



## Healthcare Industry Update

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Monday, November 19<sup>th</sup>, 2018



## THE ORIGIN RX

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### Checking in on Cannabis

One month since the legalization of recreation cannabis, and how's it going?

Well, if stock prices are any indication, not very well. Looking at the performance of some of the large producers over the last month: Canopy has dropped -33%, Aurora -41%, Tilray -31%, TGOD -32%, and Aphria -13%.

The most recent debuts of US names haven't fared any better. For example, Curaleaf, a US cannabis retailer which raised about \$520M at \$11.45 and began trading on the CSE at \$8.70 on October 29<sup>th</sup>; it closed at \$7.27 on November 16<sup>th</sup>, for a decline of -37% from the offering price. Curaleaf's raise was almost triple its intended \$150 million offering, attracting over 100 institutional investors and giving it a market value of about \$4 billion, for the biggest-ever reverse takeover on the CSE.

In fairness, stock prices generally have been more than a little wobbly over the last month for a variety of reasons. But when stocks are priced for perfection, they will get punished on nearly any sign of weakness. Has anything changed since October 17<sup>th</sup>?

The reported supply issues have obviously had an impact. These aren't the kind of shortages like when you're waiting for that Cabernet Sauvignon release date, and you're too late so you have to buy a different one. This was more like there just wasn't much selection of dried flower, prerolled, or capsules to buy. New Brunswick was forced to temporarily close more than half its stores, and the Quebec Cannabis Corporation reduced its openings to four days a week.

Do shortages mean LPs aren't producing as much product as investors thought they would? Or are they selling more in international markets? LPs have generally been reporting year-over-year sales growth, but it's safe to say that reality hasn't met expectations. For the quarter ended September 30<sup>th</sup> Aurora reported revenue of \$26M, more than 3 times the year-ago quarter, but still not what investors had expected. Net income was a whopping \$104M. The fine print tells us this is attributable, in part, to noncash unrealized gains of \$12M on the fair value of inventory, as well as gains on derivatives and investments of more than \$200M (good thing IFRS is making financial statements more meaningful!).

Canopy saw an uptick in average selling prices, for revenue of \$23M in the quarter ended September 30<sup>th</sup>, 2018, and year-over-year growth of 33%. The quarterly net loss of \$330M includes noncash unrealized losses on the fair value of inventory and biological assets of \$41M as well as fair value changes in financial assets and other financial expenses of \$111M. Notably, Canopy currently consolidates 24 subsidiaries and records investments in 17 affiliates.

So are cannabis stocks cheap? I'm not making stock recommendations, but Canopy's total enterprise value is 174x trailing EBITDA; Aurora 107x; Aphria 71x; Curaleaf 69x. Realistically, how fast can EBITDA grow? Given growing pains in this brand new industry, from cultivation to retail and the supply chain in between, the legal cannabis market isn't set to overtake the \$5.6B black market out of the gate.

Cannabis stocks are currently trading more-or-less as a pack. Over the next couple of quarters, as companies start to establish track record and demonstrate their ability to do what they said they would, we'll be better able to separate the wheat from the chaff. Companies with significant cash balances will be well positioned to fill any gaps by acquisition. Cannabis should continue to be an interesting space through 2019!

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CATHY STEINER, PRINCIPAL





## BIGGEST MOVERS

### Recent News<sup>1</sup>

Markets have been somewhat volatile in the last two weeks with the TSX decreasing 7.1% and the NASDAQ decreasing by 1.9%. It's been a mixed bag in healthcare subsectors, which follow in this report. A selection of the largest share price movers in the healthcare space during the recent period is included below:

