



At the Opening: GMP Securities morning research package

August 29, 2016

Target and Rating Changes

Initiating Coverage on three Canadian Licensed Marijuana Producers — Arrival of recreational marijuana market

Company Comments

No Current Updates

Sector Comments

No Current Updates

Yesterday's Mid-day Comments

Kinross Gold (K-TSX); BUY, C\$9.75 — FLASH: Modest positive operational update; Tasiast back in full-swing

Arrival of recreational marijuana market

Initiating Coverage on three Canadian Licensed Marijuana Producers



Prepared by GMP Securities L.P.

See important disclosures on the last page of this report

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Executive summary

Much has changed in the last year for Canadian licensed producers of medical marijuana (LPs) with the Liberal Party of Canada winning a majority government on October 19, 2015. The idea that marijuana would one day become legal for recreational purposes in Canada suddenly became closer to reality. In addition, on April 20, 2016 the Liberals announced their intention to propose a bill by the spring of 2017 to legalize marijuana for recreational purposes, putting a hard timeline to an election promise that most believed would not happen so soon.

While macro trends have changed, most LPs have also evolved rapidly over the past two years. Access to capital has become easier with capital markets opening up recently. Access to debt funding has also been made possible and most LPs now have credit facilities, something unheard of just two years ago. As LPs mature, we would expect most of them to become profitable and generate earnings in the coming 12 months. Furthermore we are still in the early innings of long term secular industry growth that has the potential to create significant value for shareholders.

Unique investment opportunity. In our view, the marijuana industry brings a rare and unique opportunity for investors for the following reasons: (1) licensed producers are tapping into an already established multi-billion dollar market, something unique, potentially de-risking their long-term growth, (2) the demand for marijuana has little correlation to economic cycles providing investors with a defensive investment, and (3) unparalleled growth potential with public perceptions rapidly changing on marijuana globally and Canada being at the forefront of these changes.

Opening up of recreational market 18 months away. The main assumption used across this report to form our investment thesis is that the first sale of recreational marijuana will occur in the first half of 2018. We estimate that the size of the recreational marijuana market could reach up to \$5b in sales at maturity assuming a wide distribution model. We would expect LPs to supply the marijuana available legally at retail. Hence, we estimate the wholesale market size for LPs at roughly \$2.5b, a significant opportunity given that the current market for medical marijuana is currently estimated at ~\$200m annually.

Recreational marijuana market opportunity is substantial and not yet fully reflected in stocks. While shares of licensed producers have had an excellent year being up on average ~55% YTD, we believe they have further room to grow. Current share prices of publicly traded licensed producers have only begun reflecting the ~12x increase in market size anticipated over the next 6-7 years and we believe that as we approach the opening of the recreational market, licensed producers' stock valuations should move upward to reflect this large opportunity.

Upon legalization, larger companies may want exposure to the industry. In our view, once legalization becomes official and more details emerge on the potential distribution framework, we would not be surprised to see the industry consolidate. In our view, tobacco, alcohol and pharmaceutical companies may all have an interest in getting exposure to the marijuana industry and could potentially takeout existing LPs.

Initiation coverage on three companies. There are over 20 publicly traded companies in Canada that have a direct or indirect exposure to the Canadian marijuana industry. Within that universe, we have chosen three companies: MT-TSXV (BUY, TP \$4.50), OGI-TSXV (BUY, TP \$2.00), and APH-TSXV (BUY, TP \$3.50) which we believe provide investors with the best exposure to the industry.

In our view, these companies have first mover advantage, solid balance sheets to carry out their expansion plans, brand awareness and scale. We believe they will emerge as clear winners under a scenario where marijuana is legalized for recreational purposes in Canada. We estimate that the recreational market opportunity accounts for ~40-50% of the valuation of the companies covered.

Figure 1. Initiating coverage on three licensed producers of marijuana

	Ticker	Current Price	Rating	Target Price	Projected Return	MCAP (\$MM)	EV (\$MM)	Target EV (\$MM)
Mettrum Health Corp.	MT-TSX.V	\$2.60	BUY	\$4.50	73%	\$120	\$104	\$203
Aphria Inc.	APH-TSX.V	\$2.58	BUY	\$3.50	36%	\$225	\$235	\$339
OrganiGram Holdings Inc.	OGI-TSX.V	\$1.39	BUY	\$2.00	44%	\$117	\$105	\$169

Source: GMP Securities, FactSet, Company reports

- Mettrum has a unique brand strategy and compelling valuation.** We are initiating coverage of MT-TSXV with a BUY rating and a \$4.50 target. We believe Mettrum has developed a unique, physician-centric platform with its “Mettrum Spectrum” colour-coded ranking system of product strength. As one of the original licensed producers, Mettrum has had a first mover advantage in speaking with physicians creating strong brand awareness. Amongst the four publicly traded marijuana companies under coverage, Mettrum has the most compelling valuation trading at 3.2x NTM sales vs. 9.0x the peer average despite having the second highest market share of ~13%. We anticipate Mettrum to report its first cash flow break-even quarter in Q3/FY17.
- Aphria is the lowest cost producer with extensive greenhouse operating experience.** We are initiating coverage of APH-TSXV with a BUY rating and a \$3.50 target. Among publicly traded licensed producers, Aphria is the lowest cost producer, with an average COGS per gram at least 35% lower than peer average. Aphria’s co-founders have extensive knowledge and experience in greenhouse operations and have outlined an aggressive but fully-funded expansion plan that could support up to 60,000kg of marijuana production per year. Aphria has been executing well after receiving its sales licence more than one year after the first batch of LPs, capturing a market share of ~9%. Moreover, Aphria is already generating positive cash flows.
- Organigram offers a differentiated product with regional advantages.** We are initiating coverage of OGI-TSXV with a BUY rating and a \$2.00 target. Organigram is one of only a handful of LPs that offers organically certified medical marijuana, and is the only LP in Atlantic Canada currently selling under the Access to Cannabis for Medical Purposes Regulations (“ACMPR”). New Brunswick offers significant energy, labour and occupancy cost advantages vs. Ontario where the majority of LPs are based. We anticipate that Organigram’s organic product will be even more advantageous once the recreational market opens up as competition for shelf space is likely to intensify. We estimate that Organigram has captured ~5% of the medical market and has generated positive cash flow from operations for two consecutive quarters.

Snapshot of GMP's coverage universe

Figure 2. Snapshot comparison of GMP's coverage universe of licensed producers

	Aphria	Canopy	Mettrum	Organigram	Average
VALUATION METRICS					
Recommendation	BUY	BUY	BUY	BUY	
Current price	\$2.58	\$3.85	\$2.60	\$1.39	
Target Price	\$3.50	\$6.00	\$4.50	\$2.00	
Projected return	35.7%	55.8%	73.1%	43.9%	52%
Market Cap, basic (\$mm)	\$225.2	\$447.0	\$119.8	\$116.7	\$227.2
Market Cap, fully diluted (\$mm)	\$283.6	\$479.5	\$129.1	\$132.8	\$256.3
EV (\$mm) ¹	\$234.7	\$427.0	\$104.1	\$105.1	\$174.2
EV/TTM Sales	27.8x	33.6x	9.8x	21.3x	23.1x
EV/NTM Sales	12.1x	11.9x	3.2x	8.9x	9.0x
EV/Patient	\$50,208	\$21,351	\$7,826	\$42,050	\$30,359
EV/Licensed capacity (per kg)	\$156,482	\$61,004	\$29,322	\$175,209	\$105,504
EV/Current production capacity (per kg)	\$93,889	\$14,234	\$17,349	\$38,935	\$41,102
P/BV	4.8x	3.1x	2.8x	6.7x	4.3x
OPERATING METRICS					
Sales (TTM \$mm)	\$8.4	\$12.7	\$10.6	\$4.9	\$7.3
Last reported patient count	4,675	20,000	13,300	2,500	10,119
Grams sold (TTM)	1,038,722	1,698,068	1,185,245	612,207	906,848
Avg selling price (TTM, \$/g)	\$8.08	\$7.45	\$8.18	\$7.97	\$7.92
Cash COGS per gram (Last quarter), \$/g) ²	\$1.15	\$2.69	\$2.00	\$1.29	\$1.78
Opex (Last quarter, \$/g) ³	\$5.56	\$7.47	\$9.16	\$4.80	\$6.75
Adj. gross margin ⁴	83%	63%	69%	49%	66%
Est. market share ⁵	9%	24%	13%	5%	13%
Current production capacity	2,500 kg	30,000 kg	6,000 kg	2,700 kg	10,300 kg
Health Canada licensed capacity	1,500 kg	7,000 kg	3,550 kg	600 kg	3,163 kg
Number of licensed facilities	1	3	3	1	2
Cannabis oil extracts license	Production & Sale	Production & Sale	Production & Sale	Production & Sale	

(1) Based on fully diluted shares outstanding.

(2) Cash COGS per gram are reported by the companies and may not be fully comparable.

(3) Includes selling, marketing, general and administrative expenses (excludes depreciation, amortization and stock-based compensation).

(4) Adjusted gross margin excludes the fair value adjustment of biological assets and amortization.

(5) Based on the average estimated market share by number of patients and grams sold.

Source: Company reports, GMP Securities, FactSet

Historical background on medical marijuana in Canada

Historical background on medical marijuana. Marijuana was first legitimately recognized for medicinal purposes by a Canadian court in 1999 following the enactment of the Controlled Drugs and Substances Act (“CDSA”) in 1996. On July 31, 2000, the Ontario Court of Appeal ruled in the case of Regina v. Parker which required the Canadian government to allow the use of cannabis as medicine, but also to provide access to the plant. This led to the creation of the Marijuana Medical Access Regulations (“MMAR”) by Health Canada in 2001, allowing individuals to either grow their own, purchase from a designated grower, or purchase from Health Canada’s only licensed producer at that time, Prairie Plant Systems (now operating under Cannimed). Cost overruns and the inability to properly enforce the regulations led to a reworking of the legislation into the Marijuana for Medical Purposes Regulations (“MMPR”) which came into force in June 2013. This new legislative framework repealed the right to grow marijuana individually in favour of a system of larger commercial licensed producers and established stringent quality and security requirements.

Federal court issues temporary injunction continuing some MMAR provision. On March 21, 2014, the Federal Court of Canada issued a temporary injunction continuing some MMAR provisions, in response to a challenge brought by individuals and their representative, Mr. John C. Conroy of British Columbia. While the MMPR would continue as envisioned and apply to all new entrants into Canada’s medical marijuana program, the key provision of the injunction is that it allows individuals previously authorized as medical marijuana producers (as of September 30, 2013) under MMAR to continue producing until the Federal Court decides the merits of the case.

Court rules MMPR unconstitutional requiring wider access. In Allard et al v. Her Majesty the Queen in Right of Canada, Justice Michael Phelan of the Federal Court ruled on February 24, 2016 the MMPR to be invalid on the basis that the regulations unjustifiably infringed liberty and security interests pursuant to Section 7 of the Charter of Rights and Freedoms. At issue was the accessibility of medical marijuana, which the court found too restrictive under the MMPR.

Current market overview

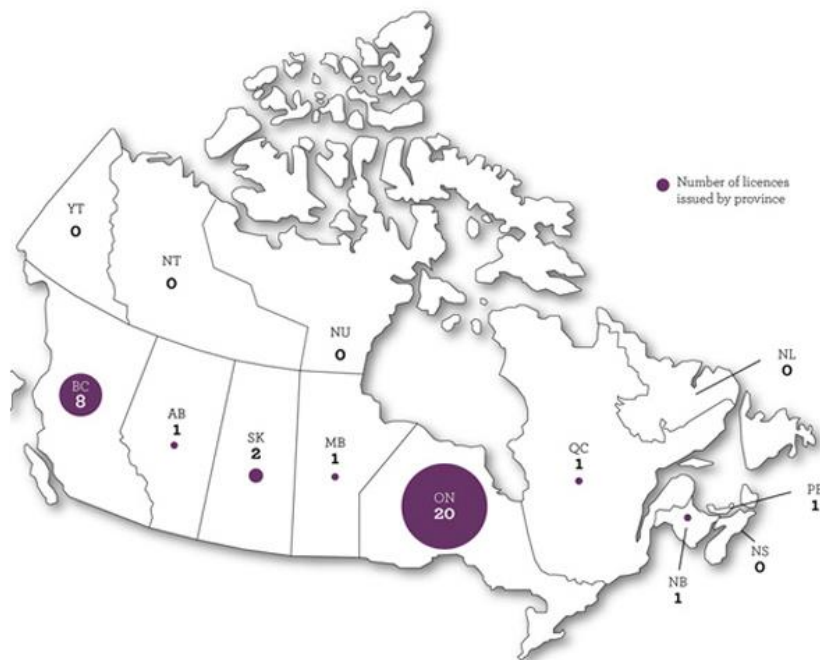
Health Canada introduces hybrid regulations to satisfy court order. On August 11, 2016 Health Canada introduced the Access to Cannabis for Medical Purposes Regulations (“ACMPR”) which, along with the licensed producers, would allow individuals the right to grow a limited amount of medical cannabis for their own consumption, or designate someone to grow it for them. All starter materials, including plants and seeds must still be purchased from a licensed producer and one must still obtain a prescription from their physician. The amount of authorized plants that one can grow at home will depend on the daily dose authorized by their physician but would typically range from two to 10 plants.

At the heart of the ACMPR is a system of commercial operators that produce and sell quality controlled medical marijuana. The in-depth licence application review process creates high barriers to entry including RCMP background checks, significant capital commitments to adhere to security and quality control standards, and a review process that has become notoriously sluggish (some applicants have waited well over one year to hear back from Health Canada regarding their applications).

As per the rules governing the ACMPR, patients must seek a medical document from their physicians authorizing them to purchase medical marijuana. This document must be forwarded to the prospective licensed producer and cannot be transferred which lends to the sticky nature of patient acquisitions (patients must obtain a new prescription every time they want to switch licensed producers). Due to supply variability amongst LPs (particularly as it relates to cannabis oils), physicians will often split the recommended dosage across multiple medical documents to allow patients to source their marijuana from more than one producer. Prescription are generally written to cover three, six or 12 months.

Health Canada has issued 35 licences to date. There are currently 35 licences issued by Health Canada for the production and/or sale of dried marijuana in Canada with a large concentration in Ontario (20) and British Columbia (8). Of the licences issued, there are 25 companies with a licence to sell dried cannabis, and 10 companies with a licence to produce only. In addition, Health Canada has issued 22 Section 56 exemptions under the Controlled Drugs and Substances Act for the production and/or sale of cannabis oils. Aphria, Canopy Growth, Mettrum and Organigram have all received their amended licences from Health Canada to both produce and sell cannabis oils.

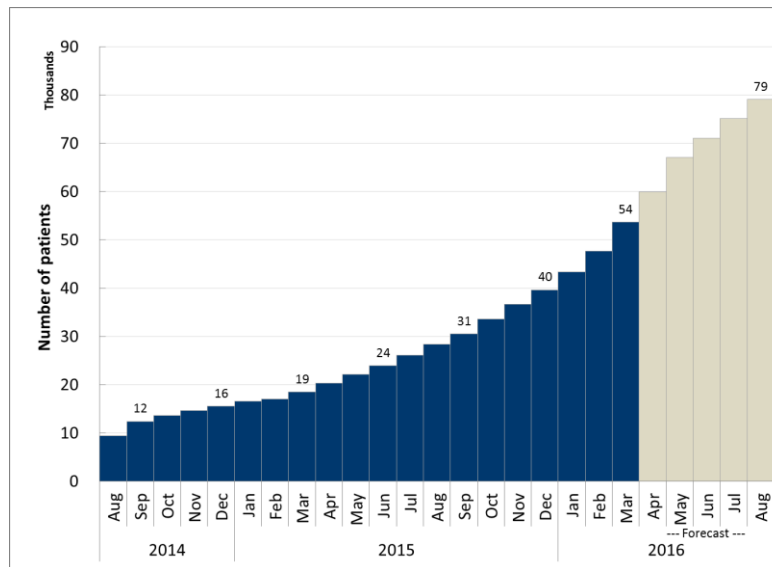
Figure 3. Number of Health Canada licences issued to cultivate and/or sell dried marijuana



Source: Health Canada

Current market size estimated at ~\$150-200m. There were 54k patients registered in the MMPR as of March 31, 2016, the last reported official statistic from Health Canada. Given estimated growth rates of ~7-9% MoM in new patient registration in the program, we estimate there are between ~75k to 80k patients accessing medical marijuana currently. Assuming an average consumption rate of 0.8-1.0 gram per day per patient at an average price of \$7.25-7.50 per gram, we estimate the total size of the Canadian medical marijuana market at ~\$150-200m currently.

Figure 4. MMPR/ACMPR patient evolution and forecast



Source: Health Canada, GMP Securities

What are the decision factors patients consider in choosing an LP?

