



Biotech Daily

Monday April 1, 2019

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH UP: PARADIGM UP 10%; PATRYS DOWN 8%**
- * **MARCH BDI-40 UP 6%, ASX200 UP 0.2%, BIG CAPS FLAT**
- * **MICRO-X \$10m THALES DEAL FOR X-RAY TECHNOLOGY**
- * **KAZIA: CANTRIXIL FOR OVARIAN CANCER 'SAFE, 1 RESPONSE'**
- * **EURO PATENT FOR AMPLIA AMP945 FOR FIBROTIC DISEASES**
- * **EXOPHARM PLANS PLEXARIS PLATELETS FOR WOUND HEALING TRIAL**
- * **GI DYNAMICS EXTENDS CRYSTAL AMBER NOTE**
- * **INVION PLEADS 'RESEARCH, SOCIAL MEDIA' TO ASX 39% QUERY**
- * **BARD1 TELLS ASX: 'ASSAY DEVELOPMENT' LED TO 25% JUMP**
- * **MEMPHASYS CHAIR ALISON COUTTS INCREASES, DILUTED TO 14.6%**
- * **DIRECTOR ANDREW GOODALL TAKES 24.6% OF MEMPHASYS**

MARKET REPORT

The Australian stock market was up 0.59 percent on Monday April 1, 2019, with the ASX200 up 36.3 points to 6,217.0 points. Eighteen Biotech Daily Top 40 stocks were up, nine fell, nine traded unchanged and four were untraded. All three Big Caps were up.

Paradigm was the best, up 18.5 cents or 9.8 percent to \$2.07, with one million shares traded. Both Avita and Imugene climbed 5.3 percent; Benitec, Mesoblast and Volpara improved four percent or more; Genetic Signatures and Proteomics were up more than three percent; Cynata, Kazia and Medical Developments rose more than two percent; Clinuvel, CSL, Nanosonics, Resmed and Telix were up one percent or more; with Cochlear, Ellex, Polynovo, Pro Medicus and Starpharma up by less than one percent.

Patrys led the falls, down 0.2 cents or 8.3 percent to 2.2 cents, with 2.8 million shares traded.

Oncosil lost 7.4 percent; Compumedics was down 5.4 percent; Immutep retreated three percent; Dimerix and Prescient shed two percent or more; with Actinogen, Neuren and Opthea down more than one percent.

BIOTECH DAILY TOP 40 INDEX (BDI-40)

March was good for Australian biotechnology, with Avita and Paradigm breaking out to their highest market capitalizations in their history.

The Biotech Daily Top 40 Index (BDI-40) climbed 5.9 percent for the month, outperforming the ASX200 up 0.2 percent, while the three Big Caps of Cochlear, CSL and Resmed (which are not included in the BDI-40) slipped a collective 0.02 percent and the Nasdaq Biotechnology Index (NBI) was down 0.1 cents (see charts below).

For the year to March 31, 2019, the BDI-40 was up 1.0 percent, the ASX200 rose 7.3 percent, the Big Caps improved 20.05 percent and the NBI was up 4.7 percent.

In March, 19 of the Biotech Daily Top 40 Index (BDI-40) stocks were up, 13 by more than 10 percent, 16 fell, with seven losing more than 10 percent, and five were unchanged.

Avita was the best, up 107.1 percent for the month and 784.7 percent for the year to \$522 million, followed by Paradigm up 65.8 percent for the month and 662.9 percent for the year to \$267 million.

Uscom was up 47.1 percent in March, followed by Compumedics (37.9%), Osprey (30.2%), Genetic Signatures (23.2%), Medical Developments (18.3%), Telix (17.3%), Volpara (16.1%), Antisense (14.3%), LBT (14.3%), Prana (13.6%) and Mesoblast (12.2%).

Oncosil led the falls on bad news for its CE mark application, down \$89 million or 78.1 percent to \$25 million, followed by Cynata (22.4%), Prescient (14.3%), Impedimed (13.7%), Optiscan (13.6%), Universal Biosensors (12.5%) and Kazia (12.1%).