- **Pacific Biosciences of California Inc.** (NasdaqGS:PACB **+72%**): Pacific Biosciences is a biotechnology company that develops and manufactures systems for gene sequencing. On November 1<sup>st</sup>, PACB announced that it has signed an agreement for Illumina Inc. to acquire Pacific Biosciences at a share price of US\$8.00 per share at a 71% premium to its closing price on October 31<sup>st</sup>. The deal is valued at US\$1.2 billion on a fully diluted basis
- **Lannett Company Inc.** (NYSE:LCI **+49%**): Lannett Company is a pharmaceutical company that develops, manufactures and distributes generic pharmaceutical products for a wide range of medical indications. Recent share price appreciation is attributed to the announcement that Lannett has entered into an agreement with Amneal Pharmaceuticals to be the sole supplier of the Levothyroxine Sodium Tablets beginning December 1<sup>st</sup>, 2018 through March 23<sup>rd</sup>, 2019. Under the agreement, Lannett will receive an upfront payment of US\$50 million
- **ZIOPHARM Oncology Inc.** (NasdaqCM:ZIOP **+37%**): ZIOPHARM Oncology is a biotechnology company focused on next-generation immunotherapies utilizing gene- and cell-based therapies to treat cancer patients. Recent share price appreciation is attributed to the announcement that it has entered into a definitive securities purchase agreement for the sale of its common stock and warrants to purchase common stocks in a private placement with expected gross proceeds of approximately US\$50 million
- **Puma Biotechnology Inc.** (NasdaqGS:PBYI **-40%**): Puma Biotechnology is a biopharmaceutical company with a focus on the development and commercialization of innovative products to enhance cancer care. Recent share price decline was attributed to less-than-expected sales growth of only 3.5% for its Nerlynx, for the treatment of early stage HER2-positive breast cancer following adjuvant trastuzumab-based therapy
- **Invacare Corporation** (NYSE:IVC **-51%**): Invacare Corporation manufactures and distributes non-acute care medical equipment. Recent share price decline is attributed a US\$6 million revenue miss in its third quarter results due to unfavourable trends in respiratory and lifestyle products. Management also announced that it plans to restructure the business, which includes downsizing of the organization for annualized savings
- **Achaogen Inc.** (NasdaqGM:AKAO **-53%**): Achaogen is a biopharmaceutical company that develops and commercializes antibacterial treatments for MDR gram-negative infections. Recent share price decline is due to continued disappointing quarterly results. Further, Achaogen announced it has engaged Evercore to commence a strategic alternatives review process
- **Clearside BioMedical Inc.** (NasdaqGM:CLSD **-72%**): Clearside BioMedical is a biopharmaceutical company dedicated to developing treatments that restore and preserve vision for people with serious eye diseases. Recent share price decline is attributed to the announcement that a Phase 3 clinical trial of SAPPHERE combination therapy in retinal vein occlusion failed to achieve the primary endpoint among patients

