

Healthcare Industry Update

Wednesday, March 14th, 2018



THE ORIGIN RX

The Politics of Drug Benefits

National pharmacare is a recurring topic that was addressed most recently in the 2018 budget. On Feb. 27th, Finance Minister Bill Morneau announced the formation of an Advisory Council on the Implementation of National Pharmacare. Former Ontario Minister of Health, Eric Hoskins, who happens to have been my MPP for the last eight years, resigned from his post to chair the Council. He was involved in Ontario's introduction of drug benefits for those under 25 starting Jan. 1 of this year - the first province to cover children. Any national plan and its impact on the price of drugs and drug plans as well as on dispensing fees is of great interest.

The federal government currently provides prescription drug coverage for about one million Canadians who are First Nations/Inuit, members of military, veterans, RCMP, and inmates of federal penitentiaries. The provinces and territories provide drug benefits to eligible residents, which may include seniors, children, recipients of social assistance, and individuals with a disease or condition associated with high drug costs. Others have private coverage, generally through employers. It's estimated that at least 10% of Canadians have trouble paying for their drugs, especially when they come at a price of \$1,800 a month or more.

Canada is the only country with national healthcare that doesn't have national pharmacare, meaning there are precedents out there for Hoskins to have a look at.

- In England, all citizens have their prescription drugs covered. There is a co-pay of about \$14.50 on each prescription, with exemptions for children, seniors and other eligible groups. Evidence-based formularies are determined by looking at clinical- and cost- effectiveness.
- In France, 99% of the population have their prescription costs at least partially covered by the government. Co-pays depend on clinical benefit and seriousness of disease. Co-pay insurance plus a strong French pharma industry make it hard for generics to get real traction; add a culture of over-prescribing and you end up ranking third in overall drug spend worldwide.
- New Zealand's Pharmaceutical Management Agency negotiates drug prices for the country and tightly controls what goes on the formulary. Drug costs remain flat but access to innovative meds is restricted.

Canadians are already pretty good at replacing costly brand name drugs with generic alternatives. Just 24% of prescriptions were for brand names in 2015/2016, but they represented 45% of total drug spending. The feds want to be in a position to negotiate lower prices for drugs on the formulary, maximize generic use and see total Canadian drug spending drop.

The parliamentary budget officer broke down 2015/2016 prescription drug spending of 28.5B as follows: 13.1B by federal 2 provincial government + 10.7B by private insurance plans + 4.7B out of pocket. They estimate 24.6B would have been covered by a national pharmacare plan and, with the feds' negotiating muscle, it would have come in at 20.4B - that's savings of 4.2B.

Universal access to medically necessary drugs will be the big win. We anticipate private insurers will also win if they don't share the benefits of pharmacare with subscribers - anecdotal evidence says they haven't dropped premiums to reflect savings from the introduction of Ontario drug benefits for children. Hoskins has until 2019 to finalize the plan. Morneau has said they would like to close gaps while preserving the best of the current system. Maybe it's not so much a plan as a band-aid. Based on Morneau's comments, it sounds like the Canadian patchwork system will continue rather than a rollout of national pharmacare, likely with the addition of groups eligible for drug benefits.

CATHY STEINER, PRINCIPAL







BIGGEST MOVERS

Recent News¹

The first half of March has been positive, with the TSX increasing 1.6% and the Nasdaq increasing 4.6%. It's been a mixed bag in healthcare subsectors, which follow in this report. A summary of the largest share price movers in the healthcare space during the recent period is included below:

- <u>G1 Therapeutics, Inc.</u> (NasdaqGS:GTHX, +58%): G1 Therapeutics is a clinical stage biopharmaceutical company focusing on novel small molecule therapeutics for cancer treatment in the United States. Strong recent share performance was driven by the company's announcement that its Phase 2a trial evaluating trilacicib in patients undergoing chemotherapy achieved positive topline results.
- <u>Corindus Vascular Robotics, Inc.</u> (AMEX:CVRS, +36%): Corindus Vascular Robotics is a US-based developer of robotic-assisted procession vascular intervention systems. Shares performed well of late due to the announcement of the company receiving 510(k) clearance from the FDA for its first automated robotic movement software, which was designed specifically for its CorPath GRX platform.
- <u>Intellia Therapeutics, Inc.</u> (NasdaqGM:NTLA +28%): Intellia is a gene editing company focusing on the development of therapeutics utilizing a biological tool known as the CIRSPR/Cas9 system. Strong share performance was driven by the company's recent manuscript publication in Cell Reports, which outlined Intellia's preclinical data demonstrating effective CRISPR/Cas9 genome editing using Lipid Nanoparticle delivery technology.
- <u>Surmodics, Inc.</u> (NasdaqGS:SRDX, +21%): Surmodics is a medical device and in vitro diagnostic technologies provider based in the United States. Recent strong performance has been driven by the announcement that the company entered into a distribution agreement with Abbott Laboratories, whereby Abbott will have exclusive worldwide commercialization rights for Surmodics' SurVeil drug-coated balloon to treat the superficial femoral artery.
- <u>Cigna Corporation</u> (NYSE:CI, -14%): Cigna is a health services organization that provides insurance and related products in the US and internationally. Share prices recently fell after the company announced its plans to acquire Express Scripts Holding Co. for US\$53 billion, in an effort to hold onto company profits.
- <u>Dermira, Inc.</u> (NasdaqGS:DERM, -59%): Dermira is a US-based biopharmaceutical company delivering new therapies to patients living with chronic skin conditions. Recent share performance has been driven by the company's announcement that the investigational treatment Olumacostat Glasaretil did not meet the co-primary endpoints in its two Phase 3 pivotal trials.

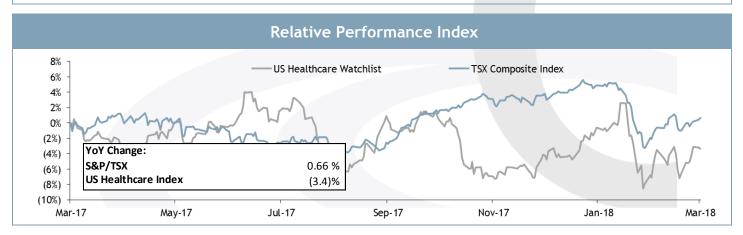
Note 1: For the period February 28th to March 13th, 2018



US HEALTHCARE WATCHLIST

News Scan¹

- The US Healthcare Watchlist index lost approximately 3% over the last twelve months, while the TSX Composite Index gained 0.7% over the same period. Some events making news this month:
- On Feb. 28th, <u>Stryker Corporation</u> announced it completed the acquisition of <u>Entellus Medical</u>, a global medical technology company focused on the treatment of various ear, nose and throat diseases, for approximately US\$662 million. The offer price of US\$24 per share represented a 50% premium to Entellus' share price on the day the deal was announced. The deal is expected to be dilutive to Stryker's 2018 adjusted net earnings by about 4 cents per share, but accretive thereafter
- On Mar. 5th, <u>Innovatus Imaging</u>, a US-based medical device manufacturer and service provider, announced it completed the acquisition of <u>Bayer's</u> European Multi Vendor Service business, which will now operate as <u>Innovatus Imaging Europe B.V.</u> Innovatus Imaging was formed in September, 2017 as the result of Bayer MVS, Wetsco, Inc and MD MedTech joining forces to draw on their combined expertise
- On Mar. 6th, <u>Celgene Corporation</u> announced it completed the acquisition of <u>Juno Therapeutics Inc.</u>, a biopharmaceutical company that develops cell-based cancer immunotherapies, for approximately US\$9 billion. Celgene financed the transaction using existing cash and new debt. The acquisition will accelerate revenue diversification with meaningful growth drivers beyond 2020, while also adding a novel scientific platform and scalable manufacturing capabilities which will compliment Celgene's leadership in hematology and oncology
- On Mar. 5th, <u>Boston Scientific</u> announced it acquired <u>EMcision Limited</u>, a UK-based developer of proprietary medical devices based on radiofrequency technology, for an undisclosed amount. The acquisition will expand the Boston Scientific Endoscopy portfolio to include the Habib EndoHPB probe, a novel endoscopic bipolar radiofrequency device used in the treatment of pancreaticobiliary cancers