In March, Cochlear improved \$118 million or 1.2 percent to \$9,959 million, CSL slipped \$52 million or 0.06 percent to \$87,719 million and Resmed shed \$86 million or 0.4 percent to \$20,704 million.

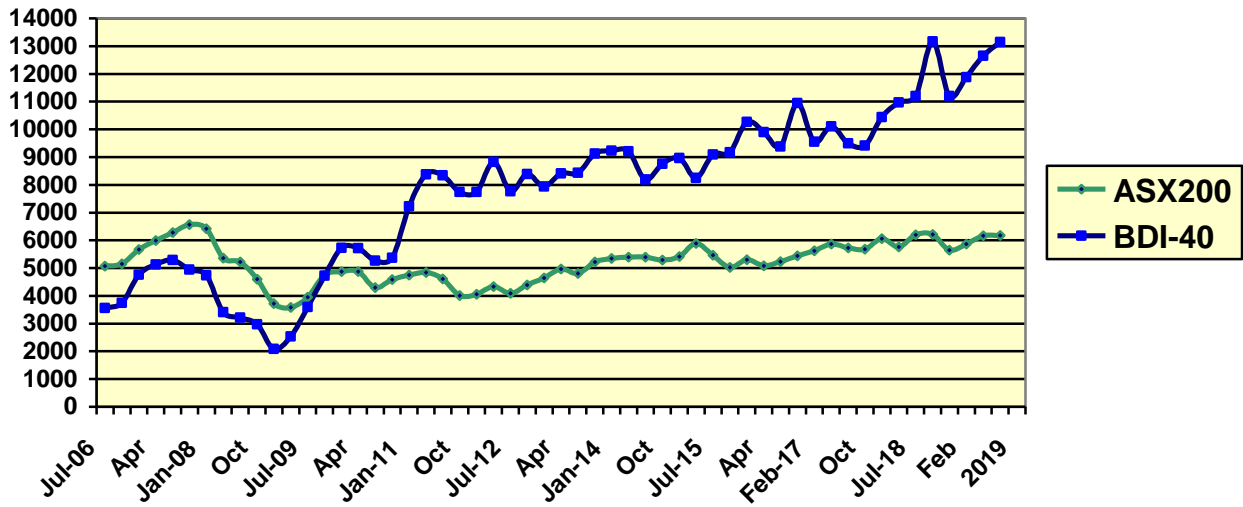
Outside the Top 40, Resonance continued its record run, up 19.4 percent for the month and 362.5 percent for the year to \$37 million, Alcidion was up 71.9 percent for the month and 129.2 percent for the year to \$55 million and Bluechiip was up 95.8 percent for the year to \$47 million.

Elixinol Global was up 222.9 percent for the year to \$565 million and it hasn't really become a medical marijuana company, yet. Medadvisor and Recce were up more than 50 percent for the 12 months to March 31, 2019.