Note 1: For the period November 1<sup>st</sup> to November 15<sup>th</sup>, 2018

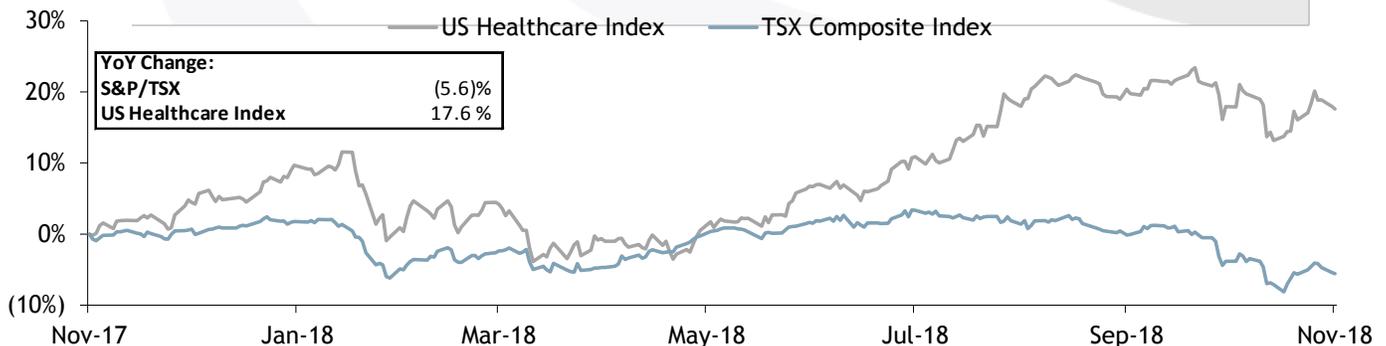


## US HEALTHCARE WATCHLIST

### News Scan<sup>1</sup>

- The US Healthcare Watchlist Index gained approximately 17.6% over the last twelve months, while the TSX Composite Index decreased (5.6%) over the same period. Some events making news this month:
- On November 15<sup>th</sup>, **AbbVie** announced that it has entered into a collaborative agreement with **Mission Therapeutics** on the research and preclinical development of a specific deubiquitylating enzymes (DUB) inhibitors for the treatment of Alzheimer's and Parkinson's Disease. The collaboration combines AbbVie's strong neurodegenerative disease research, development and commercialization capabilities with Mission's unique science, chemistry and proprietary enzyme platform
- On November 13<sup>th</sup>, **Medtronic** announced that it has received CE Mark approval for the Valiant Navion thoracic stent graft system for the minimally invasive repair of most types of lesions. The Valiant Navion system has also received approval from the U.S. Food and Drug Administration (FDA) on October 23<sup>rd</sup>, and will help advance the treatment of complex aortic diseases to improve outcomes and extend lives
- On November 13<sup>th</sup>, **Merck** announced that it has started the submission of a rolling Biologics License Application (BLA) to the U.S. FDA for V920, an investigational vaccine for the Ebola Zaire disease. The BLA is a crucial step forward in accelerating the regulatory review process of V920, which is expected to be completed by 2019
- On November 12<sup>th</sup>, **Amgen** released final results to its five-year open-label study evaluating its Repatha treatment for patients with high cholesterol. Amgen recently made Repatha available in the U.S. at a 60% reduced list price to address concerns over high out-of-pocket costs and in an effort to bring down the risk of heart attack and strokes among patients
- On November 12<sup>th</sup>, **Evergreen Coast Capital** and **Veritas Capital** announced the purchase of healthcare IT company **athenahealth** for some \$5.7 billion in cash, or \$135 per share, about a year and a half after Evergreen's parent acquired approximately 9% of the company. The deal marks a roughly 12% premium to Athenahealth's prior-day closing price. When the deal is approved, the firms will merge athenahealth with Virence Health, the value-based care assets of GE Healthcare that Veritas bought in July for more than \$1 billion.,
- On November 5<sup>th</sup>, **Bristol-Myers Squibb** and **Infinity Pharmaceuticals** announced it will collaborate on a clinical trial evaluating the combination of Opdivo and IPI-549, a PI3K-gamma inhibitor, in patients with advanced urothelial cancer who have progressed after platinum-based chemo
- On November 5<sup>th</sup>, **Novartis'** unit **Sandoz** announced that it will no longer be submitting U.S. marketing application for a biosimilar to Roche's Rituxan. This decision was made after the U.S. FDA requested for additional information to complement the submission
- On November 1<sup>st</sup>, reports indicated that **Pfizer** is working with financial advisers to consider a potential sale of its women's health portfolio, which generates approximately US\$1.2 billion in annual sales. Pfizer's strategic decision is in line with Allergan Plc and Teva Pharmaceutical, who are also winding down its women's health lines due to manufacturing challenges

### Relative Performance Index



Note 1: For the period November 1<sup>st</sup> to November 15<sup>th</sup>, 2018

**US Healthcare Watchlist Constituents:** Johnson & Johnson, Pfizer Inc., Roche Holding AG, Novartis AG, Merck & Co., Inc., AbbVie Inc., Amgen Inc., Medtronic plc, Gilead Sciences, Inc., Bayer AG, Abbott Laboratories, Bristol-Myers Squibb, GlaxoSmithKline plc, Eli Lilly and Company, AstraZeneca PLC, Celgene Corporation, Allergan plc, Boston Scientific Corporation, Mylan N.V., Teva Pharmaceutical Industries, Mallinckrodt Public Limited Company, Endo International plc