Note 1: For the period February 28th to March 13th, 2018

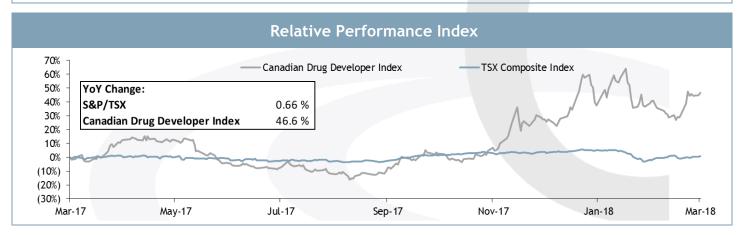
<u>US Healthcare Watchlist Constituents</u>: Johnson & Johnson, Pfizer Inc., Roche Holding AG, Novartis AG, Merck & Co., Inc., AbbVie Inc., Amgen Inc., Medtronic plc, Gilead Sciences, Inc., Bayer AG, Abbott Laboratories, Bristol-Myers Squibb, GlaxoSmithKline plc, Eli Lilly and Company, AstraZeneca PLC,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



CANADIAN DRUG DEVELOPERS

News Scan¹

- Last twelve-month performance of the Canadian Drug Developer index was an impressive 46.6%, significantly outperforming the TSX Composite Index which gained 0.7% over the same period. In the news this month:
- On Mar. 5th, <u>Prometic Life Sciences Inc.</u>, a biopharmaceutical company that develops bioseparations, plasma-derived therapeutics, and small-molecule therapeutic products, announced that Rare Pediatric Disease Designation was granted to its Inter-Alpha-Inhibitor-Protein by the FDA. This represents the second pediatric designation that Prometic's plasma-derived therapeutics have received
- On Mar. 6th, <u>Theratechnologies Inc.</u> and <u>TaiMed Biologics Inc.</u> announced the FDA granted approval of Trogarzo, an injection intended for the treatment of HIV-1 in adults with multidrug resistant HIV. Trogarzo previously received Breakthrough Therapy and Orphan Drug designations as well as Priority Review status from the FDA, underscoring the significance of the treatment for its patient population
- On Feb. 28th, <u>Zymeworks Inc.</u>, a clinical-stage biopharmaceutical company developing multifunctional biotherapeutics, announced the addition of new clinical sites in Canada and the US. The sites will be used for the ongoing Phase 1 study of the company's lead clinical candidate, ZW25, a novel bispecific antibody that targets two distinct domains of the HER2 receptor resulting in multiple differentiated mechanisms of action
- On Mar. 2nd, <u>Sierra Oncology</u>, a clinical stage drug development company focused on DNA Damage Response therapeutics for cancer treatment, announced the pricing of an underwritten public offering of 19 million shares of its common stock at a price of \$2.25 per share, with expected gross proceeds of \$42.8 million. Sierra intends to use the net proceeds to fund development of its product candidates, SRA737 and SRA141, as well as for general corporate purposes



Note 1: For the period February 28th to March 13th, 2018

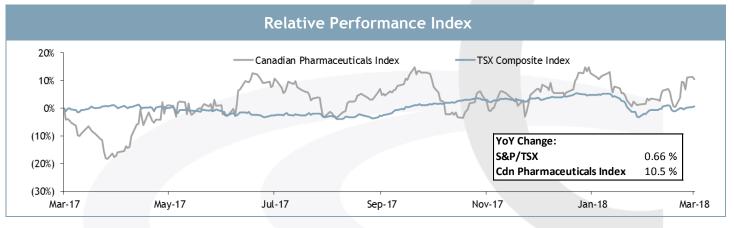
<u>Canadian Drug Developers Constituents</u>: ProMetic Life Sciences Inc., Clementia Pharmaceuticals Inc., Aurinia, Pharmaceuticals Inc., Arbutus Biopharma Corporation, Resverlogix Corp., Aquinox Pharmaceuticals, Inc., Zymeworks Inc., ImmunoVaccine Inc., InMed Pharmaceuticals Inc., Sierra Oncology, Inc.,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