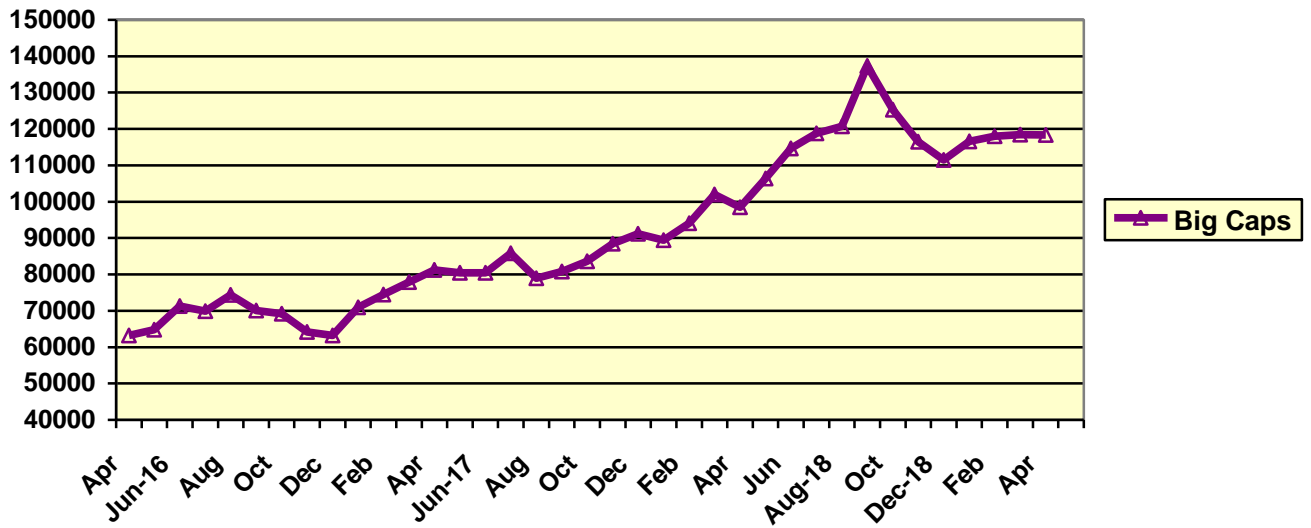
Nine of the 16 stocks in Cannabis Corner fell, four were up and three were unchanged, with Cann Group up 31.6 percent and Elixinol up 32.0 percent. The cumulative market capitalization of the 16 companies was up 9.9 percent in March to \$1,535 million, the highest it has been April 30, 2018.

On the Nasdaq, Queensland's Protagonist was up 45.3 percent to \$414 million; from a low base, Vaxart (Biota) was up 35.2 percent to \$23 million; Israel's Redhill (with Australian assets) was up 8.5 percent to \$332 million; and Eyepoint (Psivida) fell 30.5 percent to \$241 million.

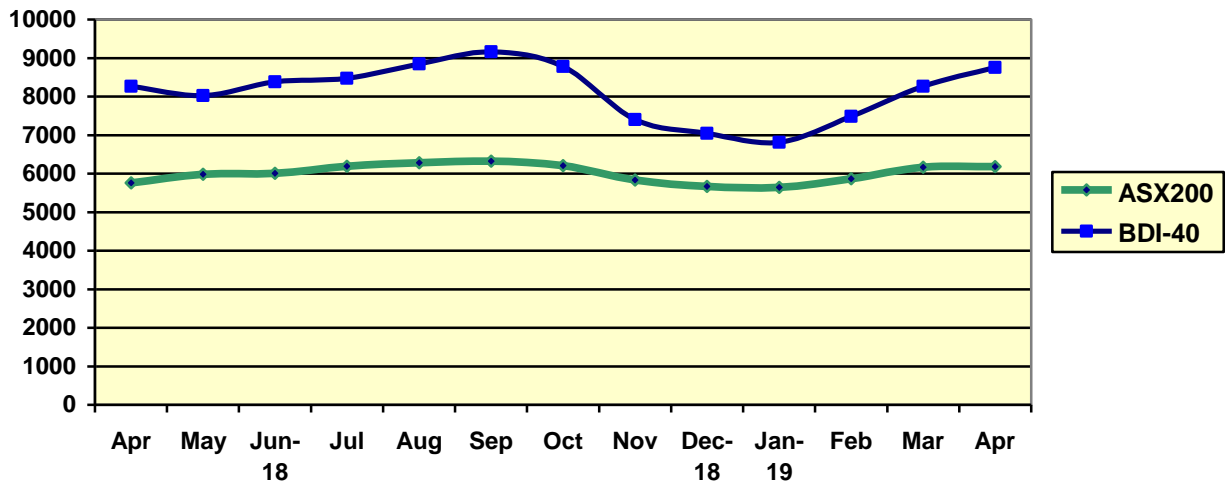
BDI-40 v ASX200 Jun 30, 2006 to Mar 31, 2019- Adjusted



Big Caps \$m (Cochlear, CSL, Resmed) Mar 31, 2016 – Mar 31, 2019



BDI-40 (\$m) v S&P ASX 200 – Mar 31, 2018 - Mar 31, 2019 (current, raw data)



[MICRO-X](#)

Micro-X says it has a long-term agreement with Thales Group, including a subscription for \$10 million worth of stock in a six-year convertible bond.