1. **Product availability.** One of the most important factors for doctors recommending a licensed producer is ensuring that the patient’s medication will be available when they need it most. In the early days of the MMPR, supply shortages were common and many patients were left having to find another licensed producer due to product being unavailable. A licensed producer capable of providing a constant availability of supply will generally be preferred over one who consistently has supply shortages.
2. **Large strain selection.** Patients with different conditions or ailments can often benefit from different concentrations of THC and CBD.¹ For instance, a patient suffering from epilepsy may find a higher concentration of CBD and lower THC more beneficial and without the psychoactive effects that get you “high”.
3. **Availability of cannabis oil.** Cannabis oils are in high demand and the preferred method of delivery for doctors who generally advise against smoke inhalation. Cannabis oils may also be preferred by patients who don’t have a prior history in taking marijuana and are inexperienced in turning the dried flower buds into usable medication.
4. **Price.** Prices range between LPs, with marijuana costing as little as a couple of dollars a gram for trimmings to up to \$15.00 per gram for some strains. Most licensed producers also offer compassionate pricing for low income earners which is often a discount off the listed price for the patients’ first 30 grams per month.
5. **Customer service and wait times.** Another important factor in choosing an LP is the level of customer service and the wait time when placing an order. Some licensed producers have consistently received glowing reviews on their level of service, with minimal wait

¹ Delta-9 tetrahydrocannabinol (THC) and cannabidiol (CBD) are two chemical compounds known as cannabinoids that are naturally produced by the cannabis plant.

times on the phone. Others have reportedly been overwhelmed at times by patient demand which has resulted in wait times of up to 30 minutes.

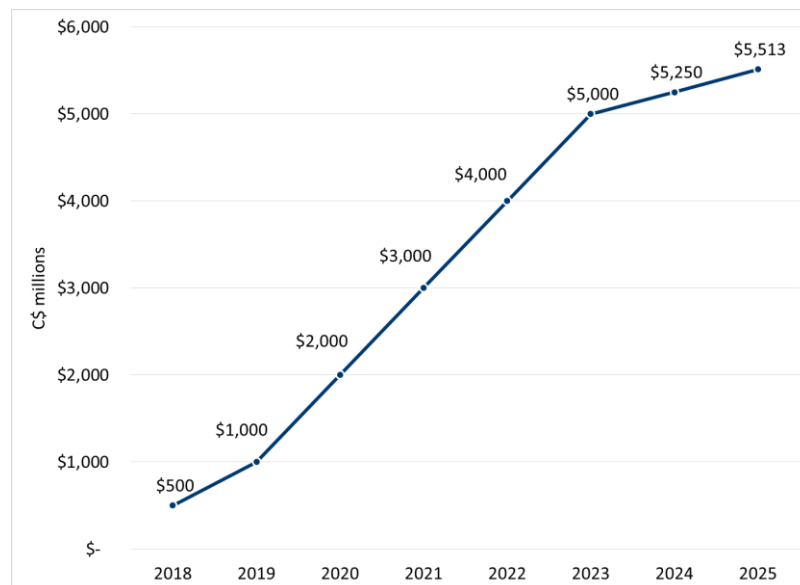
The role of cannabis clinics / support centres

While dispensaries sell marijuana from unknown sources directly on site, cannabis support clinics offer support, education, and help on using medical marijuana and choosing a licensed producer but do not offer medical marijuana for sale on premise. The support clinics are there for prospective patients to get the information they need and generally rely on referrals from doctors who are less knowledgeable on strain selection and the different licensed producers. Many licensed producers work closely with these types of clinics as a source of patient acquisitions, often paying a referral fee in the range of 15-20% or a flat education/advisory monthly fee. Cannabis clinics act as the middle-man between the patient’s physician and the licensed producers, offering their patients advice and help with registration and strain selection.

Legalizing marijuana for recreational use

The Liberal Party of Canada has pledged to “legalize, regulate, and restrict access to marijuana” with the goals of alleviating the costs on the criminal justice system, defunding organized crime, and keeping marijuana out of the hands of children. The Liberals believe that prosecuting and arresting people for non-violent marijuana offences clogs up the criminal justice system and gives Canadians a criminal record for minor offences. At the same time, the proceeds from the illegal drug trade support organized crime potentially leading to greater threats to public safety, like the increased availability of harder drugs. Therefore, new legislation is expected to remove marijuana consumption and incidental possession from the Criminal Code. Making the consumption of marijuana legal is a tremendous opportunity for the current licensed producers.

Figure 5. Estimated evolution of the recreational marijuana industry in Canada (at retail)



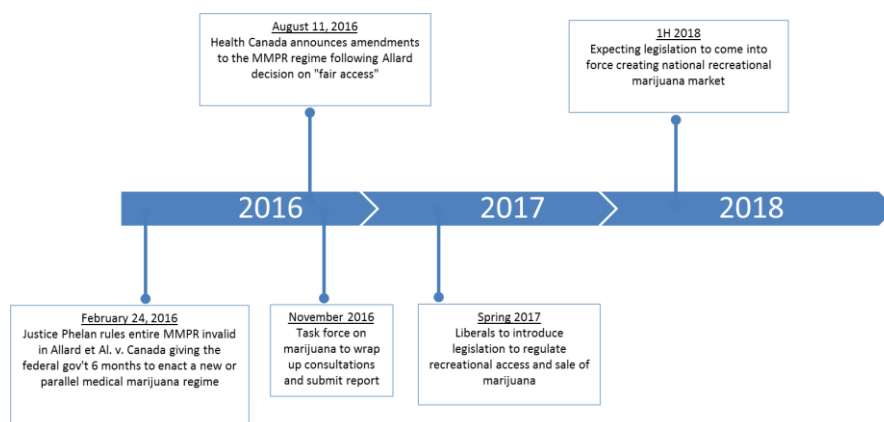
*Note: The wholesale market is expected to be 50% smaller given retail profit and taxes (both excise and sales taxes).
Source: GMP Securities*

Recreational market could reach up to \$5b at retail. We expect that the recreational market will take at least five years to reach maturity given: (1) the time needed for a full distribution system to be established, (2) the time to change Canadian’s purchasing patterns away from the black market, and (3) the time for production to catch up to demand. Our \$5b² market size estimate is predicated on the assumption that products are readily available and accessible to the majority of eligible Canadians. Under a limited distribution model (e.g. mail-order only), we could see a smaller market opportunity as Canadians could resort to a more easily accessible black market. As a frame of reference, the market size in Colorado which legalized marijuana in 2014 is estimated to reach US\$2b at maturity.

Recreational market opening by 2018? Health Minister Jane Philpot has stated the government’s intention to introduce a bill to legalize marijuana by the spring of 2017. The timetable was announced during the UN talks in New York reviewing global drug treaties (UNGAS) this past April. It could take several months before the bill comes into force given that it has to pass through the House and Senate before the legislation is enacted, so we don’t anticipate any recreational sales before the first half of 2018. We may also see a transition period to give producers time to adjust to the sizeable increase in expected demand and also for the distribution network to be fully established. The length of the transition period is unknown but could be up to two to three years which explains why we don’t expect the market to reach its full potential before 2023.

Federal-provincial task force findings expected in November 2016. The Liberal government has formed a federal-provincial task force to explore possible frameworks for the legalization of marijuana for recreational use, which is to report to MP Bill Blair, Parliamentary Secretary to the Minister of Justice and former Chief of the Toronto Police. The task force will consult experts and provincial level authorities on public health, law enforcement, regulations and taxation surrounding the legalization of marijuana. In early June the Liberals named Anne McLellan, former Minister of Justice under Jean Chretien, as head of the task force, which is made up of nine members including former members of the RCMP, physicians and academics. The task force is set to report their findings in November 2016 with plans to draft legislation in the spring of 2017.

Figure 6. Key events in Canada’s marijuana industry



Source: GMP Securities

² Assuming 10% of Canadian adults (28 million) consume 0.5 grams/day at an average price of \$10/gram.

Possible regulatory framework scenarios for recreational market

Licensed producers expected to play a major role in supplying marijuana. We believe that Health Canada-approved licensed producers will be the only source of supply to the recreational market to ensure product quality meets adequate standards. We expect strict rules will be implemented to restrict underage consumption, advertising, consumption in public places and driving while impaired. We would expect that the THC levels would be regulated with limits lower than used in medical marijuana.

It appears that the distribution could be regulated by the provincial governments while the supply would be overseen by the federal government (Health Canada). We discuss below potential scenarios with regards to the framework for distribution of medical marijuana.

- 1. Provincial liquor boards distribute through their respective retail outlets.** In our opinion, there is a high likelihood that the liquor boards in each of the 13 provinces and territories could oversee the distribution and sale of marijuana once legalized. Ontario Premier Kathleen Wynne and Manitoba Premier Greg Selinger have both voiced their support for the provincial liquor boards' role in the sale of marijuana. Distribution through liquor boards would be an ideal scenario to ensure supply comes from legal sources. In addition, it would allow government entities to restrict sale to minors, something very sensitive to the Canadian population.
- 2. Pharmacies selling medical marijuana.** In our view, it would make sense for drug stores to be included in the distribution and sale of medical marijuana. Some companies such as Shoppers Drug Mart have already expressed their interest to get involved. Under this scenario, we would expect LPs to supply drug stores with medical product which could take the form of capsules, pills, oil or dried marijuana where dosage could be easily measured.
- 3. Dispensaries expected to be shut down.** Marijuana dispensaries are storefronts that sell marijuana. They are illegal as the cannabis they sell does not come from a licensed producer. The proliferation of illegal marijuana dispensaries has accelerated over the past 12 months and new stores continue to propagate in metropolitan areas, predominantly Vancouver and Toronto, despite recent police crackdowns. We believe that these storefronts will be deemed illegal by most provincial governments with the result of dispensaries being shut down in most provinces.
- 4. Homegrown unlikely.** While there is a possibility that growing at home recreationally will be legal, given recent decisions to allow homegrown medical marijuana under the new ACMPR, the impact on the industry is expected to be minimal. For instance, it is legal to brew your own beer and grow your own tobacco in Canada, both controlled substances, but the vast majority of Canadians choose to purchase beer and tobacco products at retail. While the Colorado and Washington markets in the U.S. allow for six plants to be grown at home, market growth at retail continues to exceed initial estimates.

Pricing

In our view recreational marijuana prices will be higher at retail than medical marijuana to account for distribution profits and additional excise taxes. To this end, we would expect prices to initially be high (\$10-15/gram) given limited supply and high initial demand. Once demand normalizes and supply catches up, we would expect a steady decline in prices as an increasing number of producers become licensed and the necessary infrastructure is built out. This would match the pricing trends seen in U.S. states that have legalized marijuana.

We assume licensed producers will sell to retail outlets at ~\$5.00 per gram which will allow for a retail markup of 35-45% for an average retail price of ~\$6.75-7.25 per gram before taxes. Assuming an excise tax on marijuana is implemented at 25-30% and including an average sales tax (including federal and provincial) of ~13%, we arrive at an average retail price of ~\$9.00-11.00 per gram. This would be aligned with the average price in the U.S. of \$10.00-12.00 per gram.

Figure 7. Estimated marijuana price in the Canadian recreational market

	Scenario 1	Scenario 2
Licensed producer's wholesale price	\$5.00	\$5.00
Retail mark-up	35%	45%
Retail list price	\$6.75	\$7.25
Excise tax on recreational marijuana (est.)	20%	30%
Average sales tax rate ¹	13%	13%
Estimated retail price per gram	\$9.18	\$10.68

¹ Average of Canadian provinces

Source: GMP Securities

Marijuana dispensaries and their potential impact on the market

What is a marijuana dispensary? A marijuana dispensary is a storefront that sells marijuana and cannabis-related products to customers. Some dispensaries purport to service only medical patients with a valid prescription, but whether or not operating as a medical dispensary, all storefronts selling marijuana are illegal, as is the cannabis itself given that it did not come from a licensed producer. Licensed producers are currently only allowed to sell direct-to-consumer and distribute by mail. Most licensed producers agree that dispensaries have hindered patient growth under the MMPR/ACMPR and would prefer to have current laws enforced.

How many dispensaries are operating in Canada? We estimate that there are approximately 350 marijuana dispensaries operating across Canada.³ The proliferation of illegal marijuana dispensaries has accelerated over the past 12 months and new stores continue to propagate in metro areas, predominantly Vancouver and Toronto, despite recent crackdowns. We estimate that marijuana dispensaries could be servicing 200-300k customers in aggregate based on 350 dispensaries with an average of ~500-1,000 regular customers each.

Why the sudden proliferation across Canada? Opportunistic entrepreneurs are taking advantage of the current regulatory confusion and uncertainty surrounding both the MMAR/MMPR

³ Based on The Canadian Association of Medical Cannabis Dispensaries estimate of ~350 dispensaries before recent forced closures in Vancouver and Toronto, and allowing for some operators who continue to operate post-enforcement.

injunction and the legalization for recreational use. The dispensaries advocate and welcome a regulated system but are trying to get out in front of an eventual legalized system. Many owners simply hope that enforcement will remain weak in advance of laws to legalize recreational use.

Market size could double under scenario where dispensaries are abolished. We would expect that between 30-45% of dispensaries customers would switch their sourcing habit to legal licensed producers under a scenario where all dispensaries would be closed down. Given the stance that some Canadian cities have adopted, such as Vancouver, the closure of all dispensaries in each provinces may be unlikely. Regardless of the scenario, we believe the current proliferation is having a material impact on the addressable market of licensed producers.

Figure 8. Scenario analysis of the impact of dispensary closures on licensed producers

	Conservative	→		Aggressive
Estimated # of dispensary customers	200,000	233,000	266,000	300,000
% of customers that would switch to an LP	30%	35%	40%	45%
Incremental customers to LPs	60,000	81,550	106,400	135,000
Daily consumption rate per customer (grams)	0.80	0.80	0.80	0.80
Est. average selling price (\$/gram)	\$7.50	\$7.50	\$7.50	\$7.50
Incremental revenues to LPs (\$ millions)	\$131.4	\$178.6	\$233.0	\$295.7
Current est. market size serviced by LPs (\$ millions)	200	200	200	200
Potential increase in current market	66%	89%	117%	148%

Source: GMP Securities Inc.

Case study: Legal recreational marijuana markets

Figure 9. Comparative analysis of recreational marijuana regimes

	Colorado	Washington	Alaska ¹	Oregon	Uruguay	Netherlands	Average	Canada (GMP est)
Regulatory authority	Department of Revenue	Washington State Liquor and Cannabis Board	Alaska Department of Health and Social Services, Division of Public Health	Oregon Liquor Control Commission	Federal government	Federal government		Provincial liquor boards
Estimated current rec market size	US\$650-750m	US\$900-1,100m	n.a.	US\$250-300m	US\$5-10m	US\$400-600	n.a.	n.a.
Estimated market size at maturity	US\$2 billion	US\$2.65 billion	US\$110m	US\$465m	US\$18-22m	US\$300-450m	US\$937m	C\$4-5 billion
% of population that use marijuana	10-14%	12-15%	11-13%	n.a.	4-6%	n.a.	10.6%	10%
Average price (\$/gram) ³	~\$11.00-12.00	\$10.00-11.00	n.a.	~\$10.50-11.50	~\$1.00	~\$10.75	~\$8.00-9.00 ⁴	\$9.00 - \$11.00
Distribution	Retail dispensaries	Retail dispensaries	Retail dispensaries	Med dispensaries ² Rec dispensaries (2017)	Cannabis clubs Homegrown Pharmacies*	Coffee shops	n.a.	Liquor boards
Suppliers	Licensed producers	Licensed producers	Licensed producers	Licensed producers Homegrown	Cannabis clubs Homegrown Licensed producers	Unregulated	n.a.	Licensed Producers
Homegrown allowance	6 plants	Illegal	6 plants	4 plants	6 plants	Illegal	6 plants	Illegal
Excise tax	15%	37%		25%	none		26%	15-25%
Population (millions)	5.4	7.1	0.7	4.0	3.4	16.8	n.a.	35

* Not yet implemented

(1) Alaska is still setting up its retail marijuana framework (and retail sales are not yet legal. Licences have so far been granted to several testing facilities and cultivation facilities.

(2) Oregon Liquor Control Commission is currently issuing licences to producers for expected sales to retail outlets in 2017.

(3) Based on average prices for one ounce.

(4) Excluding Uruguay.

Source: Regulatory authorities, ArcView Market Research & New Frontier “State of Legal Marijuana Markets” report, “Uruguay’s Drug Policy: Major Innovations, Major Challenges” report, www.talkingdrugs.org, RAND Drug Policy Research Center “What Can We Learn From the Dutch Cannabis Coffeeshop Experience?” report, Marijuana Policy Group “Market Size and Demand for Marijuana in Alaska” report

Colorado, USA. Colorado was the first state to legalize marijuana for recreational consumption after passing Amendment 64 following a popular vote in November 2012. First sales of recreational marijuana began in January 2014 and is regulated by the Marijuana Enforcement Division of the Colorado Department of Revenue. Combined sales of medical and recreational marijuana was ~\$1 billion in 2015 and Colorado has reported a decrease in crime and traffic fatalities, and an increase in tax revenue and economic output. Most industry sources estimate that the market could reach up to \$2b at maturity.