CANADIAN PHARMACEUTICALS

News Scan¹

- The Canadian Pharmaceutical index gained approximately 10% over the last twelve months, beating the TSX Composite Index which gained 0.7% over the same period. News for Canadian-listed pharmaceutical companies in March 2018:
- On Mar. 8th, <u>Knight Therapeutics</u> announced <u>Medimetriks Pharmaceuticals Inc.</u> has prepaid US\$20 million of the US\$23 million secured strategic loan issued in 2016. Interest and fees on the loan of US\$8.5 million represent a pre-tax internal rate of return of approximately 20%. Knight currently owns 19% of MediMetriks common shares outstanding and remains its exclusive distribution partner in Canada and select international markets
- On Mar. 12th, <u>Valeant Pharmaceuticals International, Inc.</u> and its subsidiary, <u>Valeant Pharmaceuticals International</u>, announced the launch of a US\$1.5 billion offering of principal unsecured notes, due 2026. The offering is expected to close on or about March 26, 2018. The net proceeds from the offering, along with cash on hand, will be used to repurchase US\$1.5 billion aggregate principal amount of outstanding notes pursuant to a tender offer announced by the company earlier on the same day
- On Mar. 13th, <u>Knight Therapeutics</u> announced the acquisition and sale of common shares of <u>Crescita Therapeutics Inc.</u> following its exercise of common share purchase rights. Immediately after the exercise of 1,509,432 rights and the sale of 570,540 rights, Knight owns an aggregate of 2,834,689 shares representing approximately 13.5% of Crescita's common shares outstanding, after giving effect to the 7,001,603 shares to be issued pursuant to the Rights Offering, as well as 396,000 Warrants



Note 1: For the period February 28th to March 13th, 2018

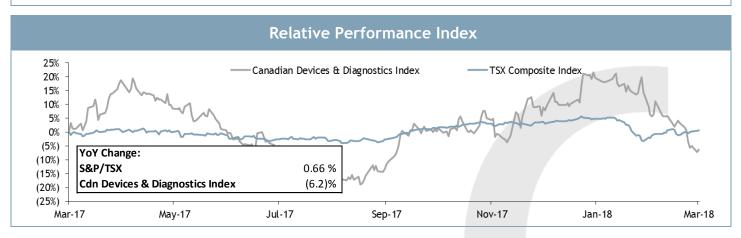
<u>Canadian Pharmaceuticals Constituents</u>: Valeant Pharmaceuticals International, Inc., Knight Therapeutics Inc., Concordia International Corp., Aralez Pharmaceuticals Inc., Theratechnologies Inc., Zomedica Pharmaceuticals Corp.



CANADIAN DEVICES & DIAGNOSTICS

News Scan¹

- The Canadian Devices & Diagnostics index lost approximately 6% over the last twelve months, lagging the TSX Composite Index which gained 0.7% over the same period. Newsmakers for March 2018:
- On Mar. 5th, <u>CRH Medical Corporation</u>, a company that provides products and services for the treatment of gastrointestinal diseases in the United States, announced that it repurchased 1,339,800 shares between Nov. 7th, 2017 and Dec. 31st, 2017 for approximately C\$3.7 million, representing a 1.81% stake of the company. The buybacks come as part of the share repurchase program announced by the company in November, 2017



Note 1: For the period February 28th to March 13th, 2018

<u>Canadian Devices and Diagnostics Constituents</u>: CRH Medical Corporation, TSO3 Inc., Titan Medical Inc., Opsens Inc., Neovasc Inc., ChroMedX Corp., Profound Medical Corp., Covalon Technologies Ltd., Spectral Medical Inc., Hamilton Thorne Ltd.