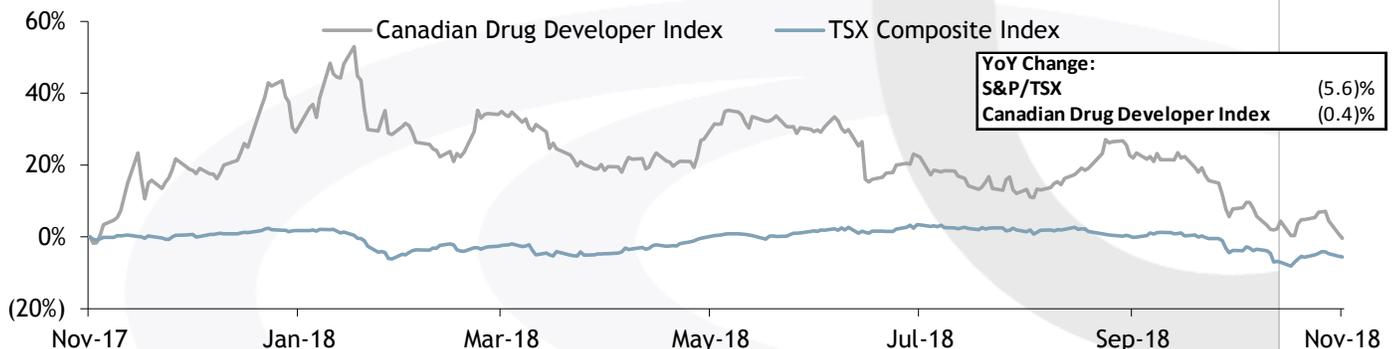


## CANADIAN DRUG DEVELOPERS

### News Scan<sup>1</sup>

- Last twelve-month performance of the Canadian Drug Developers Index was down (0.4%), only slightly outperforming the TSX Composite Index which decreased (5.6%) over the same period. In the news this month:
- On November 6<sup>th</sup>, **Tetra Bio-Pharma**, a leader in cannabinoid-based drug discovery and development, announced that it has entered into a non-binding proposal to acquire all issued shares of **Panag Pharma Inc.**, a Canadian company developing cannabinoids for treatment of pain and inflammation, for C\$12.0 million. Tetra expects to commercialize Panag's products and generate revenues from Panag's pipeline by Q4 2019 following completion of the acquisition
- On November 6<sup>th</sup>, **ImmunoVaccine**, a clinical stage immune-oncology company, announced that it has appointed Markus Warmuth MD to its Board of Directors. Warmuth currently serves as an Entrepreneur in Residence at the life science venture capital firm, **Third Rock Ventures**. He brings more than 20 years of drug discovery experience and a strong focus on developing targeted therapy and immune-oncology programs to IMV's board
- On November 5<sup>th</sup>, **InMed Pharmaceuticals** announced that it has appointed Michael Woudenberg as Vice President of Chemistry, Manufacturing and Controls ("CMC"). In 2019, InMed expects to make the transition from a pre-clinical stage company to a clinical stage company. Woudenberg brings key CMC expertise which is expected to assist with the transition
- On November 2<sup>nd</sup>, **Resverlogix Corp**, a development stage pharmaceutical company, announced that it has a closed a private placement of 4.5 million equity units at C\$3.00 per unit for total proceeds of C\$13.5 million. The units were comprised of one common share and one-half of a common share purchase warrant that is exercisable at a price of C\$3.10. Proceeds will primarily be used to fund research and development activities related to trials of the company's phase 3 BETonMACE trial
- On November 1<sup>st</sup>, **Aeterna Zentaris**, announced that it was advised by **Strongbridge BioPharma**, that it has signed an agreement with **Novo Nordisk**, under which Novo will acquire the rights to Macrilen in the United States and Canada. Aeterna Zentaris previously licensed the rights to Macrilen in the United States and Canada to Strongbridge in January 2017