Micro-X said that on approval from the Foreign Investment Review Board, it would receive \$5 million with the \$5 million balance to be drawn as required.

The company said the loan would be convertible at any time in the sixth year of the loan at a 20 percent discount to the 30-day volume-weighted average price at conversion, and pay interest at 185 basis points above the six-month Australian bank bill swap rate.

Micro-X said Thales would collaborate on a range of products, including to sell its counter-terrorism Mobile Backscatter Imager for the assessment of improvised explosive devices and Micro-X would licence a core imaging subsystem for Thales' airport checkpoint security system and collaborate to manufacture a new range of ultra-miniature x-ray tubes for medical and security markets.

Thales head of microwave and imaging sub-systems Jean-Jacques Guittard said the agreement was "just the beginning ... [and] like those Silicon Valley pioneers in the [1970s] we are at the birth of a new technology evolution".

"From airport checkpoints to counter terrorism activities to future medical imaging devices, Thales and Micro-X are on the edge of a historically decisive moment," Mr Guittard said.

"In addition to these high-tech synergies and as a major player in the digital domain, this partnership will give us a technological leap none else can offer," Mr Guittard said.

Micro-X climbed 8.25 cents or 30.8 percent to 35 cents.

[KAZIA THERAPEUTICS](#)

Kazia says one of nine-patients in its phase I dose-escalation Cantrixil ovarian cancer study had a partial response when co-administered with chemotherapy.

Kazia said the trial began in 2016 at five US and Australian sites and last year said that 11 of 14 enrolled patients were well enough to receive treatment at the dose of 5.0mg/kg (BD: Dec 6, 2016; Oct 10, 2018).

Today, Kazia said nine ovarian cancer patients who had failed at least two prior lines of therapy completed the first cycle of the Cantrixil treatment.

The company said patients received two cycles of Cantrixil alone over six weeks, followed by up to six cycles or 18 weeks of Cantrixil with chemotherapy.

Kazia said that five of nine patients "achieved stable disease after two cycles of Cantrixil monotherapy [and] one of these five patients subsequently achieved a partial response when Cantrixil was administered with chemotherapy, as intended per protocol".

The company said the main side effects were gastro-intestinal with abdominal pain and fatigue being the most common, but were not generally dose-limiting.

Kazia said the part B expansion cohort of the study was underway to seek efficacy signals with 12 patients planned to be enrolled and treated at the 5.0mg/kg dose, with initial data expected by the end of 2019.

Kazia chief executive officer Dr James Garner said the data showed "a safety profile very suitable for further development and we have been able to reach a dose well within the predicted therapeutic range".

"It is extremely positive that we have seen some preliminary evidence of efficacy at this early stage in development, and the ongoing part B of the study should give us much more information," Dr Garner said.

Kazia said the data would be presented at the American Association of Cancer Research meeting in Atlanta, Georgia on April 1, 2019.

Kazia was up one cent or 2.2 percent to 47 cents.

AMPLIA THERAPEUTICS

Amplia says it has a European patent for the composition of drug candidate AMP945 for fibrotic diseases, including pancreatic cancer and idiopathic pulmonary fibrosis.

Amplia said the composition-of-matter patent, titled 'A salt and crystal form of a FAK Inhibitor' would protect its intellectual property for AMP945 until 2034.

The company said that AMP945 was "a highly selective inhibitor of focal adhesion kinase".

Amplia said it had lodged a patent for application for an improved formulation of AMP945 which was expected to provide additional protection until 2040.

Amplia was untraded at 14 cents.