CANADIAN HEALTHCARE SERVICES

News Scan¹

- The Canadian Healthcare Services index experienced a decline of approximately 11% over the last twelve months, lagging the TSX Composite Index which gained 0.7% over the same period. March 2018 news highlights among the group:
- On Mar. 13th, <u>Sienna Senior Living Inc.</u>, a senior housing provider with 75 residences across key markets in Canada, announced that it will be added to the S&P/TSX Composite Index, effective March 19th, 2018. Sienna shares began trading on the TSX in 2007 and the company has a market capitalization of approximately \$C1.1 billion

Relative Performance Index 10% Canadian Healthcare Services Index TSX Composite Index 0% (10%) YoY Change: (20%) S&P/TSX 0.66 % Cdn Healthcare Services Index (11.1)% (30%) Jul-17 Nov-17 Jan-18 Mar-17 May-17 Sep-17 Mar-18

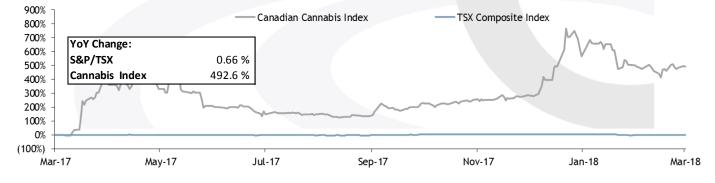
<u>Canadian Healthcare Services Constituents:</u> Sienna Senior Living Inc., Extendicare Inc., Medical Facilities Corporation, Akumin Inc, Centric Health Corporation

Note 1: For the period February 28th to March 13th, 2018



CANNABIS

News Scan¹ ۲ Last twelve-month performance of the Canadian Pharmaceutical index was approximately 493%, dwarfing the 0.7% gain of the TSX Composite Index over the same period. Highlights of cannabis news for March 2018: On Mar. 9th, Aurora Cannabis Inc. announced it completed a bought deal offering for gross proceeds of C\$230 million, including the exercise, in full, of the underwriters' overallotment option. The offering was comprised of 5% unsecured convertible debentures with a maturity of two years On Mar. 13th, Aphria Inc. announced it received a license amendment from Health Canada that provides the company with additional production space of 200,000 square feet as part of its Phase 3 expansion of its Learnington, Ontario facility. The license amendment and expansion will increase Aphria's annual production capacity from 9,000 kg to 30,000 kg On Mar. 6th, MedReleaf Corp. announced it entered into an exclusive licensing agreement with Woodstock Cannabis Company for use of the Woodstock brand in the Canadian cannabis market. Under the terms of the agreement, MedReleaf will grow and sell a variety of strains and formats under the Woodstock banner, expanding the offering of products as regulations allow On Mar. 13th, CannTrust Holdings announced it entered into a joint venture agreement with STENOCARE, one of the first • companies to receive a licence to grow, produce and import medical cannabis in Denmark. Under the terms of the agreement, STENOCARE will initially sell CannTrust's standardized cannabis products in Denmark while working towards developing a domestic growing facility. Construction of the facility is expected to begin in the second guarter of 2018 with technical expertise being provided by CannTrust • On Mar. 6th, Organigram Holdings Inc. announced it received Health Canada approval for the remaining 13 grow rooms of its 23 room Phase 2 expansion, a week ahead of schedule. The company expects harvests from the phase 2 expansion to begin in the third week of April **Relative Performance Index** 900% Canadian Cannabis Index TSX Composite Index



Note 1: For the period February 28th to March 13th, 2018

<u>Cannabis Index Constituents</u>: Canopy Growth Corporation, Aurora Cannabis Inc., Aphria Inc., MedReleaf Corp., CannTrust Holdings Inc., CanniMed Therapeutics Inc., Cannabis Wheaton Income Corp., OrganiGram Holdings Inc., The Supreme Cannabis Company, Inc., The Hydropothecary Corporation





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 Jim Osler Principal T: 416-800-0784 jim.osler@originmerchant.com

Jim Meloche

Principal T: 416-800-0873 Jim.meloche@originmerchant.com