### Relative Performance Index



Note 1: For the period November 1<sup>st</sup> to November 15<sup>th</sup>, 2018

**Canadian Drug Developers Constituents:** ProMetic Life Sciences Inc., Clementia Pharmaceuticals Inc., Aurinia Pharmaceuticals Inc., Arbutus Biopharma Corporation, Resverlogix Corp., Aquinox Pharmaceuticals Inc., Zymeworks Inc., ImmunoVaccine Inc., InMed Pharmaceuticals Inc., Sierra Oncology, Inc., Tetra Bio-Pharma Inc., Oncolytics Biotech Inc., Acerus Pharmaceuticals Corporation, ProMIS Neurosciences Inc., Aeterna Zentaris Inc., Trillium Therapeutics Inc.

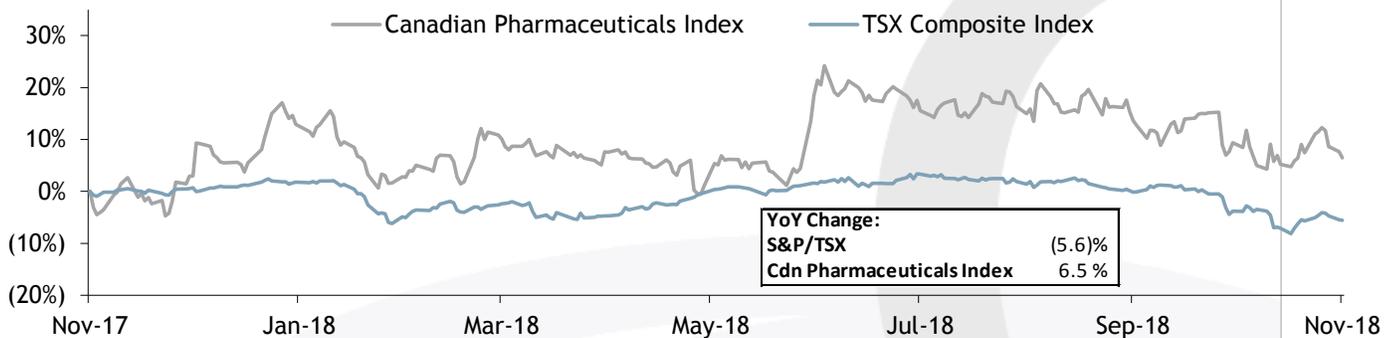


## CANADIAN PHARMACEUTICALS

### News Scan<sup>1</sup>

- The Canadian Pharmaceuticals Index experienced a gain of 6.5% over the last twelve months, while the TSX Composite Index decreased (5.6%) over the same period. Recent news highlights include:
- On November 7<sup>th</sup>, **Bausch Health Companies** and its dermatology business, **Ortho Dermatologics** announced that it expects to start distribution of BRYHALI lotion to US wholesale distributors this month. The company received FDA approval for BRYHALI lotion on November 6<sup>th</sup>. The launch of the product provides a new topical treatment option for adult patients with plaque psoriasis
- On November 5<sup>th</sup>, **Theratechnologies** announced that the U.S. FDA has approved the new single-vial formulation of EGRIFTA. EGRIFTA is a growth hormone releasing factor and the only FDA-approved treatment for excess abdominal visceral adipose tissue in HIV-infected patients with lipodystrophy. The new formulation is indicated for the reduction of excess abdominal fat. The new formulation allows the company to revitalize the brand and helps patients manage a series HIV co-morbidity

### Relative Performance Index



Note 1: For the period November 1<sup>st</sup> to November 15<sup>th</sup>, 2018

**Canadian Pharmaceuticals Constituents:** Bausch Health Companies Inc., Knight Therapeutics Inc., Concordia International Corp., Aralez Pharmaceuticals Inc., Theratechnologies Inc., Zomedica Pharmaceuticals Corp., HLS Therapeutics Inc., Correvio Pharma Corp.