Washington, USA. The legal recreational market kicked off in July 2014, in which the Washington State Liquor and Cannabis Board (WSLCB) licenses and regulates marijuana production, distribution, and possession for adults over 21 years old. The supply chain is set up in three tranches: (1) producers grow and sell marijuana wholesale to processors, (2) processors package and label marijuana for wholesale to marijuana retailers, and (3) retailers sell marijuana at retail outlets (dispensaries) regulated by the WSLCB. A licensee can hold both a production and processor licence but a producer/processor cannot hold a retail licence. Homegrown marijuana for recreational use remains illegal and must be purchased from a state-licensed retailer. The current market is estimated at ~\$1b and is estimated to reach over \$2.5b at maturity.

Alaska, USA. In November 2014, voters adopted Ballot Measure 2, expanding the rules surrounding legal possession and for the establishment of a system to license, regulate and tax the production and sale of marijuana for personal use. Alaska began accepting business applications for testing and cultivation licences in February 2016, with processor and retail licences to be issued later in 2016. The Marijuana Control Board has also proposed rules for cafés that would allow the consumption of marijuana onsite, the first such rules proposed in the US.

Oregon, USA. In November 2014, voters passed Ballot Measure 91 becoming the third state to form a recreational marijuana market. The legislation was enacted in July 2015 with the first recreational sale occurring in October 2015. Currently, marijuana for recreational use is being sold through existing medical marijuana dispensaries while the Liquor Control Commission works to issue licences to producers for expected sales to retail outlets in the fall of 2016. The current market size is estimated to be \$250m-300m.

Uruguay. In 2013, Uruguay became the first country in the world to have a legal marijuana market. Uruguay allows cannabis clubs (akin to the designated growers under Canada's prior MMAR regime) of up to 45 members to grow a max of 99 plants each year for its members. Individuals may also grow up to six plants for personal consumption. More recently, the Uruguayan government has commissioned two producers (ICCorp and Simbiosys SA) to supply cannabis to pharmacies, where individuals can purchase up to 40 grams per month for ~\$1 per gram. The system was set up in an attempt to defund and reduce the influence of cartels importing the drug from Paraguay, which allegedly also has a street price of \$1 per gram.

Netherlands. The production and sales of cannabis in the Netherlands remains illegal but is governed under a toleration policy in which the Public Prosecution Services does not prosecute coffee shops or individuals for small amounts of soft drugs (cannabis and hash) equal to five grams or five plants. Tourists in Amsterdam may legally purchase marijuana (up to five grams at once) from coffee shops, but other municipalities are free to legally ban tourists from purchasing marijuana.

Aphria Inc.^{1,7}

APH-TSXV

August 29, 2016

BUY

Last: **C\$2.58**
Target: **C\$3.50**

Initiating coverage: Lowest cost producer

Aphria is a licensed producer of medical marijuana based in Leamington, Ontario. The company is growing marijuana in greenhouses with operators boasting decades of greenhouse expertise. According to our analysis, APH has the lowest operating costs of all publicly traded LPs. This has led the company to develop two channels of growth, selling wholesale to other producers and selling in the traditional retail channel directly to patients.

Aphria was one of the first publicly traded companies to report positive operating cash flows (along with Organigram), when it reported its Q4 results ending May 2016. Aphria reached that threshold after only one year of sales, the fastest pace of all publicly traded peers. According to our analysis, with a cash balance of ~\$49m, Aphria has enough funding to carry out its mid-term expansion plans.

Our positive stance on Aphria is based on the following:

- **Low cost advantage:** Aphria runs a state-of-the-art greenhouse facility and its co-founders have a long history of operating greenhouses, having grown produce and flowers for decades. Aphria's production costs on a cash basis is ~\$1.15 per gram, ~35% lower than publicly traded peers.
- **Large expansion plans.** At full capacity and assuming additional greenspace is built on the undeveloped land, Aphria's production capability could reach 55,000-60,000kg of marijuana per year, potentially representing in excess of \$300m in annual revenues.
- **Solid execution to date.** In less than 24 months of operations, Aphria has been able to capture a market share of ~9%, despite receiving its licence to sell marijuana more than one year after the first licences were issued.

We are initiating coverage with a target price of \$3.50. We derive our target price using a two-stage, 10-year DCF model with a discount rate of 12%. We estimate that Aphria will capture a 7.5% share of the recreational market vs. a ~9% share of the medical market today. Our DCF assumptions include an average EBITDA margin of 37% for the first stage, higher than peers due to its highly efficient greenhouse operations.

Rating	BUY
Target	\$3.50
Revenue 2017E (mm)	\$19.3
Revenue 2018E (mm)	\$33.4
EBITDA 2017E	\$5.3
EBITDA 2018E	\$12.1

Share Data

Share o/s (mm, basic/f.d.)	87.3 / 109.9
52-week high/low	2.85 / 0.79
Market cap (mm) f.d.	\$283.6
EV (mm)	\$234.7
Net debt (net cash), mm	(\$48.9)
Dividend	n.a.
Dividend yield	n.a.
Projected return	35.7%

Financial Data

FYE May 31	2016A	2017E	2018E
Revenue (mm)	\$8.4	\$19.3	\$33.4
EBITDA (mm)	\$0.3	\$5.3	\$12.1
EV/EBITDA	nmf	44.7x	19.5x
EPS (f.d.)	\$0.00	\$0.03	\$0.07
P/E	nmf	97.4x	39.0x
CFPS	(\$0.02)	\$0.04	\$0.09
P/CF	nmf	nmf	28.1x
Net debt (net cash)	(\$16.5)	(\$41.7)	(\$44.6)
BVPS	0.60	0.74	0.84
P/BV	4.3x	3.5x	3.1x

All figures in C\$ unless otherwise noted

 [Current Chart](#)

 [Previous Research](#)

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Overview - Aphria

Figure 10. Snapshot comparison of publicly traded licensed producers

	Aphria	Canopy	Mettrum	Organigram	Average
VALUATION METRICS					
Recommendation	BUY	BUY	BUY	BUY	
Current price	\$2.58	\$3.85	\$2.60	\$1.39	
Target Price	\$3.50	\$6.00	\$4.50	\$2.00	
Projected return	35.7%	55.8%	73.1%	43.9%	52%
Market Cap, basic (\$mm)	\$225.2	\$447.0	\$119.8	\$116.7	\$227.2
Market Cap, fully diluted (\$mm)	\$283.6	\$479.5	\$129.1	\$132.8	\$256.3
EV (\$mm) ¹	\$234.7	\$427.0	\$104.1	\$105.1	\$174.2
EV/TTM Sales	27.8x	33.6x	9.8x	21.3x	23.1x
EV/NTM Sales	12.1x	11.9x	3.2x	8.9x	9.0x
EV/Patient	\$50,208	\$21,351	\$7,826	\$42,050	\$30,359
EV/Licensed capacity (per kg)	\$156,482	\$61,004	\$29,322	\$175,209	\$105,504
EV/Current production capacity (per kg)	\$93,889	\$14,234	\$17,349	\$38,935	\$41,102
P/BV	4.8x	3.1x	2.8x	6.7x	4.3x
OPERATING METRICS					
Sales (TTM \$mm)	\$8.4	\$12.7	\$10.6	\$4.9	\$7.3
Last reported patient count	4,675	20,000	13,300	2,500	10,119
Grams sold (TTM)	1,038,722	1,698,068	1,185,245	612,207	906,848
Avg selling price (TTM, \$/g)	\$8.08	\$7.45	\$8.18	\$7.97	\$7.92
Cash COGS per gram (Last quarter, \$/g) ²	\$1.15	\$2.69	\$2.00	\$1.29	\$1.78
Opex (Last quarter, \$/g) ³	\$5.56	\$7.47	\$9.16	\$4.80	\$6.75
Adj. gross margin ⁴	83%	63%	69%	49%	66%
Est. market share ⁵	9%	24%	13%	5%	13%
Current production capacity	2,500 kg	30,000 kg	6,000 kg	2,700 kg	10,300 kg
Health Canada licensed capacity	1,500 kg	7,000 kg	3,550 kg	600 kg	3,163 kg
Number of licensed facilities	1	3	3	1	2
Cannabis oil extracts license	Production & Sale	Production & Sale	Production & Sale	Production & Sale	

(1) Based on fully diluted shares outstanding.

(2) Cash COGS per gram are reported by the companies and may not be fully comparable.

(3) Includes selling, marketing, general and administrative expenses (excludes depreciation, amortization and stock-based compensation).

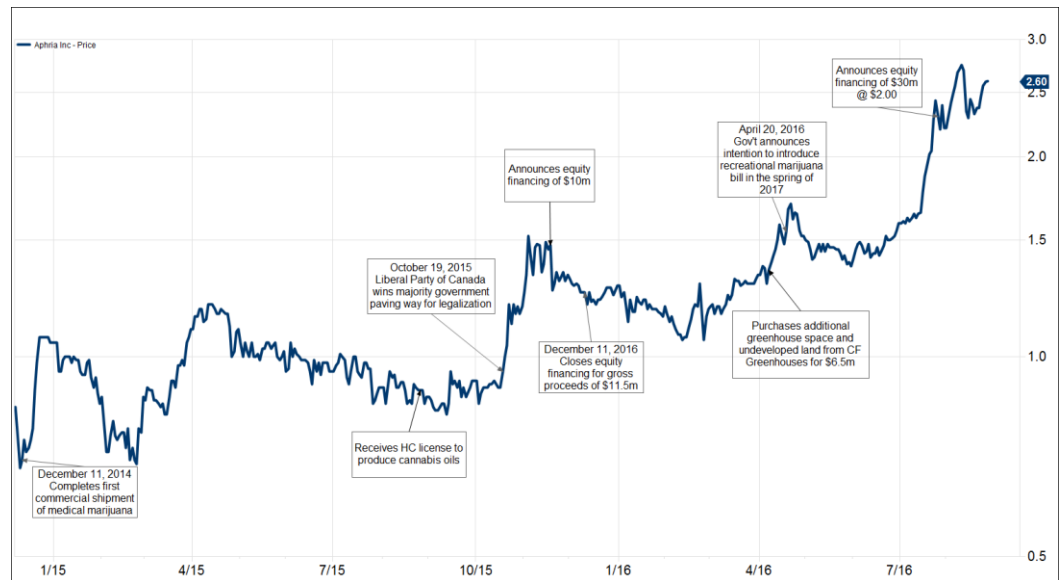
(4) Adjusted gross margin excludes the fair value adjustment of biological assets and amortization.

(5) Based on the average estimated market share by number of patients and grams sold.

Source: Company reports, GMP Securities, FactSet

Aphria is a Health Canada licensed producer of medical marijuana based in Leamington, Ontario. Aphria began trading on the TSX Venture Exchange on December 8, 2014 following a qualifying transaction on December 2, 2014 between its wholly-owned subsidiary Pure Natures Wellness (doing business as Aphria) and the capital pool company Black Sparrow Capital Corp. Aphria received its licence to produce and sell dried medical marijuana buds on November 24, 2014 (the 14th licence issued by Health Canada), received its licence to produce cannabis oils on August 26, 2015, and recently had its licence amended to allow for the sale of cannabis oils on August 17, 2016. Aphria has recently purchased the large greenhouse complex formerly owned by CF Greenhouses including nine acres of ready-built greenhouses (including currently occupied space) and an additional 27 acres of undeveloped land, 17 acres of which are free to be developed into additional growing space. Aphria has also entered into an agreement to purchase an additional 11 acres of land adjacent to its current operations (including 345,000 sq. ft. of existing greenhouses) for \$2.1m in cash.

Figure 11. Aphria’s historical price action



Source: FactSet, Aphria Inc.

Products and pricing

Simple and straightforward product packaging for pharmaceutical approach. Aphria’s go-to-market strategy was to adopt a pharmaceutical approach to separate the company from the lingering stigma of marijuana as a street drug. The company also took the decision to rebrand all of its cannabis strains after Canadian lakes, foregoing original street names like “AK-47” or “Triple Diesel”, instead opting for names such as “Great Bear” or “Okanagan”, making them much more accessible in a medical setting, in our view. Aphria packages its dried marijuana buds in a 10-gram blue bottle with a clean white label.

Figure 12. Aphria’s dried marijuana product packaging



Source: Aphria Inc.

Aphria receives licence to sell cannabis oils. Aphria received its amended licence to produce and sell cannabis oils on August 17, 2016 and is currently producing and building up inventory. The company has dedicated an area of 7,000 sq. ft. for extraction processes and has a current oil extraction capacity of 12,000 bottles per month. Aphria has chosen three strains with a good

balance of THC/CBD content for initial commercial release. Like many of its peers, Aphria will use supercritical CO₂ extraction machines to produce the cannabis oils. The level of demand for cannabis oil remains difficult to forecast given that it is the first sales cycle for all licensed producers, but we estimate that cannabis oil will eventually represent 30-40% of Aphria's sales. This may be a lower proportion than other licensed producers given that Aphria has a large portion of Canadian veterans amongst its patient base and veterans are currently only reimbursed for dried marijuana, not cannabis oils, suggesting that most of the Canadian veteran patients would prefer to continue using the dried cannabis in order to get reimbursed.

Figure 13. Aphria's Waters CO₂ critical extraction setup



Source: Aphria Inc.

Aphria acquires CannWay Pharmaceuticals. On January 14, 2016 Aphria acquired a 100% ownership interest in CannWay Pharmaceuticals Inc. in exchange for 3.6m shares, or ~\$4.4m based on the prior day's closing price. Half the shares are being held in escrow until certain operational metrics are achieved. CannWay is a medical support service created by Canadian veterans, for Canadian veterans to help them navigate the medical cannabis market and administrative process of reimbursements through Veterans Affairs Canada. The transaction provides Aphria with an established patient-base of Canadian veterans, a patient demographic that is generally characterized by high consumption rates.

Growth strategy

Targeting two avenues of growth through wholesale and retail sales. Retail sales will remain Aphria's core channel in order to develop the Aphria brand in advance of a legal recreational market, but the company is also successfully selling wholesale to several other licensed producers, opening up an additional distribution channel for any excess or slow-moving inventory. Moreover, the wholesale distribution channel is very profitable given Aphria's low cost structure and substantially lower operating expenses associated with wholesale (e.g. no need to pay referral fees). Therefore, wholesale remains an attractive opportunity in the near and

medium-term as we believe a handful of licensed producers may find it more economically viable to purchase wholesale if they are experiencing high costs of production, are capacity constrained due to delays in licence renewals, are awaiting capacity build-out, or crop failures.

Penetrating heavy user veterans' market. According to Aphria, Canadian veterans are among the heaviest users of medical marijuana, turning to cannabis to help with symptoms associated with Post-Traumatic Stress Disorder (PTSD), chronic pain and depression. Aphria notes that a single Canadian Veteran can have consumption patterns five times that of the average medical marijuana user. For this reason, veterans are a highly sought after patient group that Aphria has targeted. Veterans Affairs Canada is the only publicly funded payer of medical marijuana and currently only reimburses (through Blue Cross) for dried marijuana. As of March 2016, Aphria had registered over 500 Canadian veterans.

Already generating cash from operations as a result of focused strategy. Aphria has more leverage to sales given its lower cost structure than perhaps any other publicly traded LP, which results in higher profitability levels. Aphria was the first to turn EBITDA positive and is currently generating positive cash from operations, an accomplishment only Organigram has achieved thus far (amongst publicly traded peers). Aphria, like many of the other licensed producers, will pay referral fees to health clinics and patient aggregators but not at the expense of profitability. Aphria's cash cost to produce marijuana are ~35%⁴ lower than the publicly traded peer average, and operating costs per gram of marijuana sold were ~20% below the peer average for the most recent reported quarter.

Feedback from our channel checks

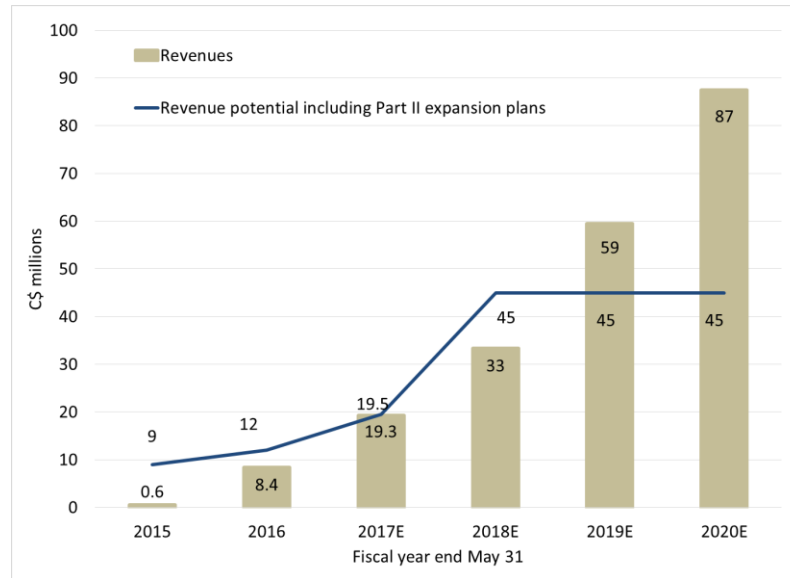
When conducting our channel checks with doctors and clinics, Aphria's name did not come up as often as some of the larger licensed producers such as Tweed, Bedrocan, Mettrum, MedReleaf and Tilray, but had generally positive reviews, including that they were a very professional company to deal with and patients reported excellent customer service. We also tested the company's call centre several times over the month of August at varying times of the day and had no issues. Wait times were under one minute and supply of their most popular strains (Treasure Island) never appeared to be an issue.