EXOPHARM

Exopharm says it hopes to begin a 20-patient prospective, open-label, proof-of-concept study of exosomes from blood platelets to heal wounds, by mid-2019.

Exopharm said the first-in-human trial of autologous Plexaris from platelets would examine safety, wound healing and scar formation, with results expected in 2020.

Exopharm was unchanged at 40 cents.

GI DYNAMICS

GI Dynamics says it has extended its convertible note with largest shareholder Crystal Amber Fund from March 31 to May 1, 2019.

GI Dynamics said it did not have sufficient cash reserves to repay the \$US5 million note.

GI Dynamics was unchanged at 2.1 cents.

INVION

Invion has told the ASX that an NDF Research report on March 29 and an email posted on a social media site with a link to a report could explain recent trading in its securities.

The ASX said the company's share price climbed 38.5 percent from 1.3 cents to 1.8 cents today April 1, 2019 and noted a "significant increase" in trading volumes.

Invion was up 0.6 cents or 50 percent to 1.8 cents with 15.6 million shares traded.

BARD1 LIFE SCIENCES

Bard1 has told the ASX that it is not aware of any information it has not announcement which, if known, could explain recent trading in its securities.

The ASX said the company's share price climbed 25.0 percent from 1.6 cents on March 29 to 2.0 cents today, April 1, 2019 and noted a "significant increase" in trading volumes.

Bard1 said the development of its ovarian cancer test, which expected to complete by July 2019, revised from an initial completion date of April 2019.

Bard1 was up 0.6 cents or 37.5 percent to 2.2 cents with 77.3 million shares traded.

MEMPHASYS

Chair Alison Coutts says she has increased and diluted her holding in Memphasys from 58,992,217 shares (16.21%) to 79,625,138 shares (14.58%), while director Andrew Goodall says he has increased his holding from 89,230,093 shares (24.52%) to 134,341,983 shares (24.60%).

Memphasys fell 0.1 cents or 4.35 percent to 2.2 cents.

BIOTECH DAILY TOP 40 WITH MARKET CAPITALIZATION AT MAR 31, 2019

Company \$Am	Apr-18	Mar-19	Apr-19
Cochlear	10,452	9,841	9,959
CSL	70,330	87,771	87,719
Resmed	17,661	20,790	20,704
BDI-20			
Avita	59	252	522
Clinuvel	473	1,279	1,217
Compumedics	65	58	80
Cyclopharm	81	81	75
Ellex	124	79	85
Immutep	63	105	112
Impedimed	282	95	82
LBT Innovations	26	14	16
Medical Developments	416	268	317
Mesoblast	705	616	691
Nanosonics	769	1,245	1,293
Neuren	295	114	118
Opthea	114	183	175
Pharmaxis	102	103	103
Polynovo	347	522	486
Pro Medicus	845	1,425	1,537
Reva	161	71	71
Starpharma	463	401	357
Telix	114	156	183
Volpara	68	193	224
Second 20			
Actinogen	35	63	59
Airxpanders	122	21	19
Antisense	7	14	16
Benitec	41	33	33
Cynata	125	161	125
Dimerix	18	14	14
Genetic Signatures	25	95	117
Imugene	94	72	69
Kazia (Novogen)	36	33	29
Oncosil	73	114	25
Optiscan	32	22	19
Orthocell	25	12	12
Osprey	97	43	56
Paradigm	35	161	267
Patrys	38	25	27
Prana	24	22	25
Prescient	22	14	12
Proteomics	15	26	24
Universal Biosensors	48	40	35
Uscom	32	17	25

* Biotech Daily editor, David Langsam, owns shares in Acrux, Amplia, Benitec, Mesoblast, Nanosonics, Neuren, Patrys, Polynovo, Prana, Telix, Volpara and non-biotechnology stocks. Through Australian Ethical Superannuation he has an indirect interest in a range of other biotechnology companies: <http://www.australianethical.com.au/who-we-invest-in>. These holdings are liable to change.

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