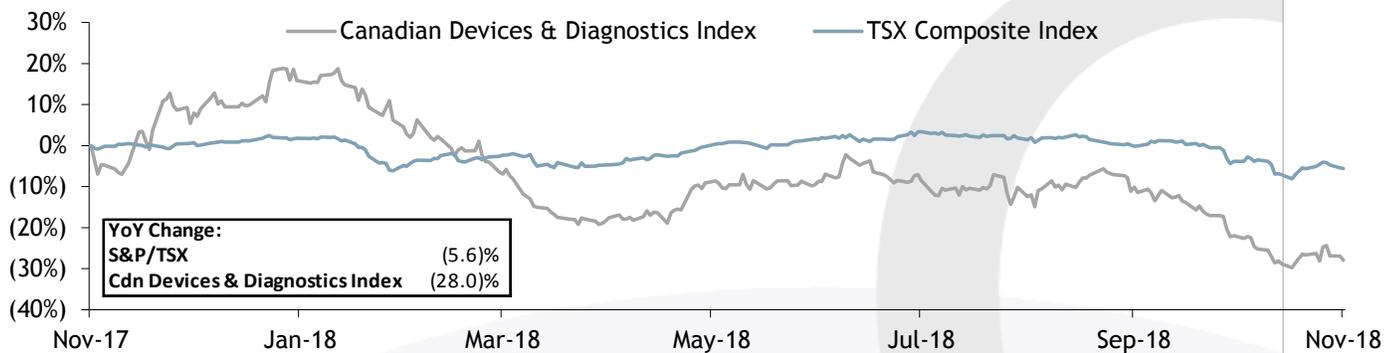


## CANADIAN DEVICES & DIAGNOSTICS

### News Scan<sup>1</sup>

- The Canadian Devices & Diagnostics Index lost approximately 28% over the last twelve months, lagging the TSX Composite Index which fell by (5.6%) over the same period. Newsmakers for November 2018 so far:
- On November 5<sup>th</sup>, **CRH Medical Corp.** announced that it has received approval from the TSX of its Notice of Intention to renew its existing Normal Course Issuer Bid. The company expects to purchase for cancellation up to 7,044,410 of its common shares, representing 10% of the public float. The bid will be funded by the company's internally generated cash flow
- On November 1<sup>st</sup>, **Opsens Inc.** announced that it has reached a milestone, with more than 50,000 patients assessed with the OptoWire. OptoWire is a pressure guide wire used to measure Fractional Flow Reserve to diagnose and treat cardiovascular disease. The milestone highlights the quality of the product and brings a second-generation fiber optic technology to the guide wire market. The company expects to scale manufacturing to respond to the growing demand for the OptoWire in its main markets including Japan, Europe, Canada and the United States

### Relative Performance Index



Note 1: For the period November 1<sup>st</sup> to November 15<sup>th</sup>, 2018

**Canadian Devices and Diagnostics Constituents:** CRH Medical Corporation, TSO3 Inc., Titan Medical Inc., Opsens Inc., Neovasc Inc., Relay Medical Corp., Profound Medical Corp., Covalon Technologies Ltd., Spectral Medical Inc., Hamilton Thorne Ltd.