Current capacity and expansion plans

Aphria currently has a Health Canada licence to sell 1,500 kg of dried marijuana equivalent expiring in September 2016, and has been approved by Health Canada to produce marijuana in ~43,000 sq. ft. of its greenhouse facility, representing a current capacity of ~2,500 kg of dried marijuana assuming a yield per sq. ft. of 60 grams per year. At an average price of \$7.50 per gram, this would represent \$20.3m in potential revenue. To reach our revenue forecasts in FY19 and FY20, Aphria will need to build additional production capacity. According to our estimates, absent acquisitions Aphria has enough cash on hand to internally fund its near-term expansion.

⁴ Based on company-reported cash costs to produce and may not be comparable across companies.

Figure 14. Additional capacity needed beyond current expansions underway



Source: Aphria, GMP Securities

Preparations are underway on Aphria’s Part II expansion plan for an additional ~57,000 sq. ft. of growing space. The planned expansion will bring the total cultivation area to ~100,000 sq. ft. capable of producing ~6,000kg per year. At \$7.50 per gram, peak revenues would more than double to almost \$45m. We estimate the Part II expansion to be completed in Q4/FY17. Assuming all nine acres of current ready-built greenhouses and 17 additional acres of undeveloped land are used, we estimate that Aphria could support production of ~55,000-60,000kg of marijuana per year.

On August 19, 2016, Aphria entered into a purchase agreement with DiNiro Farms for 11 acres of land adjacent to Aphria’s existing footprint for a \$2.1m cash payment. We estimate that these additional 11 acres could supply an additional 23,000kg and eventually boost Aphria’s annual production to well over 80,000kg.

Figure 15. Aphria’s expansion potential footprint



Facility	Expansion phase	Estimated	Estimated	Cumulative capacity
Leamington greenhouse complex	Current Capacity			2,500
	Part II	3,500	Q4/FY17	6,000
	Part III - Phase 1	11,500	Q3/FY18	17,500
	Part III - Phase 2	21,000	Q2/FY19	38,500
	Part III - Phase 3	21,000	Q1/FY20	60,000
Total capacity including announced expansion plans				60,000
Additional land purchased from DiNiro Farms		23,000		83,000
<i>assuming 8 of the 11 acres purchased is available greenspace</i>				

Source: Aphria, GMP Securities

Aphria is already cash flow positive and has fully funded its current expansion plans. Aphria is one of the first licensed producers to turn cash flow positive (after changes in working capital) and appears well funded to complete its production expansion plans that we forecast will be needed by FY20. We estimate Aphria has ~\$49m cash on hand (including net proceeds of ~\$32m from the equity offering that closed August 18) which should be sufficient to fund the larger capex budget we are forecasting for FY17, FY18 and FY19 (~\$49m over three years). According to our forecasts, we expect Aphria to begin generating free cash flow in FY20 once the current expansion projects are complete.

Figure 16. Aphria appears fully funded to support expansion plans

FYE May 31, C\$000s unless otherwise noted	FY15	FY16	FY17E	FY18E	FY19E	FY20E
Estimated production capacity (kg)	1,200	1,600	2,500	6,000	11,000	25,000
Capex	2,405	4,426	19,700	13,500	16,000	3,000
Cash balance - Beginning	170	7,052	16,473	46,748	49,576	46,525
Cash from operations	(5,443)	(988)	4,736	10,080	12,949	20,331
Free cash flow	(7,848)	(5,414)	(14,964)	(3,420)	(3,051)	17,331
Equity financing	17,270	10,315	32,430	-	-	-
Exercise of warrants & options ¹	-	6,065	7,810	6,248	-	-
Other source (uses) of cash	(2,541)	(1,545)	5,000	-	-	-
Cash balance - End	7,052	16,473	46,748	49,576	46,525	63,857

(1) We are assuming that ~45% of the options and warrants outstanding are exercised in FY17 and FY18. Most of Aphria's options and warrants are in the money currently.

Source: Aphria, GMP Securities

Recent results

Aphria reported Q4/FY16 results on July 8, 2016 for the quarter ended May 31, 2016.

Figure 17. Aphria's Q4/FY16 results

Year-end May-31 (C\$)	Q4/FY16	Q3/FY16	QoQ Chg (%)	Q4/FY15	YoY Chg (%)
Average selling price (\$/gram)	8.16	8.31	-1.9%	7.20	13.3%
# of grams sold	340,422	322,400	5.6%	69,429	390.3%
Revenues	2,776,316	2,679,898	3.6%	499,890	455.4%
Adj. gross profit*	2,316,517	2,088,694	10.9%	508,510	355.5%
Gross profit margin	83%	78%	550 bps	102%	-1829 bps
Total operating expenses	1,893,082	1,697,595	11.5%	508,510	272.3%
% of sales	68%	63%	484 bps	101.7%	-3354 bps
Adj. EBITDA (before stock-based comp)	423,435	391,099	8.3%	(491,307)	-186.2%
Margin (%)	15.3%	14.6%	66 bps	nmf	nmf
Depreciation & amortization	410,973	244,290	68%	125,559	227%
Stock-based compensation	57,235	145,748	-60.7%	104,178	-45.1%
Net financing costs (income)	(109,550)	(86,808)	nmf	(58,964)	86%
Income taxes (recovery)	(1,200,000)	-	n.a.	-	n.a.
Adj. net income (loss)	1,264,777	87,869	1339%	(662,080)	-291%
Margin (%)	45.6%	3.3%	nmf	nmf	nmf
Adjusted EPS (f.d.)	\$0.02	\$0.00	1778%	(\$0.01)	-255%
Weighted avg # of shares o/s	64,984,290	84,798,131	-23%	52,618,286	24%

* Adj. gross profit excludes the fair value adjustment of biological assets as well as amortization

Source: Company reports

Revenues increase 3.6% QoQ to \$2.8m. Revenues increased a modest 3.6% QoQ as a result of Aphria's inability to accept new patients in March and April as the company was capacity constrained while awaiting Health Canada's approval for its first phase of expansion. Aphria sold over 340kg of dried marijuana in the quarter, an increase of 5.6% QoQ and at an average price of \$8.16 per gram, a slight decrease in the average price per gram QoQ as a result of a greater number of grams sold wholesale.

Adj. gross profit increased 11% QoQ to \$2.3m. Excluding the change in fair value of biological assets and amortization included in the cost of goods sold, adjusted gross margin increased 11% QoQ to \$2.3m, representing an adjusted gross margin of 83% and an increase of 550bps QoQ. Cash costs to produce decreased to \$1.15 per gram (excluding packaging costs), a decrease of 31% QoQ, representing the lowest costs of production amongst publicly traded peers.

Positive adj. EBITDA reported for second consecutive quarter. Q4/FY16 adj. EBITDA (excluding changes in fair value of biological assets and stock-based compensation) of \$423k increased 8% QoQ and was the second consecutive quarter of positive EBITDA. Amongst our peer group, Aphria and Organigram remain the only licensed producers to achieve cash flow breakeven.

Investment risks

Valuation under medical market only scenario. Under the unlikely scenario that the pursuit to legalize the recreational use of marijuana is abandoned, we estimate the value of Aphria under a medical only scenario would be ~\$1.75-2.00 per share. We arrive at this valuation by removing the recreational marijuana market opportunity and related capex, and doubling the rate of medical patient acquisitions from 2,000 to 4,000 annually. Given our target price of \$3.50, this would imply the recreational market represents almost half of our valuation.

Veteran Affairs Canada (VAC) could limit medical marijuana reimbursement program. The federal government is considering putting a cap on the amount of marijuana Canadian veterans can receive, as the cost of funding the program continues to climb quickly. VAC is currently the only publicly funded payer for medical marijuana, which is processed through Blue Cross. Minister of Veterans Affairs Kent Hehr has launched an internal investigation into the 12-fold increase in claims for medical marijuana since 2013/14 (and only five claimants when the program launched in 2008). Since then, reimbursements for medical marijuana jumped from \$409k to \$12.1 million, with the number of veterans being reimbursed increasing from 112 in the 2013/14 fiscal period to over 1,300 as of December 2015. Given the rapid growth, VAC is proposing a cap of five grams per day at a maximum price of \$9 per gram.

Forecasts and valuation

We derive a target price of \$3.50. Our target price of \$3.50 represents an expected return of 36% from the current share price. We base our target price on our discounted cash flow analysis given the high growth nature of the industry and high near-term capital requirements for capacity expansion. We model a two-stage, 10-year DCF using a discount rate of 12% and terminal growth rate of 3%.

Figure 18. Comparable table of publicly listed licensed producers

August 26, 2016	Ticker	Price	Basic Shares O/S (m)	Market Cap (\$m)	EV (\$m, f.d.)	Current EV / sales			Reported patients	EV/patient (\$000s)	HC licensed cap. (kg)	EV/HC cap. (\$000s/kg)
						CY16	CY17	CY18				
<i>Select publicly listed licensed marijuana producers</i>												
APHRIA INC	APH-CA	2.58	87	225	235	17.3x	9.4x	4.8x	4,675	50.2	1,500	156.5
AURORA CANNABIS INC	ACB-CA	0.73	129	94	120	n.a.	n.a.	n.a.	6,500	18.4	1,500*	79.8
CANOPY GROWTH CORP	CGC-CA	3.85	116	447	427	14.0x	8.7x	4.2x	20,000	21.4	7,000	61.0
METRUM HEALTH CORP	MT-CA	2.60	46	120	104	5.1x	2.5x	1.6x	13,300	7.8	3,550	29.3
ORGANIGRAM HOLDINGS INC	OGI-CA	1.39	84	117	105	12.9x	7.0x	3.6x	2,500*	42.1	600	175.2
SUPREME PHARMACEUTICALS INC	SL-CA	0.52	97	50	70	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Average				176	177	12.3x	6.9x	3.5x	9,395	28.0	2,830	105.5
Aphria premium (discount) to peers						40%	36%	36%	-50%	80%	-47%	48%

* GMP estimate

Source: Company reports, FactSet, GMP Securities

Forecasting FY17 EBITDA of \$5.3m on revenues of \$19.3m. We estimate Aphria will generate \$19.3m in revenues on the sale of ~1,900kg of dried marijuana at an average price of ~\$8.00, ~194 kg of equivalent grams in cannabis oils at an average price of \$9.90 per gram, and 550 kg of dried marijuana sold to other LPs at \$4.00 per gram. We expect sales of cannabis oils to begin in September (Q2/FY17), with 15% of the patient base ordering a 60ml bottle twice per month at a cost of \$99 per bottle. We estimate total COGS to amount to \$1.49 per gram (excluding the change in the fair value of biological assets and amortization) and opex to amount to ~\$5.33 per gram (excluding stock-based compensation and depreciation). We do not anticipate Aphria to pay any income taxes in FY17 given tax loss carry forwards, and are forecasting EPS of \$0.03.

Forecasting FY18 EBITDA of \$12.1m on revenues of \$33m. We are forecasting revenues to increase 73% YoY to \$33m in FY18 driven by the completion of its expansion to 100,000 sq. ft. of growing space, or a run-rate of ~6,000kg per year. We forecast cannabis oils will contribute 15% of total revenues, and that the sale of recreational marijuana will contribute \$3m, or ~9% of total revenues despite only beginning in the fourth quarter. We expect total COGS to decline to \$1.37 per gram and opex to decline to \$5.00 per gram of marijuana sold as a result of increased scale and operating leverage. Aphria is likely to begin paying income tax in FY18 as it depletes its tax assets, and we are forecasting FY18 EPS of \$0.07.

Our main model assumptions are as follows:

- 1. Medical marijuana patient acquisition to slow once recreational market opens.** We are forecasting Aphria to onboard 4,000 medical marijuana patients per year in FY17 and FY18, declining to 2,000 patients per annum in FY19 and beyond. We assume that once a recreational marijuana framework is implemented, many customers will simply choose to source from the recreational market instead. In the first full year of recreational marijuana sales, we expect revenue contribution from the medical market to drop to ~49% of sales and continue to decline YoY to ~30% as the recreational market grows.
- 2. Forecasting an average selling price per gram in line with peers.** We are forecasting an average price of medical marijuana in dried form of \$7.50 per gram in the first stage of our DCF, declining to \$7.00 in stage two, and a flat price of \$9.90 per equivalent gram for cannabis oil (\$99 per 60ml bottle). For the recreational market we have assumed a flat wholesale price of \$5.00 per gram. Should the company be allowed to sell directly to consumers, we may have to increase our sales price assumption.
- 3. Assuming Aphria initially commands a 7.5% share of recreational market.** We are forecasting initial sales for the recreational market to start on April 1, 2018 and to contribute \$3m to Aphria's FY18 revenues. We are expecting the addressable market for Aphria to be ~\$350m in FY19 (~\$700m at retail). Furthermore, we assume Aphria's market share is initially 7.5% and declines by 0.5% per annum as the number of suppliers grow and the industry matures, settling at 5.5% at maturity.
- 4. Wholesale shipments to other licensed producers.** We are assuming Aphria continues to ship a modest amount of dried marijuana to other LPs in FY17 (550kg) and FY18 (800kg), growing at 10% YoY in stage 1 of our DCF and 5% in stage 2 as industry production normalizes.

- Average EBITDA margin of ~38%.** As the lowest cost producer, we have assumed the highest long-run operating margin amongst publicly traded peers at ~37% in first stage of our DCF, increasing to 38% in stage two as we are expecting pricing to stabilize and higher margin cannabis oils to represent a larger proportion of sales.
- Capex.** We are assuming capex of ~\$20m in FY17 to complete the Part II expansion project build-out to 100,000 sq. ft. of greenspace, the acquisition of the greenhouse complex and undeveloped land from Cacciavillani and F.M. Farms Ltd., extraction equipment purchases, DiNiro Farms land acquisition, and initial work towards the company's Part III expansion plans. We have assumed capex of \$13.5m in FY18 to account for additional work on Phase I of Aphria's Part III expansion, including razing the older greenhouses and construction of new state-of-the-art greenhouses.

