosensors fell half a cent or 2.2 percent to 22 cents.

MICRO-X

Micro-X says it has requested a trading halt pending "an announcement to the market in relation to a capital raising".

Micro-X said trading would resume on December 24, 2018 or on an earlier announcement.

Micro-X last traded at 33.5 cents.

NOXOPHARM

Noxopharm says it has received \$3,264,337 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program. Noxopharm said the rebate related to expenditure for the year to June 30, 2018. Noxopharm fell one cent or 2.1 percent to 47 cents.

CRESO PHARMA

Creso says it "has the opportunity" to sell its marijuana-derived Cannaqix, Anibidiol and Cannadol in the US following the removal of hemp from Controlled Substances Act. Creso said the US Senate and House of Representatives had removed hemp from the Act which was "expected to be signed imminently by President [Donald] Trump after which it will become law".

The company said Cannaqix was a mouth lozenge, Anibidiol was a pet food and Cannadol was an ointment intended for use by athletes to help alleviate pain and inflammation.

Creso was up one cent or 2.9 percent to 35 cents.

NEUROTECH

Neurotech says that founder Dr Adrian Attard Trevisan will return to the company as a strategic advisor with a "focus on medical and artificial intelligence".

In June, Neurotech said that Dr Trevisan had retired as a non-executive director of the company (BD: Jun 28, 2018).

Neurotech said Dr Attard Trevisan had no intention of selling further shares of the year ahead and would be paid in shares in lieu of cash.

Neurotech fell half a cent or 10 percent to 4.5 cents.

ESENSE LAB

Esense says non-executive director Kobi Zecharia has resigned "to focus on his other business interests".

Esense was up 0.1 cents or 3.45 percent to three cents.