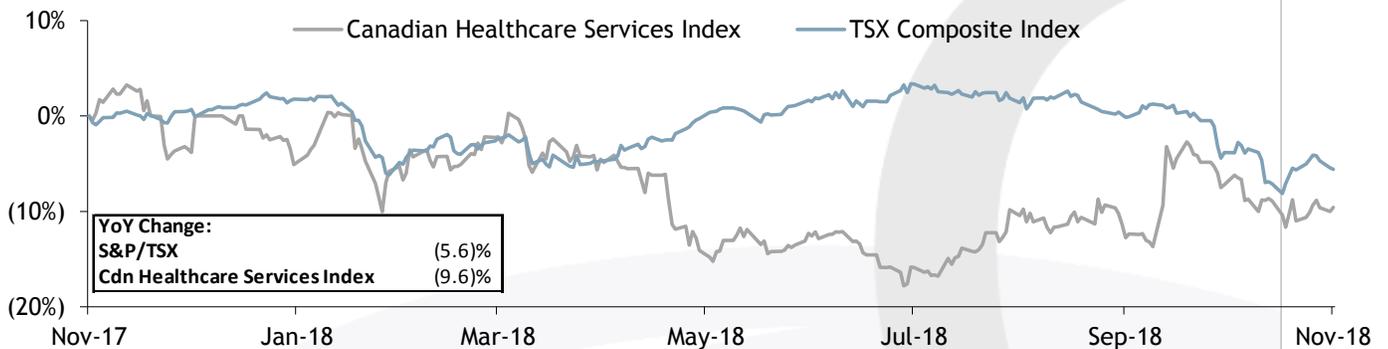


## CANADIAN HEALTHCARE SERVICES

### News Scan<sup>1</sup>

- Last twelve-month performance of the Canadian Healthcare Services Index decreased (9.6%), while the TSX Composite Index fell by (5.6%) over the same period. In the first half of November, the following occurred in the Canadian healthcare services space:
- On November 12<sup>th</sup>, **Akumin Inc.** announced that it has acquired four freestanding, outpatient diagnostic imaging centres in Broward County, Florida, and an additional imaging centre in Kissimmee, Florida. The financial terms of the transaction were not disclosed but Akumin financed the transaction through its revolving credit facility. The five centres produced a combined revenue of US\$19.2 million on an LTM basis as at June 30<sup>th</sup>, 2018. With these transactions complete, Akumin now operates 45 centres in Florida and 95 company wide
- On November 2<sup>nd</sup>, **Sienna Senior Living** has announced that the Ontario Superior Court of Justice has ruled that a class action lawsuit filed against the Company in May 2018 claiming negligence can no longer proceed as a class action, rather the plaintiffs must make their claims individually. The company expects that any potential liability to such claim will be covered by insurance and therefore will not have a material adverse impact on the business

### Relative Performance Index



Note 1: For the period November 1<sup>st</sup> to November 15<sup>th</sup>, 2018

**Canadian Healthcare Services Constituents:** Sienna Senior Living Inc., Extendicare Inc., Medical Facilities Corporation, Akumin Inc, Centric Health Corporation