Figure 19. Aphria discounted cash flow analysis

Aphria Inc, FYE May 31	Forecasts		Stage 1					Stage 2				
C\$ thousands	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Recreational market												
Estimated addressable market size (C\$ mlns)		42	354	708	1,208	1,708	2,208	2,552	2,680	2,814	2,954	3,102
Aphria's estimated market share		7.5%	7.5%	7.0%	6.5%	6.0%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Implied number of kilos sold		625	5,313	9,917	15,708	20,500	24,292	28,073	29,477	30,950	32,498	34,123
Average price per gram (\$/gram)		\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
Revenues (recreational market)		3,125	26,563	49,583	78,542	102,500	121,458	140,365	147,383	154,752	162,490	170,614
Wholesale to other LPs												
Number of grams sold		550	800	880	968	1,065	1,171	1,353	1,420	1,491	1,566	1,644
Average price per gram (\$/gram)		\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00
Revenues (wholesale)		2,200	3,200	3,520	3,872	4,259	4,685	5,411	5,682	5,966	6,264	6,577
Medical market												
Avg customers for period		6,675	10,675	12,675	14,675	16,675	18,675	20,675	22,675	24,675	26,675	28,675
Number of kilos sold (dried equivalent)		2,097	3,443	3,470	4,017	4,565	5,112	5,660	6,207	6,755	7,302	7,850
Average price per gram equivalent		\$8.18	\$7.86	\$8.46	\$8.46	\$8.46	\$8.46	\$8.46	\$8.45	\$8.45	\$8.45	\$8.45
Total revenues medical market		17,141	27,050	29,354	33,986	38,618	43,250	47,882	52,452	57,078	61,704	66,331
Total revenues		19,341	33,375	59,437	87,442	121,419	150,435	174,494	198,227	210,143	222,422	235,084
EBITDA		5,253	12,056	21,397	31,916	44,925	56,413	66,308	75,326	79,854	84,520	89,332
margin		27.2%	36.1%	36.0%	36.5%	37.0%	37.5%	38.0%	38.0%	38.0%	38.0%	38.0%
Depreciation & amortization		2,076	2,592	3,267	4,067	4,217	4,367	4,667	4,817	4,967	5,117	5,267
Net finance costs & other		279	359	395	434	478	526	636	699	769	846	931
EBT		2,898	9,106	17,736	27,415	40,230	51,521	61,213	70,024	74,338	78,784	83,369
Cash taxes		-	1,826	5,321	8,224	12,069	15,456	18,364	21,007	22,301	23,635	25,011
NOPAT		3,177	7,639	12,810	19,625	28,639	36,590	43,427	49,652	52,736	55,918	59,205
+ Depreciation & amortization		2,076	2,592	3,267	4,067	4,217	4,367	4,667	4,817	4,967	5,117	5,267
- Net increase in working capital		(517)	(151)	(3,127)	(3,361)	(4,077)	(3,482)	(2,848)	(1,430)	(1,474)	(1,519)	(1,568)
- CAPEX		(19,700)	(13,500)	(16,000)	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)
Free cash flow to the firm		(14,964)	(3,420)	(3,051)	17,331	25,779	34,475	42,057	48,471	53,123	56,412	59,802
PV factor		0.9449	0.8437	0.7533	0.6726	0.6005	0.5362	0.4787	0.4274	0.3816	0.3407	0.3042
PV of Free Cash Flows		(14,140)	(2,885)	(2,298)	11,656	15,480	18,484	20,718	20,274	19,222	18,194	17,195

Valuation	
PV of Free cash flow to the firm	142,033
Terminal value	196,782
Enterprise value	338,816
Current net debt (net cash)	(48,903)
Equity value (C\$, 000s)	387,718
Shares O/S (fully diluted)	109,932
Equity value /share	\$ 3.53

Recreational - Stage 1 key assumptions	
Aphria's average market share	7%
Average \$/gram	\$5.00
EBIT margin	37.0%

Medical - Stage 1 key assumptions	
Annual customer acquisition	2,000
Price of dried marijuana (\$/gram)	\$7.50
Price of cannabis oil (\$/gram)	\$9.90
Proportion of sales - dried marijuana	60%
Proportion of sales - oils/extracts	40%
EBITDA margin	37.0%

Recreational - Stage 2 key assumptions	
Aphria's average market share	6%
Average \$/gram	\$5.00
EBIT margin	38.0%

Medical - Stage 2 key assumptions	
Annual customer acquisition	2,000
Price of dried marijuana (\$/gram)	\$7.00
Price of cannabis oil (\$/gram)	\$9.90
Proportion of sales - dried marijuana	50%
Proportion of sales - oils/extracts	50%
EBITDA margin	38.0%

Terminal Value	
Terminal FCFF	65,198
Terminal growth rate	3.0%
WACC	12.0%
WACC - g	9.0%
TCF/(WACC-g)	724,424
Present value	196,782

Source: GMP Securities

Recommendation

Initiating coverage with a BUY rating and C\$3.50 target price. Our positive stance on Aphria is based on:

1. **Production costs ~35-45% lower than peers.** Aphria produces exclusively under a greenhouse setting which affords it several cost advantages as compared to indoor harvests. Moreover, the company is able to benefit from the state-of-the-art greenhouse facilities recently purchased from CF Greenhouses and proprietary fertilizer and nutrient mixes. As a group, the greenhouses are able to leverage their buying power for better pricing. Aphria is already one of the lowest cost licensed producers with estimated cash costs of ~\$1.15/gram, ~35% lower than the peer average.
2. **Greenhouse expertise.** Both co-founders have a long history running and operating greenhouses coming from family-run businesses growing flowers and produce in greenhouses. They were pioneers in developing quality standards and nutrient delivery systems under a greenhouse setting, with Mr. Cacciavillani operating over 400,000 sq. ft. of greenhouse production space. Together, management has over 85 years of combined experience in agriculture and agribusiness.
3. **Large growth potential.** Aphria is currently producing on ~43,000 sq. ft. of greenhouse growing space producing ~2,500kg of marijuana per year. The company has now secured ~17 acres of greenhouse growing space with another ~17 acres of undeveloped land for a total production capability once fully developed of 50,000-60,000kg of marijuana potentially representing in excess of \$300m in annual revenues.

Select officers and directors

Vic Neufeld, President, CEO, and Chairman

Mr. Neufeld, President, CEO, and Chairman of Aphria, spent 21 years as CEO of Jamieson Laboratories, a company producing and manufacturing vitamins and nutritional supplements. During his tenure the company grew revenues from \$20m to over \$250m annually before being acquired by private equity for \$300m in early 2014. Mr. Neufeld earned an MBA from the University of Windsor and is a Chartered Professional Accountant (CPA).

Cole Cacciavillani, Co-Founder, Vice-President Growing Operations

Mr. Cacciavillani, Co-Founder and Vice-President Growing Operations, is an industrial engineer by trade with 35 years of agriculture and greenhouse experience. Mr. Cacciavillani was part owner of CF Greenhouses before its sale to Aphria. Having worked in the greenhouse business for 35 years, Mr. Cacciavillani has an expertise in using greenhouse technologies to produce superior and cost effective products.

John Cervini, Co-Founder, Vice-President Infrastructure & Technology

Mr. Cervini is Co-Founder and Vice-President Infrastructure & Technology with an extensive background in agricultural stemming from four generations of growers in southwestern Ontario. Mr. Cervini helped establish family-run Lakeside Produce, one of North America’s leading companies selling fresh Canadian produce to multinational retailers throughout North America.

Carl Merton, CFO

Carl Merton was appointed CFO on December 14, 2015 bringing 23 years of experience in various finance related positions, 10 years of which were in executive financial leadership positions. Mr. Merton is a CPA and Fellow of the Canadian Institute of Chartered Business Valuators. Prior to accepting the role of CFO Mr. Merton was a director of Aphria.

Gary Leong, Chief Scientific Officer

Mr. Leong is currently the president of Neutrical Solutions Inc., a business to business company offering regulatory, supply and logistic solutions to small and medium-sized companies in the Canadian Natural Health Product industry. Prior to that, he was the Chief Scientific Officer at Jamieson Laboratories Ltd. Mr. Leong earned an MBA in Quality Management from City University of Bellevue, Washington.

Figure 20. Aphria - Insider and institutional ownership

Major shareholders	# of shares	% ownership
Insiders		
John Cervini, Co-Founder, VP Infrastructure & Technology	11,500	13.17%
Cole Cacciavillani, Co-Founder, VP Growing Operations	9,444	10.82%
Victor Neufeld, President, CEO, and Chairman	672	0.77%
Gary Leong, Chief Scientific Officer	20	0.02%

Source: SEDI, FactSet

Aphria Inc. - Financial statements

Figure 21. Income statement and operating metrics

FYE May 31 (C\$)	FY2015A	FY2016A	Q1/FY17E	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
Total sales of equivalent dried marijuana (grams)	76,588	1,038,722	498,833	606,650	734,650	806,519	2,646,651	4,867,688
Avg. selling price per equivalent dried gram	\$7.20	\$8.12	\$7.40	\$7.35	\$7.21	\$7.31	\$7.31	\$6.86
Revenues	\$551,430	\$8,433,929	\$3,690,660	\$4,458,793	\$5,299,893	\$5,891,943	\$19,341,288	\$33,374,916
Growth YoY %	n.a.	1429.5%	288.2%	120.0%	97.8%	112.2%	129.3%	72.6%
COGS (excluding adj. for biological assets)	216,429	1,861,440	811,945	891,759	1,059,979	1,178,389	3,942,071	6,674,983
Adj. gross margin	335,001	6,572,489	2,878,715	3,567,034	4,239,914	4,713,554	15,399,217	26,699,933
Gross margin %	60.8%	77.9%	78.0%	80.0%	80.0%	80.0%	79.6%	80.0%
Operating expenses	2,872,162	6,244,012	2,254,617	2,483,349	2,646,577	2,761,517	10,146,061	14,643,556
% of sales	520.9%	74.0%	61.1%	55.7%	49.9%	46.9%	52.5%	43.9%
Operating expense per gram sold	\$37.50	\$6.01	\$5.32	\$5.83	\$5.35	\$4.95	\$5.33	\$5.00
Adj. EBITDA	(2,537,161)	328,477	624,098	1,083,685	1,593,337	1,952,037	5,253,156	12,056,377
Margin %	-460.1%	3.9%	16.9%	24.3%	30.1%	33.1%	27.2%	36.1%
Stock-based compensation	1,261,589	462,314	62,235	67,235	72,235	77,235	278,940	358,940
Depreciation & amortization	380,878	952,178	461,973	509,473	536,973	567,973	2,076,392	2,591,892
EBIT	(4,179,628)	(1,086,015)	99,890	506,977	984,129	1,306,829	2,897,824	9,105,545
Interest expense (income)	(130,231)	(281,497)	-	-	-	-	-	-
EBT	(4,049,397)	(804,518)	99,890	506,977	984,129	1,306,829	2,897,824	9,105,545
Net income	(4,049,397)	395,482	99,890	506,977	984,129	1,306,829	2,897,824	7,280,020
Margin %	-734.3%	4.7%	2.7%	11.4%	18.6%	22.2%	15.0%	21.8%
Growth YoY %	nmf	nmf	nmf	nmf	1020.0%	3.3%	632.7%	151.2%
EPS (f.d.)	(\$0.09)	\$0.01	\$0.00	\$0.00	\$0.01	\$0.01	\$0.03	\$0.07
Total one-time items (after-tax)	(2,280,357)	2,479	-	-	-	-	-	-
Reported net income	(6,543,444)	397,961	99,890	506,977	984,129	1,306,829	2,897,824	7,280,020
Reported EPS (f.d.)	(\$0.14)	\$0.01	\$0.00	\$0.00	\$0.01	\$0.01	\$0.03	\$0.07
Shares outstanding (f.d.)	45,386,330	58,044,022	95,557,374	109,932,374	109,932,374	109,932,374	106,338,624	109,932,374
OPERATING METRICS	FY2015A	FY2016A	Q1/FY17E	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
CASH FLOW STATEMENT								
TTM Operating cash flow (levered)	(5,443,017)	(988,134)	(135,667)	730,311	2,997,758	4,735,714	4,735,714	10,080,302
TTM Operating cash flow (un-levered)	(5,443,017)	(988,134)	(135,667)	730,311	2,997,758	4,735,714	4,735,714	10,080,302
TTM CAPEX	(2,404,846)	(4,426,059)	(9,169,828)	(13,459,607)	(16,034,600)	(19,700,000)	(19,700,000)	(13,500,000)
TTM Free cash flow (levered)	(7,847,863)	(5,414,193)	(9,305,495)	(12,729,296)	(13,036,842)	(14,964,286)	(14,964,286)	(3,419,698)
Levered TTM Free cash flow yield (on market cap)	-2.7%	-1.9%	-3.3%	-4.5%	-4.6%	-5.2%	-5.2%	-1.2%
TTM Free cash flow (un-levered)	(7,847,863)	(5,414,193)	(9,305,495)	(12,729,296)	(13,036,842)	(14,964,286)	(14,964,286)	(3,419,698)
Un-levered TTM Free cash flow yield (on EV)	-3.3%	-2.3%	-3.9%	-5.4%	-5.5%	-6.3%	-6.3%	-1.4%
CAPITAL STRUCTURE								
Total debt	-	-	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total cash	7,051,909	16,472,664	51,141,212	47,479,284	47,201,336	46,748,154	46,748,154	49,576,277
Net debt (Net cash)	(7,051,909)	(16,472,664)	(46,141,212)	(42,479,284)	(42,201,336)	(41,748,154)	(41,748,154)	(44,576,277)
Market cap (f.d.)	285,824,172	285,824,172	285,824,172	285,824,172	285,824,172	285,824,172	285,824,172	285,824,172
Enterprise value	236,921,508	236,921,508	236,921,508	236,921,508	236,921,508	236,921,508	236,921,508	236,921,508
Total capital employed	6,293,439	18,540,830	24,588,317	30,386,412	33,282,680	36,681,880	36,681,880	47,740,538
Net debt/TTM EBITDA	nmf	nmf	nmf	-16.8x	-11.3x	-7.9x	-7.9x	-3.7x
Net debt/Total cap	-1.1x	-0.9x	-1.9x	-1.4x	-1.3x	-1.1x	-1.1x	-0.9x
Net debt/Equity	-0.5x	-0.5x	-0.7x	-0.6x	-0.6x	-0.5x	-0.5x	-0.5x
EFFICIENCY RATIOS								
ROA (TTM) (%)	nmf	1.6%	2.4%	4.2%	2.7%	4.7%	4.7%	7.7%
ROE (TTM) (%)	nmf	1.6%	2.6%	4.6%	3.0%	5.1%	5.1%	8.5%
ROIC (TTM) (%)	nmf	-6.1%	-1.5%	2.0%	4.4%	7.3%	7.3%	15.1%

Source: Company reports, GMP Securities

Figure 22. Balance sheet

FYE May 31 (C\$)	FY2015A	FY2016A	Q1/FY17E	Q2/FY17E	Q3/FY17E	Q3/FY17E	FY2017E	FY2018E
ASSETS								
Cash & cash equivalents	7,051,909	16,472,664	51,141,212	47,479,284	47,201,336	46,748,154	46,748,154	49,576,277
Accounts receivable	-	1,778,679	2,364,464	3,221,774	4,486,641	3,774,741	3,774,741	5,203,727
Other receivables	759,528	126,952	126,952	126,952	126,952	126,952	126,952	126,952
Inventory	1,724,247	2,088,850	2,329,628	2,380,291	1,950,953	2,031,508	2,031,508	3,358,539
Biological assets	288,858	697,997	697,997	697,997	697,997	697,997	697,997	697,997
Prepaid expenses	167,270	160,156	160,156	160,156	160,156	160,156	160,156	160,156
Current portion of promissory notes receivable	346,255	567,588	567,588	567,588	567,588	567,588	567,588	567,588
Total current assets	10,338,067	21,892,886	57,387,997	54,634,041	55,191,622	54,107,096	54,107,096	59,691,237
Property Plant & Equipment	3,626,161	7,309,220	12,947,247	18,187,774	21,400,801	24,932,828	24,932,828	35,840,936
Intangible assets	74,598	4,317,680	4,317,680	4,317,680	4,317,680	4,317,680	4,317,680	4,317,680
Promissory notes receivable	253,745	-	-	-	-	-	-	-
Long-term investments	-	1,560,200	1,560,200	1,560,200	1,560,200	1,560,200	1,560,200	1,560,200
Goodwill	-	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Total assets	14,292,571	36,279,986	77,413,124	79,899,695	83,670,303	86,117,804	86,117,804	102,610,053
LIABILITIES								
Accounts payable & accrued liabilities	947,223	1,266,492	1,683,595	2,033,999	3,186,288	2,687,770	2,687,770	5,293,237
Current liabilities	947,223	1,266,492	1,683,595	2,033,999	3,186,288	2,687,770	2,687,770	5,293,237
Long-term debt	-	-	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total liabilities	947,223	1,266,492	6,683,595	7,033,999	8,186,288	7,687,770	7,687,770	10,293,237
SHAREHOLDERS EQUITY								
Share capital	20,246,095	40,916,880	76,470,791	78,032,746	79,594,701	81,156,656	81,156,656	87,404,477
Share-based reserve	1,261,589	1,723,903	1,786,138	1,853,373	1,925,608	2,002,843	2,002,843	2,361,783
Warrants	556,589	693,675	693,675	693,675	693,675	693,675	693,675	693,675
Retained Earnings (deficit)	(8,718,925)	(8,320,964)	(8,221,074)	(7,714,098)	(6,729,969)	(5,423,140)	(5,423,140)	1,856,880
Total shareholders equity	13,345,348	35,013,494	70,729,529	72,865,696	75,484,015	78,430,035	78,430,035	92,316,815
Total liabilities and shareholders equity	14,292,571	36,279,986	77,413,124	79,899,695	83,670,303	86,117,804	86,117,804	102,610,053

Source: Company reports, GMP Securities

Figure 23. Cash flow statement

FYE May 31 (C\$)	FY2015A	FY2016A	Q1/FY17E	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
Operating activities								
Net earnings	(6,543,444)	397,961	99,890	506,977	984,129	1,306,829	2,897,824	7,280,020
Items not affecting cash								
Amortization	380,878	952,178	461,973	509,473	536,973	567,973	2,076,392	2,591,892
Stock based compensation	1,261,589	462,314	62,235	67,235	72,235	77,235	278,940	358,940
Change in fair value of biological assets	(997,711)	4,646	-	-	-	-	-	-
Gain on sale of capital assets	-	(7,125)	-	-	-	-	-	-
Non-cash listing costs	2,468,020	-	-	-	-	-	-	-
Income tax recovery	-	(1,200,000)	-	-	-	-	-	-
Operating cash flow before changes in NWC	(3,430,668)	609,974	624,098	1,083,685	1,593,337	1,952,037	5,253,156	10,230,852
Changes in working capital items	(2,012,349)	(1,598,108)	(409,460)	(557,567)	316,759	132,826	(517,442)	(150,550)
Cash flow from operating activities	(5,443,017)	(988,134)	214,637	526,117	1,910,096	2,084,863	4,735,714	10,080,302
Financing activities								
Share capital issued, net of cash issuance costs	17,270,184	10,314,727	32,430,000	-	-	-	32,430,000	-
Advances from related parties	574,951	1,139,788	-	-	-	-	-	-
Cash from exercise of warrants & options	-	6,065,144	3,123,911	1,561,955	1,561,955	1,561,955	7,809,776	6,247,821
Proceeds (repayment) of long-term debt	-	-	5,000,000	-	-	-	5,000,000	-
Repayment of amounts due to related parties	(2,487,011)	(1,139,788)	-	-	-	-	-	-
Cash flows related to financing activities	15,358,124	16,379,871	40,553,911	1,561,955	1,561,955	1,561,955	45,239,776	6,247,821
Investing activities								
Purchase of PP&E	(2,404,846)	(4,426,059)	(6,100,000)	(5,750,000)	(3,750,000)	(4,100,000)	(19,700,000)	(13,500,000)
Purchase of intangible assets	(107,995)	(53,705)	-	-	-	-	-	-
Proceeds from disposal of capital assets	-	36,570	-	-	-	-	-	-
Issuance of promissory notes receivable	(600,000)	(200,000)	-	-	-	-	-	-
Repayment of promissory notes receivable	-	232,412	-	-	-	-	-	-
Long-term investment in third party	-	(1,560,200)	-	-	-	-	-	-
Net cash acquired in reverse takeover	79,188	-	-	-	-	-	-	-
Cash flow from investing activities	(3,033,653)	(5,970,982)	(6,100,000)	(5,750,000)	(3,750,000)	(4,100,000)	(19,700,000)	(13,500,000)
Net increase (decrease) in cash	6,881,454	9,420,755	34,668,548	(3,661,928)	(277,949)	(453,181)	30,275,490	2,828,123
Cash, beginning of period	170,455	7,051,909	16,472,664	51,141,212	47,479,284	47,201,336	16,472,664	46,748,154
Cash, end of period	7,051,909	16,472,664	51,141,212	47,479,284	47,201,336	46,748,154	46,748,154	49,576,277

Source: Company reports, GMP Securities

Mettrum Health Corp.^{1,7,9}

BUY

MT-TSXV

August 29, 2016

 Last: **C\$2.60**
 Target: **C\$4.50**

Initiating coverage: Appealing valuation

Mettrum was the third company to receive a Health Canada licence in November 2013. This early mover advantage resulted in a strong brand awareness amongst patients and doctors. The company has three licensed facilities located in Ontario, the most (with Canopy) of all producers, reducing operational risk. Currently Mettrum only grows indoors, but we could see the company add greenhouse production in the future.

In addition, Mettrum has developed a strong medical outreach platform with its colour categorization system and the Cannabis EMR software - tools designed to simplify the physician/patient dialogue and prescription process.

With the most recent financing, the company has a strong balance sheet with a cash balance of ~\$28m. Mettrum has not reached breakeven yet, but we would expect the company to get there by the end of the next quarter. The company was lacking scale to be profitable due to its higher production costs. However, with the expansion of the Bennett South facility, we would expect production costs to come down materially on a per gram basis.

Our positive stance on Mettrum is based on:

1. **Trades at a discount to peers.** Mettrum's valuation has lagged peers for more than two years. The company has the lowest EV/ forward 12 months sales of our coverage universe, trading at less than half the peer average. In our view, as the company starts to generate positive operating cash flows, the valuation gap will narrow.
2. **Strong brand awareness.** In our discussions with doctors and industry participants, the Mettrum name comes up often, a sign of the company's strong brand recognition. The company has the second largest patient population at 13.3k and an estimated market share of ~13%.
3. **Simple merchandising strategy.** Mettrum has a simple colour-coded classification system greatly simplifying product selection and conversations between patients, physicians and producer. We received very positive feedback from industry participants on this unique strategy.

We are initiating coverage of Mettrum with a \$4.50 target and a BUY rating.

We derive our target price using a two-stage, 10-year DCF analysis with a discount rate of 13%. Our assumptions include a recreational market share of 8% at the onset, declining slowly as new players enter the market. We model an average EBITDA margin of 27% for the first stage.

Rating	BUY
Target	\$4.50
Revenue 2017E (mm)	\$26.8
Revenue 2018E (mm)	\$45.3
EBITDA 2017E	\$0.9
EBITDA 2018E	\$9.8

Share Data

Share o/s (mm, basic/f.d.)	46.1 / 49.7
52-week high/low	3.19 / 1.22
Market cap (mm) f.d.	\$129.1
EV (mm)	\$104.1
Net debt (net cash), mm	(\$25.0)
Dividend	n.a.
Dividend yield	n.a.
Projected return	73.1%

Financial Data

FYE Mar. 31	2016A	2017E	2018E
Revenue (mm)	\$7.7	\$26.8	\$45.3
EBITDA (mm)	(\$8.1)	\$0.9	\$9.8
EV/EBITDA	nmf	nmf	10.7x
EPS (f.d.)	(\$0.27)	(\$0.05)	\$0.12
P/E	nmf	nmf	21.4x
CFPS	(\$0.26)	(\$0.03)	\$0.06
P/CF	nmf	nmf	45.6x
Net debt (net cash)	(\$3.8)	(\$18.8)	(\$17.5)
BVPS	\$0.83	\$1.15	\$1.21
P/BV	3.1x	2.3x	2.2x

All figures in C\$ unless otherwise noted

[Current Chart](#)
[Previous Research](#)

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Overview – Mettrum Health Corp.

Figure 24. Mettrum is a top producer trading at a discount to peers

	Aphria	Canopy	Mettrum	Organigram	Average
VALUATION METRICS					
Recommendation	BUY	BUY	BUY	BUY	
Current price	\$2.58	\$3.85	\$2.60	\$1.39	
Target Price	\$3.50	\$6.00	\$4.50	\$2.00	
Projected return	35.7%	55.8%	73.1%	43.9%	52%
Market Cap, basic (\$mm)	\$225.2	\$447.0	\$119.8	\$116.7	\$227.2
Market Cap, fully diluted (\$mm)	\$283.6	\$479.5	\$129.1	\$132.8	\$256.3
EV (\$mm) ¹	\$234.7	\$427.0	\$104.1	\$105.1	\$174.2
EV/TTM Sales	27.8x	33.6x	9.8x	21.3x	23.1x
EV/NTM Sales	12.1x	11.9x	3.2x	8.9x	9.0x
EV/Patient	\$50,208	\$21,351	\$7,826	\$42,050	\$30,359
EV/Licensed capacity (per kg)	\$156,482	\$61,004	\$29,322	\$175,209	\$105,504
EV/Current production capacity (per kg)	\$93,889	\$14,234	\$17,349	\$38,935	\$41,102
P/BV	4.8x	3.1x	2.8x	6.7x	4.3x
OPERATING METRICS					
Sales (TTM \$mm)	\$8.4	\$12.7	\$10.6	\$4.9	\$7.3
Last reported patient count	4,675	20,000	13,300	2,500	10,119
Grams sold (TTM)	1,038,722	1,698,068	1,185,245	612,207	906,848
Avg selling price (TTM, \$/g)	\$8.08	\$7.45	\$8.18	\$7.97	\$7.92
Cash COGS per gram (Last quarter), \$/g ²	\$1.15	\$2.69	\$2.00	\$1.29	\$1.78
Opex (Last quarter, \$/g) ³	\$5.56	\$7.47	\$9.16	\$4.80	\$6.75
Adj. gross margin ⁴	83%	63%	69%	49%	66%
Est. market share ⁵	9%	24%	13%	5%	13%
Current production capacity	2,500 kg	30,000 kg	6,000 kg	2,700 kg	10,300 kg
Health Canada licensed capacity	1,500 kg	7,000 kg	3,550 kg	600 kg	3,163 kg
Number of licensed facilities	1	3	3	1	2
Cannabis oil extracts license	Production & Sale	Production & Sale	Production & Sale	Production & Sale	

(1) Based on fully diluted shares outstanding.

(2) Cash COGS per gram are reported by the companies and may not be fully comparable.

(3) Includes selling, marketing, general and administrative expenses (excludes depreciation, amortization and stock-based compensation).

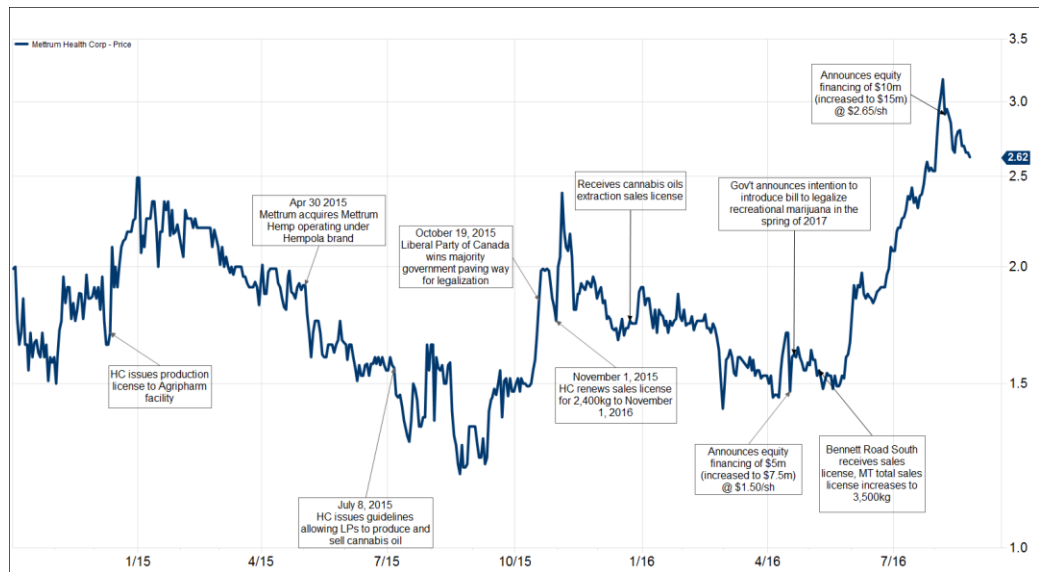
(4) Adjusted gross margin excludes the fair value adjustment of biological assets and amortization.

(5) Based on the average estimated market share by number of patients and grams sold.

Source: Company reports, GMP Securities, FactSet

Mettrum was co-founded in 2012 by Michael Haines, CEO; Trevor Fencott, Chief Legal Officer, Greg Herriott, Chief Product Officer; Lucas Escott, Master Grower, and two others who are no longer with the company. The company was the third company to receive a Health Canada licence to produce medical marijuana on November 1, 2013. Mettrum Health Corp. began trading on the TSX Venture on October 2, 2014 following its qualifying transaction with the capital pool company Cinaport Acquisitions Corp. on September 30, 2014. Mettrum Health operates through its direct wholly-owned subsidiary Mettrum Ltd., a holder of two Health Canada licences under the ACMPR, and Mettrum Creemore, a wholly-owned subsidiary of Mettrum Ltd, and holder of one Health Canada ACMPR sales licence. Finally, Mettrum Hemp, a direct wholly-owned subsidiary of Mettrum Health, is a licensed producer of hemp and sells hemp-based products at retail.

Figure 25. Mettrum Health Corp. price action history



Source: FactSet, Mettrum Health Corp.

Products and pricing

Dried cannabis. Mettrum produces ~16 strains as part of its Mettrum Spectrum line of dried cannabis, colour-coded to reflect the relative percentages of THC and CBD cannabinoids in the strain. Prices range from \$3.60 to \$9.60 per gram, with the most common price being \$9.60.

Cannabis oil. Mettrum currently offers four oil extracts based in the red, blue and yellow spectrum of its product offering, with two products offering a high THC concentration (red) and two offering a high CBD concentration (blue and yellow). The cannabis oil extracts sell for \$80-90 per 40ml bottle. Each 40ml bottle is equivalent to five grams of dried cannabis for an equivalent price ~\$17.00 per gram (realized average price is likely lower as a result of the compassionate pricing program for low-income patients). Mettrum began producing cannabis oils for sale in December 2015 and commenced selling cannabis oils in January 2016.

Figure 26 Mettrum medical marijuana product packaging



Source: Mettrum

Mettrum Originals. Mettrum Hempworks, a subsidiary of Mettrum Health, makes and distributes premium hemp products under the Mettrum Originals brand. The company currently has ~30 SKUs ranging from hemp seeds, snack bars, hand creams and wood finisher. Mettrum expects the Mettrum Originals business to contribute modestly to earnings, with a goal of growing the business to represent ~10% of revenues. We view Mettrum Originals less as a significant revenue contributor and more of an advertising platform in an otherwise restricted advertising landscape. Mettrum Originals is able to get brand awareness of the Mettrum brand out through association without the need to advertise marijuana.

Figure 27. Mettrum Originals hemp-based products

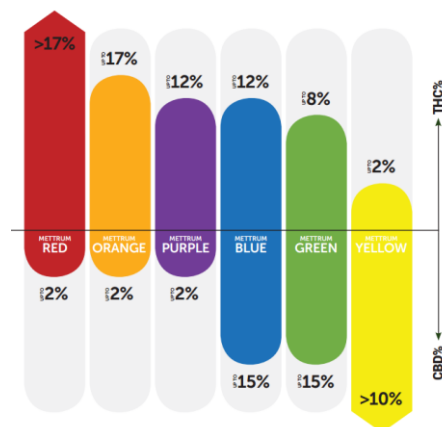


Source: Mettrum

Growth strategy

Mettrum Spectrum. The “Mettrum Spectrum” is a unique approach to branding among licensed producers and is designed to simplify strain selection based on the cannabinoid profiles of THC and CBD content. The Mettrum Spectrum is a colour-coded system from red (very strong, high THC levels) to yellow (very mild, high CBD levels) with blue representing a balance of THC and CBD content. We believe this unique approach, coupled with Mettrum’s Cannabis Electronic Medical Records software described below, provides Mettrum an edge over other licensed producers in conversation with physicians, as it greatly simplifies the process of strength and dosing.

Figure 28. Mettrum Spectrum categorization of strains



Source: Mettrum Ltd.

Mettrum CEMR. Mettrum has developed a unique tool for physicians and their patients called the Mettrum CEMR, or Cannabis Electronic Medical Records. It is a piece of software that allows the physician to register patients right from their office without the need to send additional emails or faxes, significantly streamlining and shortening the process. More importantly, the CEMR allows prescribing physicians to monitor in real-time or when renewing a prescription the patient's consumption levels, strain selections, and strength of medication the patient is choosing. This in turn allows them to adjust their prescription to a more reasonable limit if needed. No other licensed producer has a system like Mettrum's which, when combined with the simplified Mettrum Spectrum naming system, could provide the company with a serious competitive advantage when approaching physicians.

Feedback from our channel checks

Mettrum consistently ranked as a preferred licensed producer. Mettrum had the most positive reviews from our channel checks with doctors and clinics with all of them listing Mettrum as a top three preferred licensed producer to deal with. Reasons included: (1) simple patient registration through the online CEMR portal which saves doctors 10-15 minutes per patient, (2) the simple to follow colour-coded "Mettrum Spectrum" strain selection tool, (3) excellent customer service, with Mettrum calling ahead of time if they are running out of a popular strain, (4) availability of cannabis oils, (5) lots of high-CBD strains, and (6) good patient management. One recurring negative we heard was supply availability, which was sporadic in the past but appears to have improved over the last couple of months.

Excellent service but varying supply. We also tested the company's call centre several times over the month of August at varying times of the day. Wait times were between one to two minutes which was acceptable but supply was an issue. When we called on a Monday, Mettrum was down to five strains available out of an average of 10. The rep indicated that the company is harvesting every week and that supply tends to fall off at the end of the week.

Current capacity and expansion plans

Mettrum currently has Health Canada-issued licences to sell 3,550 kg of dried marijuana from its three Health Canada approved facilities: Bennett Road North (Bowmanville), Agripharm (Creemore), and Bennett Road South (Bowmanville). The current production capacity of the three facilities is ~6,000 kg which, at an average price of \$7.50 per gram, could generate \$45m in revenues.