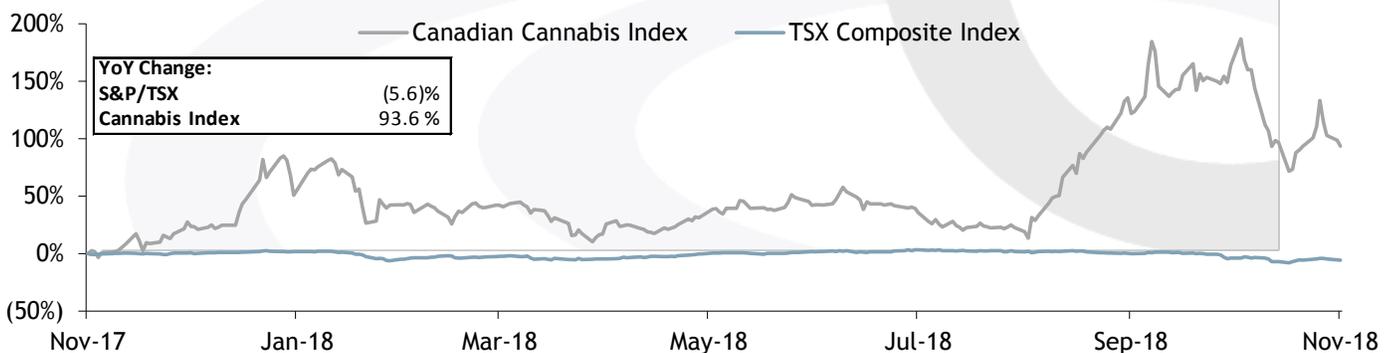


## CANNABIS

### News Scan<sup>1</sup>

- One month since legalization, the ACMPR has issued 133 licenses. Last twelve-month performance of the Cannabis index saw an increase of 93.6%, compared to the (5.6%) decline of the TSX Composite Index over the same period. Highlights:
- On November 13<sup>th</sup>, **The Supreme Cannabis Company** announced that it has entered into a three-year agreement with **MediPharm Labs** to facilitate the launch of the Supreme's cannabis oil products line. MediPharm holds a processing license and is a leader in the cannabis industry focused exclusively on cannabis extraction and producing pharmaceutical-grade cannabis oil
- On November 5<sup>th</sup>, **Aurora Cannabis** announced that it has completed a non-brokered private placement of a convertible debenture in **Choom Holdings** for a principal amount of C\$20 million. The debenture is convertible into common shares at a price of C\$1.25 per share, with a four year maturity. Additionally, Aurora has secured the right to acquire up to 40% of Choom for C\$2.75 per share
  - On November 5<sup>th</sup>, **Aurora Cannabis** announced the grand opening of Aurora Eau, a new indoor premium cannabis production facility in Lachute, Quebec. With 11 purpose-built grow rooms and over 48,000 sq. ft. of cultivation space, Aurora Eau will be able to produce ~4,500kg of cannabis per year
- On November 5<sup>th</sup>, **Aphria Inc.** announced that it intends to acquire **CC Pharma GmbH**, a leading distributor of pharmaceutical products to over 13,000 pharmacies in Germany. The transaction will strengthen Aphria's end-to-end medical cannabis operations and infrastructure in Germany. Aphria will pay €24.5 million in cash to CC Pharma at closing with an earn-out worth up to another €23.5 million following closing, if certain performance milestones are met
  - On November 5<sup>th</sup>, **Aphria Inc.** announced that it has established an agreement with **Rapid Dose Therapeutics Inc.** that grants Aphria the exclusive rights to license, manufacture, distribute and sell RDT's proprietary oral thin strips delivery technology for medical and recreational cannabis consumption
- On November 1<sup>st</sup>, **Auxly Cannabis Group** announced that it has received approval from SENACLAFT, the government body overseeing foreign direct investments in Uruguay, for the Company's acquisition of 80% of **Inverell S.A.**, a federally licensed cannabis operator. Auxly has agreed to provide US\$15 million in total consideration to Inverell shareholders, as well as an additional US\$5 million secured loan

### Relative Performance Index



Note 1: For the period November 1<sup>st</sup> to November 15<sup>th</sup>, 2018

**Cannabis Index Constituents:** Canopy Growth, Aurora Cannabis, Aphria, CannTrust Holding, Auxly Cannabis Group, OrganiGram Holdings, The Supreme Cannabis Company, The Hydrothecary, Tilray Inc.



**Origin Merchant Partners**

220 Bay Street, Suite 1500

P.O. Box 23

Toronto, Ontario

M5J 2W4

**OMP Healthcare Team:**

**Cathy Steiner**

Principal

T: 416-775-3602

[Cathy.Steiner@originmerchant.com](mailto:Cathy.Steiner@originmerchant.com)

**Jim Osler**

Principal

T: 416-800-0784

[jim.osler@originmerchant.com](mailto:jim.osler@originmerchant.com)

**Jim Meloche**

Principal

T: 416-800-0873

[Jim.meloche@originmerchant.com](mailto:Jim.meloche@originmerchant.com)