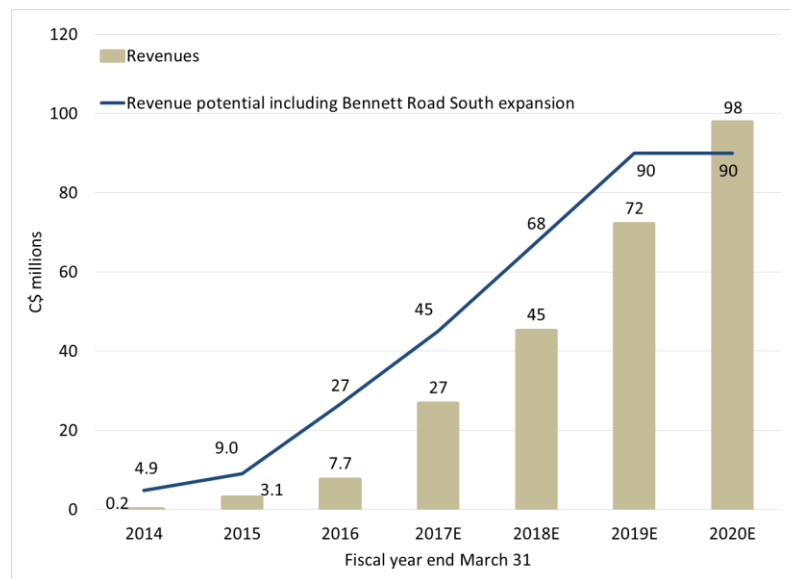
Figure 29. Mettrum’s expansion plan opportunities and timeline

Facility	Expansion phase	Estimated capacity added (kg/yr)	Estimated completion date	Cumulative capacity (kg/yr)
Total current capacity				6,000
Bennett Road North, Bowmanville	Current Capacity			500
Bennett Road South, Bowmanville	Current Capacity			2,000
	5 room expansion	2,000	Q4/FY16	4,000
	5 room expansion	2,000	Q1/FY17	6,000
	5 room expansion	2,000	Q4/FY17	8,000
Agripharm, Creemore	Current Capacity			3,500
Total capacity at existng facilities after expansion			Q4/17	12,000
Undeveloped land at Creemore		14,000	2019+	26,000

Source: Mettrum, GMP Securities

Once the potential to add grow rooms within the walls of the existing facilities is fully exploited, production capacity could more than double to ~12,000 kg which could support revenues of \$90m per year.

Figure 30. Mettrum’s expansion opportunities and revenue potential



Source: Mettrum, GMP Securities

To expand further, Mettrum would need to develop surrounding vacant lands. Management anticipates using the current vacant land at Bennett Road South to build a greenhouse facility which could generate an additional \$105m in revenues for potential peak revenues of \$195m without needing to apply for an additional licence with Health Canada.

Mettrum appears fully funded to carry out its near-term expansion plans. Our analysis suggests that Mettrum, with its current cash balance of ~\$28m (post the most recent equity offerings), would have enough cash on hand to carry out its near-term expansion plans. In addition, we believe the company has enough cash on hand to move forward with its intention to eventually

build a greenhouse facility adjacent to its Bennett Road South facility, which could add an additional 14,000 kg of capacity for total cumulative capacity of 26,000 kg per year. Our DCF analysis suggests that Mettrum will generate enough operating cash flow post-FY18 to finance any future capacity expansion internally.

Figure 31. Mettrum’s capex and funding requirements to carry announced expansion plans

FYE March 31, C\$000s unless otherwise noted	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Estimated production capacity (kg)	650	1,200	3,550	6,000	9,000	12,000	12,000
Capex	343	9,482	5,933	8,655	5,000	5,112	13,962
Cash balance - Beginning	20	4,793	21,697	7,056	21,957	20,566	21,351
Cash from operations	(1,566)	(4,190)	(8,868)	(771)	2,829	5,897	11,811
Free cash flow	(1,908)	(13,672)	(14,801)	(9,426)	(2,171)	785	(2,151)
Equity financing	5,752	32,481	54	23,882	-	-	-
Exercise of warrants & options ¹	300	-	-	1,060	1,060	-	-
Other source (uses) of cash	629	(1,904)	106	(616)	(280)	-	-
Cash balance - End	4,793	21,697	7,056	21,957	20,566	21,351	19,201

(1) We are assuming that ~40% of the options and warrants outstanding are exercised in FY17 and FY18. Most of Mettrum’s options and warrants are in the money currently.

Source: Mettrum, GMP Securities

Bennett Road North, Bowmanville Ontario. Mettrum’s original facility in Bowmanville, Ontario (“Bowmanville North”, “BRN”) is ~15,000 sq. ft. and is the smallest of the three facilities but functions as the company’s head office, lab, R&D, customer service and production facilities. The facility is currently licensed to produce 1,150 kg of dried marijuana equivalent (including cannabis extracts) per year until November 2016, so we expect the company to seek a renewal of the licence in the coming months.

Agripharm, Creemore Ontario. Mettrum acquired the facility in June 2014 and it is currently licensed for the production and sale of marijuana. The Creemore facility currently has a production capacity of ~3,500 kg per year, with a full capacity of 4,000 kg of dried cannabis per year. There is also some undeveloped land on which Mettrum could ultimately build a greenhouse facility if it wants to expand production further.

Bennett Road South, Bowmanville Ontario. Mettrum’s third indoor licensed facility is also the company’s largest at 60,000 sq. ft. on seven acres of land. The company intends for the Bennett Road South (“Bennett South”, “BRS”) facility to become the primary production facility, which currently has five production rooms built out to support 2,000 kg of marijuana production. Mettrum is currently in the process of expanding the production capacity to 20 grow rooms capable of producing ~8,000 kg annually of dried marijuana once fully built out. The facility is now fully licensed for the production and sale of both dried marijuana and cannabis oils.

Recent results

Mettrum reported Q1/FY17 results on August 22, 2016 for the quarter ended June 30, 2016.

Figure 32. Mettrum Q1/FY17 results

Year-end Mar-31 (C\$)			QoQ		YoY	
	Q1/FY17	Q4/FY16	Chg (%)	Q1/FY16	Chg (%)	
Average selling price (\$/gram)	\$ 8.88	\$ 8.23	8%	\$ 7.49	19%	
# of gram equivalent sold	436,570	305,950	42.7%	160,560	171.9%	
Medical cannabis	3,875,437	2,519,035	53.8%	1,193,144	224.8%	
Mettrum original products	156,327	111,287	40.5%	37,540	316.4%	
Other	138,750	84,146	64.9%	18,487	650.5%	
Total revenues	4,170,514	2,714,468	54%	1,249,171	234%	
Adj. gross profit*	2,867,159	1,500,863	91%	524,963	446%	
Gross profit margin	68.7%	55.3%	134.6 bps	42%	nmf	
Total operating expenses	3,999,579	3,119,291	28%	2,393,068	67%	
% of sales	96%	115%	-190 bps	192%	nmf	
Adj. EBITDA (before stock-based comp)	(1,132,420)	(1,618,428)	30%	(1,868,105)	39%	
Margin (%)	nmf	nmf	nmf	nmf	nmf	
Depreciation & amortization	530,208	499,803	6%	173,629	205%	
Stock-based compensation	100,667	56,331	79%	129,395	-22%	
Net financing costs (income)	37,145	19,015	nmf	(42,419)	nmf	
Taxes	-	-	n.a.	-	n.a.	
Net income	(1,800,440)	(2,193,577)	18%	(2,128,710)	15%	
Margin (%)	nmf	nmf	nmf	nmf	nmf	
Adjusted EPS (f.d.)	(\$0.05)	(\$0.06)	25%	(\$0.06)	23%	
Weighted avg # of shares o/s	37,033,802	33,748,895	3,284,907	33,736,275	3,297,527	

* Adj. gross profit excludes the fair value adjustment to biological assets and amortization.

** Before fair value adjustment to biological assets and stock-based compensation.

Source: Company reports

Revenues increase 54% QoQ to \$4.2m. Revenues increased 54% QoQ and more than tripled YoY to \$4.2m driven by 437kg of marijuana sold at an average price of \$8.88, the highest average price achieved for the company to date and driven by favourable product mix following the introduction of higher priced cannabis oils.

Adj. gross profit increased 91% QoQ to \$2.9m. Excluding the change in fair value of biological assets and amortization included in COGS, adjusted gross margin increased 91% QoQ to \$2.9m, representing an adjusted gross margin of 68.7%, an improvement of 135bps QoQ. COGS per gram excluding the change in fair value of biological assets, amortization included in COGS, and packaging costs decreased 20% QoQ to \$2.00 per gram.

Adjusted EBITDA improved to a loss of \$1.1m. Q1/FY17 adj. EBITDA of negative \$1.1m improved 30% QoQ excluding the fair value adjustment on biological assets and stock-based compensation. Operating expenses of \$9.16 per gram of marijuana sold remains elevated when compared to peers, but continues to trend lower QoQ.

Cash from operations used to fund growing working capital requirements. Mettrum continues to use cash to fund operations as it builds out additional grow rooms at Bennett Road South and ramps up production. Cash used in operations was 24% lower QoQ at \$1.5m, the fourth consecutive quarter of improvement in negative operating cash flow.

Investment risks

Valuation under medical market only scenario. Under the unlikely scenario that the pursuit to legalize the recreational use of marijuana is abandoned, we estimate the value of Mettrum under a medical only scenario would be ~\$2.50 per share. We arrive at this valuation by removing the recreational marijuana market opportunity and related capex, and more than double the rate of medical patient acquisitions from 2,000 to 5,000 annually. Given our target price of \$4.50, this would imply the recreational market adds ~\$2.00 per share to our valuation.

Higher cost indoor production could squeeze profitability in a declining price environment.

While there are certainly yield and quality benefits to growing marijuana in a highly controlled indoor environment, the production costs are generally higher than its greenhouse-grown counterpart.

Forecasts and valuation

We derive a target price of \$4.50. Our target price of \$4.50 represents an expected return of 73% from the current share price. We base our target price on a discounted cash flow analysis given the high growth nature of the industry and high near-term capital outlays for capacity expansion. We model a two-stage, 10-year DCF using a discount rate of 13% and terminal growth rate of 3% based on fully diluted shares outstanding of ~50m.

Figure 33. Comparable table of publicly listed licensed producers

August 26, 2016	Ticker	Price	Basic Shares O/S (m)	Market Cap (\$m)	EV (\$m, f.d.)	Current EV / sales			Reported patients	EV/patient (\$000s)	HC licensed cap. (kg)	EV/HC cap. (\$000s/kg)	
						CY16	CY17	CY18					
<i>Select publicly listed licensed marijuana producers</i>													
	APHRIA INC	APH-CA	2.58	87	225	235	17.3x	9.4x	4.8x	4,675	50.2	1,500	156.5
	AURORA CANNABIS INC	ACB-CA	0.73	129	94	120	n.a.	n.a.	n.a.	6,500	18.4	1,500*	79.8
	CANOPY GROWTH CORP	CGC-CA	3.85	116	447	427	14.0x	8.7x	4.2x	20,000	21.4	7,000	61.0
	METRUM HEALTH CORP	MT-CA	2.60	46	120	104	5.1x	2.5x	1.6x	13,300	7.8	3,550	29.3
	ORGANIGRAM HOLDINGS INC	OGI-CA	1.39	84	117	105	12.9x	7.0x	3.6x	2,500*	42.1	600	175.2
	SUPREME PHARMACEUTICALS INC	SL-CA	0.52	97	50	70	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Average				176	177	12.3x	6.9x	3.5x	9,395	28.0	2,830	105.5
	Mettrum premium (discount) to peers						-59%	-64%	-56%	42%	-72%	25%	-72%

* GMP estimate

Source: Company reports, FactSet, GMP Securities

Forecasting \$27m in sales and an EBITDA of \$904k in FY17. We are expecting sales to ramp-up significantly to \$27m in FY17, an increase of 249% YoY on the back of contributions from cannabis oil sales of \$6.5m and a production capacity expansion to a run-rate of 8,500kg of marijuana per year estimated to be completed by year-end FY17. This assumes average growth of 2,000 patients per quarter for an average patient count estimate of 12,650 (registered patients increased by ~4,900 in Q1/FY17). Our FY17 revenue forecast of \$27m assumes that Mettrum sells ~2,700 kg of dried marijuana equivalent at a price of \$9.35 per gram, higher YoY due to higher priced cannabis oils relative to dried marijuana. Our EBITDA forecast of \$904k represents an improvement over the negative \$8m EBITDA recorded in FY16 as we expect the company to achieve near break-even EBITDA by the end of Q2/FY17 and positive EBITDA in 2H/FY17.

Forecasting \$45m in sales and \$9.8m of EBITDA in FY18. Our FY18 revenue forecast of \$45m assumes that Mettrum sells ~4,000 kg of dried marijuana at an average price of \$7.50 per gram.

Our forecasts further assumes that Mettrum continues onboarding 2,000 patients per quarter, reaching an average of 22,100 active patients in FY18. Sales of cannabis oils are expected to contribute ~\$13.5m to total sales assuming 30% of the patient base order a 40ml bottle twice per month at a price of \$85 per bottle. We expect the hemp-based product lines of Mettrum Originals to contribute a modest ~\$0.9m in sales in FY18.

Our DCF assumptions are as follows:

1. **Assuming Mettrum initially commands ~8.0% of the recreational market.** We are forecasting initial sales for the recreational market to start on April 1, 2018 and to contribute \$25m to Mettrum's FY19 revenues. We expect the addressable market size to be ~\$315m (\$625m at retail). We are assuming Mettrum is initially able to service ~8% of the market, declining by 0.5% per year as more suppliers enter the rapidly growing market. We estimate Mettrum's market share to stabilize at 5.5%.
2. **Average EBITDA margin of ~30%.** We expect that margins will expand over time from 22% in FY19 to peak at 30% in FY2023 as we are expecting higher margin cannabis oils to represent a larger proportion of sales. In the second stage of our DCF we are assuming a stable EBITDA margin of 32%.
3. **Forecasting a flat selling price per gram until recreational market matures.** We are assuming a wholesale price of \$5.00 for the recreational market. We assume that Mettrum will only sell wholesale to retailers. Under a scenario where Mettrum would be allowed to ship directly to recreational patients, our sales price assumption would need to be increased.
4. **Medical marijuana patient acquisition to slow once recreational legalized.** We are forecasting Mettrum to onboard 8,000 medical marijuana patients in FY18, declining to 2,000 patients per year in FY19 and beyond. We assume that once a recreational marijuana market is established, many customers who would have otherwise gone to their physician for a script will instead choose to source from the recreational market.
5. **Capex.** We are assuming a capex budget of ~\$9m in FY17 for continued work on the additional 15 grow rooms at Bennett Road South expected to be completed in FY18. We estimate capex to decrease to \$5m in FY18 as Mettrum begins spending on another phase of expansion with a target of doubling capacity to 24,000kg to be completed in FY19.

Figure 34. Mettrum’s valuation summary

Mettrum Health Corp., FYE Mar 31	Forecasted		Stage 1					Stage 2				
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
C\$ thousands												
Recreational market												
Estimated addressable market size (C\$ mins)			313	625	1,125	1,625	2,125	2,531	2,658	2,791	2,930	3,077
Mettrum's estimated market share			8.0%	7.5%	7.0%	6.5%	6.0%	5.5%	5.5%	5.5%	5.5%	5.5%
Implied kilos sold			5,000	9,375	15,750	21,125	25,500	27,844	29,236	30,698	32,233	33,844
Average price per gram (\$/gram)			\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
Revenues (recreational market)			25,000	46,875	78,750	105,625	127,500	139,219	146,180	153,489	161,163	169,221
Medical market												
Avg customers for period	12,650	22,100	24,100	26,100	28,100	30,100	32,100	34,100	36,100	38,100	40,100	42,100
Number of kilos sold (dried equivalent)	2,730	4,840	4,398	4,763	5,128	5,493	5,858	6,223	6,588	6,953	7,318	7,683
Average price per gram (\$/gram)	\$9.35	\$9.06	\$10.50	\$10.50	\$10.50	\$10.50	\$10.50	\$9.75	\$9.75	\$9.75	\$9.75	\$9.75
Total revenues medical market	25,540	43,857	46,182	50,014	53,847	57,679	61,512	60,677	64,235	67,794	71,353	74,912
Mettrum Originals revenue	759	873	917	963	1,011	1,062	1,115	1,170	1,229	1,290	1,355	1,423
Total revenues	26,829	45,251	72,099	97,852	133,608	164,366	190,126	201,066	211,644	222,573	233,871	245,556
% growth YoY	249%	69%	59%	36%	37%	23%	16%	6%	5%	5%	5%	5%
EBITDA	904	9,766	15,862	23,974	36,074	48,488	60,840	64,341	67,726	71,223	74,839	78,578
margin	3.4%	21.6%	22.0%	24.5%	27.0%	29.5%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%
Depreciation & amortization	2,226	3,232	3,432	3,636	4,195	4,676	5,081	5,329	5,504	5,685	5,871	6,063
Net finance costs & other	535	496	546	600	660	726	799	879	966	1,063	1,169	1,286
EBT	(1,856)	6,038	15,316	23,374	35,414	47,762	60,042	63,462	66,760	70,160	73,669	77,291
Cash taxes	-	-	4,595	7,012	10,624	14,329	18,012	19,039	20,028	21,048	22,101	23,187
NOPAT	(1,322)	6,534	7,835	13,325	21,255	29,483	37,747	39,973	42,194	44,490	46,867	49,327
+ Depreciation & amortization	2,226	3,232	3,432	3,636	4,195	4,676	5,081	5,329	5,504	5,685	5,871	6,063
- Net increase in working capital	(2,383)	(6,953)	(5,370)	(5,151)	(7,151)	(6,152)	(5,152)	(2,188)	(2,116)	(2,186)	(2,260)	(2,337)
- CAPEX	(8,655)	(5,000)	(5,112)	(13,962)	(12,038)	(10,115)	(6,209)	(4,379)	(4,513)	(4,654)	(4,801)	(4,801)
Free cash flow to the firm	(10,134)	(2,188)	785	(2,151)	6,260	17,892	31,467	38,735	41,069	43,336	45,677	48,252
PV factor	1.0000	0.8850	0.7831	0.6931	0.6133	0.5428	0.4803	0.4251	0.3762	0.3329	0.2946	0.2607
PV of Free Cash Flows	(10,134)	(1,936)	615	(1,490)	3,840	9,711	15,114	16,465	15,449	14,426	13,456	12,579

Valuation	
PV of Free cash flow to the firm	88,094
Terminal value	114,660
Enterprise value	202,754
Current net debt (net cash)	(25,009)
Equity value (C\$, 000s)	227,764
Shares O/S (fully diluted)	49,654
Equity value /share	\$ 4.59

Recreational - Stage 1 key assumptions	
Mettrum's average market share	7.0%
\$/gram	\$5.00
EBIT margin	27.0%

Medical - Stage 1 key assumptions	
Annual customer acquisition	2,000
Price of dried marijuana (\$/gram)	\$7.50
Price of cannabis oil (\$/gram)	\$15.00
Proportion of sales - dried marijuana	60%
Proportion of sales - oils/extracts	40%
EBITDA margin	27.0%

Recreational - Stage 2 key assumptions	
Mettrum's average market share	5.5%
Average \$/gram	\$5.00
EBIT margin	32.0%

Medical - Stage 2 key assumptions	
Annual customer acquisition	2,000
Price of dried marijuana (\$/gram)	\$7.00
Price of cannabis oil (\$/gram)	\$12.50
Proportion of sales - dried marijuana	50%
Proportion of sales - oils/extracts	50%
EBITDA margin	32.0%

Terminal Value	
Terminal FCFF	49,700
Terminal growth rate	3.0%
WACC	13.0%
WACC - g	10.0%
TCF/(WACC-g)	496,998
Present value	114,660

Source: GMP Securities

Recommendation

Initiating coverage on Mettrum with a BUY rating and C\$4.50 target price. Our positive thesis on Mettrum is predicated on:

- **A clear medical marijuana strategy with unique tools for prescribing physicians.** Among the current crop of medical marijuana producers, we believe Mettrum has perhaps the clearest go-to-market strategy and the strongest physician engagement. Mettrum has avoided using the street names of the different marijuana strains, instead developing its “Mettrum Spectrum” colour-coded classification system of strain varieties, greatly simplifying the product selection and understanding between patients, physicians and producer. Mettrum has complemented this system with an exclusive web-based patient registration software for physicians which eliminates much of the administrative burden.

We believe this provides Mettrum with a good competitive advantage in their discussion with physicians, ~1,500 of which have referred patients to Mettrum.

- **High quality, modular indoor growing facility.** By growing its medical marijuana exclusively indoors, Mettrum has the utmost control over environmental variables (most importantly the lighting conditions) and the health of its crops (pest control). While advancements in greenhouse technology have narrowed the gap in yields and environmental control, the risk of crop losses from contamination is lower for Mettrum given the sub-divisibility of its facility, unlike that of a typical greenhouses (with some exceptions). Mettrum's grow rooms are generally much smaller which limits the impact of contamination to a much smaller percentage of production. The downside to this approach is that costs will likely be higher at comparable production levels vs. a greenhouse operation.
- **Trades at a discount to peers on all relevant metrics.** Mettrum continues to trade at a discount to peers on most metrics. With an EV/NTM Sales multiple of 3.2x, it is the least expensive amongst our coverage universe and represents a 64% discount to the peer average. Mettrum hasn't had the extensive news flow as some of its peers have over the past several months but continues to accelerate patient acquisitions and capacity build out. We believe the large valuation discrepancy is temporary and that the gap will narrow over the next 12 months.

Select officers and directors

Michael Haines, CEO and Director

Mr. Haines joined Mettrum as CEO in May 2014. He previously held senior positions in the media industry for over 15 years and has more than 20 years of experience in marketing and communications. He previously served as Chairman of the Board of Blammo Games (wholly owned by Glu Mobile); as Executive Director of ES3, an IPTV application developer; and as an advisor to Fuse Powered Inc., a mobile analytics and digital distribution firm. Mr. Haines was also a founder of Groove Media Inc. and Hip Interactive Corp. which became Canada's largest video game distribution company achieving annual sales of ~\$500 million prior to his departure in 2002. Mr. Haines currently holds 2m shares (~4.3% of shares outstanding).

Peter Kampian, CFO

Mr. Kampian, CPA, joined Mettrum as CFO in May 2014. Previously, Mr. Kampian held CFO positions at Threshold Power Administrator, Inc. and Threshold Power Trust (2012-2013). Prior to Threshold, Mr. Kampian spent eight years with Algonquin Power Income Fund (now Algonquin Power and Utilities Corp.) as CFO. Mr. Kampian received his undergraduate degree from Wilfrid Laurier University.

Trevor Fencott, Chief Legal Officer and Director

Mr. Fencott is a practicing lawyer and current Chief Legal Officer at Mettrum, bringing 15 years of experience operating, building and financing businesses in the technology and media sectors. Most recently, Mr. Fencott was President and subsequently Executive Director of bitHeads Inc., a software development company based in Ottawa. Prior to that, Mr. Fencott co-founded Groove Media Inc. along with Michael Haines. Mr. Fencott holds a BA (Hons) from Queen's University and an LLB from the University of Western Ontario and serves on the Board of Directors of the Canadian Medical Cannabis Industry Association.

George Scorsis, President

George Scorsis joined Mettrum in October 2015 as President. Previously, Mr. Scorsis was President of Red Bull Canada since 2010, having been with Red Bull Canada since 2005. Mr. Scorsis was instrumental in restructuring the organization from a geographical and operational perspective and worked closely with Health Canada on the guidelines regulating the energy drink category. Prior to joining Red Bull, Mr. Scorsis worked with Bacardi Canada in an executive leadership capacity.

Don Wright, Director

Mr. Wright has over 39 years of experience in the financial industry including President of Merrill Lynch Canada from 1990 to 1994, Executive VP and member of the executive committee of Burns Fry Ltd. in 1994, and Chairman and CEO of TD Securities Inc. and Deputy Chairman of TD Bank Financial Group from 1995 to 2002 where he retired. From October 2005, Mr. Wright has been serving as President and CEO of The Winnington Capital Group Inc., an investment firm with positions in a diverse set of companies around the world.

Figure 35. Mettrum - Insider and institutional ownership

Major shareholders	# of shares	% ownership
Insiders		
Michael Haines, CEO & Director	2,000	4.35%
Gregory Herriott, Co-founder of Hempola	1,965	4.27%
Trevor Fencott, Chief Legal Officer & Director	1,780	3.87%
Donald Wright, Director	424	0.92%
Grant Koehler, EVP Sales & Marketing	41	0.09%
Peter Kampian, CFO	20	0.04%
George Scorsis, President	20	0.04%

Source: SEDI, FactSet

Mettrum Health Corp. - Financial statements
Figure 36. Mettrum - Income statement and operating metrics

FYE Mar 31 (C\$)	FY2015A	FY2016A	Q1/FY17A	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
Total sales of equivalent dried marijuana (grams)	418,312	909,235	436,570	560,680	816,608	916,389	2,730,247	4,839,900
Avg. selling price per equivalent dried gram	\$7.31	\$7.90	\$8.88	\$9.26	\$9.50	\$9.51	\$9.35	\$9.06
Revenue from the sale of marijuana	3,058,711	7,181,050	3,875,436	5,192,840	7,755,964	8,716,212	25,540,453	43,857,450
Mettrum Originals	-	426,383	156,327	229,549	240,003	133,544	759,424	873,337
Other	-	213,681	138,750	130,000	130,000	130,000	528,750	520,000
Total revenues	3,058,711	7,691,574	4,170,514	5,552,389	8,125,967	8,979,756	26,828,627	45,250,787
Growth YoY %	1696%	151.5%	233.9%	224.5%	302.9%	230.8%	248.8%	68.7%
COGS (excluding adj. for biological assets)	2,020,455	4,514,513	1,303,355	1,665,717	2,275,271	2,244,939	7,489,282	12,670,220
Adj. gross margin	1,038,256	3,177,061	2,867,159	3,886,672	5,850,696	6,734,817	19,339,345	32,580,567
Gross margin %	33.9%	41.3%	68.7%	70.0%	72.0%	75.0%	72.1%	72.0%
Operating expenses	7,399,461	11,260,600	3,999,579	4,402,805	5,073,244	4,959,575	18,435,203	22,814,725
% of sales	241.9%	146.4%	95.9%	79.3%	62.4%	55.2%	68.7%	50.4%
Operating expense per gram sold	\$17.69	\$12.38	\$9.16	\$7.85	\$6.21	\$5.41	\$6.75	\$4.71
Adj. EBITDA	(6,361,205)	(8,083,539)	(1,132,420)	(516,133)	777,452	1,775,242	904,142	9,765,841
Margin %	-208.0%	-105.1%	-27.2%	-9.3%	9.6%	19.8%	3.4%	21.6%
Stock-based compensation	484,345	501,061	100,667	105,667	110,667	115,667	432,668	512,668
Depreciation & amortization	352,245	1,416,105	530,208	531,208	532,208	632,208	2,225,832	3,231,832
EBIT	(7,197,795)	(10,000,705)	(1,763,295)	(1,153,008)	134,577	1,027,367	(1,754,358)	6,021,341
Interest expense (income)	(112,537)	(36,227)	37,145	40,426	11,432	13,129	102,132	(16,702)
EBT	(7,085,258)	(9,964,478)	(1,800,440)	(1,193,434)	123,145	1,014,239	(1,856,490)	6,038,043
Net income	(7,085,258)	(9,964,478)	(1,800,440)	(1,193,434)	123,145	1,014,239	(1,856,490)	6,038,043
Margin %	-231.6%	-129.6%	-43.2%	-21.5%	1.5%	11.3%	-6.9%	13.3%
Growth YoY %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EPS (f.d.)	(\$0.27)	(\$0.30)	(\$0.05)	(\$0.03)	\$0.00	\$0.02	(\$0.04)	\$0.12
Total one-time items (after-tax)	468,102	(1,824,755)	(786,140)	-	-	-	(786,140)	-
Reported net income	(7,553,360)	(8,139,723)	(1,014,300)	(1,193,434)	123,145	1,014,239	(1,070,350)	6,038,043
Reported EPS (f.d.)	(\$0.29)	(\$0.24)	(\$0.03)	(\$0.03)	\$0.00	\$0.02	(\$0.02)	\$0.12
Shares outstanding (f.d.)	26,205,601	33,741,490	37,033,802	45,314,012	49,654,112	49,654,112	45,414,010	49,654,112
OPERATING METRICS	FY2015A	FY2016A	Q1/FY17A	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
CASH FLOW STATEMENT								
TTM Operating cash flow (levered)	(4,190,171)	(8,868,168)	(8,308,684)	(6,430,443)	(3,898,882)	(771,092)	(771,092)	2,829,099
TTM Operating cash flow (un-levered)	(4,070,988)	(8,804,766)	(8,195,071)	(6,270,308)	(3,690,761)	(532,493)	(532,493)	2,976,924
TTM CAPEX	(9,481,756)	(5,933,271)	(4,826,046)	(4,150,694)	(4,640,405)	(8,654,602)	(8,654,602)	(5,000,000)
TTM Free cash flow (levered)	(13,671,927)	(14,801,439)	(13,134,730)	(10,581,137)	(8,539,287)	(9,425,694)	(9,425,694)	(2,170,901)
Levered TTM Free cash flow yield (on market cap)	-10.4%	-11.2%	-10.0%	-8.0%	-6.5%	-7.2%	-7.2%	-1.6%
TTM Free cash flow (un-levered)	(13,552,744)	(14,738,037)	(13,021,117)	(10,421,002)	(8,331,166)	(9,187,095)	(9,187,095)	(2,023,076)
Un-levered TTM Free cash flow yield (on EV)	-12.7%	-13.8%	-12.2%	-9.8%	-7.8%	-8.6%	-8.6%	-1.9%
CAPITAL STRUCTURE								
Total debt	-	3,266,302	3,169,683	3,149,683	3,129,683	3,109,683	3,109,683	3,029,683
Total cash	21,697,396	7,056,224	12,058,729	27,394,312	26,361,336	21,956,764	21,956,764	20,566,133
Net debt (Net cash)	(21,697,396)	(3,789,922)	(8,889,046)	(24,244,629)	(23,231,653)	(18,847,081)	(18,847,081)	(17,536,450)
Market cap (f.d.)	131,583,397	131,583,397	131,583,397	131,583,397	131,583,397	131,583,397	131,583,397	131,583,397
Enterprise value	106,574,186	106,574,186	106,574,186	106,574,186	106,574,186	106,574,186	106,574,186	106,574,186
Total capital employed	12,979,715	24,143,358	25,795,370	26,098,940	27,610,796	33,390,341	33,390,341	42,311,953
Net debt/TTM EBITDA	nmf	nmf	nmf	nmf	nmf	nmf	nmf	nmf
Net debt/Total cap	-1.7x	-0.2x	-0.3x	-0.9x	-0.8x	-0.6x	-0.6x	-0.4x
Net debt/Equity	-0.6x	-0.1x	-0.3x	-0.5x	-0.5x	-0.4x	-0.4x	-0.3x
EFFICIENCY RATIOS								
ROA (TTM) (%)	-30.0%	-24.6%	-22.1%	-16.4%	-10.3%	-3.8%	-3.8%	9.1%
ROE (TTM) (%)	-33.8%	-29.1%	-26.0%	-18.7%	-12.4%	-4.6%	-4.6%	10.8%
ROIC (TTM) (%)	-68.3%	-34.5%	-29.6%	-22.9%	-14.1%	-4.3%	-4.3%	11.1%

Source: Company reports, GMP Securities

Figure 37. Mettrum - Balance sheet

FYE Mar 31 (C\$)	FY2015A	FY2016A	Q1/FY17A	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
ASSETS								
Cash & cash equivalents	21,697,396	7,056,224	12,058,729	27,394,312	26,361,336	21,956,764	21,956,764	20,566,133
Accounts receivable	539,125	1,162,281	1,199,595	1,597,074	2,330,325	3,844,952	3,844,952	5,433,284
Inventory	1,030,258	4,089,929	5,422,534	6,400,154	6,482,026	6,704,665	6,704,665	12,908,765
Biological assets	446,978	955,689	935,681	935,681	935,681	935,681	935,681	935,681
Prepaid expenses	162,324	582,137	858,694	858,694	858,694	858,694	858,694	858,694
Total current assets	23,876,081	13,846,260	20,475,233	37,185,914	36,968,061	34,300,756	34,300,756	40,702,556
Promissory notes receivable	-	499,242	696,484	696,484	696,484	696,484	696,484	696,484
Property Plant & Equipment	14,589,100	19,985,418	20,282,544	20,507,578	21,581,811	26,826,045	26,826,045	29,240,579
Intangible assets	433,063	574,812	581,897	525,655	469,214	392,772	392,772	(53,594)
Goodwill	-	133,739	133,739	133,739	133,739	133,739	133,739	133,739
Total assets	38,898,244	35,039,471	42,169,897	59,049,370	59,849,309	62,349,796	62,349,796	70,719,764
LIABILITIES								
Accounts payable & accrued liabilities	2,236,133	3,239,612	3,743,301	4,983,622	5,304,681	6,430,194	6,430,194	7,269,181
Current portion of LT debt	-	395,402	401,860	401,860	401,860	401,860	401,860	401,860
Current portion of finance leases	-	113,914	115,802	115,802	115,802	115,802	115,802	115,802
Mortgage payable	1,985,000	-	-	-	-	-	-	-
Current liabilities	4,221,133	3,748,928	4,260,963	5,501,284	5,822,343	6,947,856	6,947,856	7,786,843
Long-term debt (term loan)	-	2,870,900	2,767,823	2,747,823	2,727,823	2,707,823	2,707,823	2,627,823
Finance leases	-	486,363	456,695	456,695	456,695	456,695	456,695	456,695
Total liabilities	4,221,133	7,106,191	7,485,481	8,705,802	9,006,861	10,112,374	10,112,374	10,871,361
SHAREHOLDERS EQUITY								
Share capital	38,504,256	38,596,006	46,260,775	63,007,694	63,272,762	63,537,829	63,537,829	64,598,099
Share-based reserve	539,777	1,003,158	1,103,825	1,209,492	1,320,159	1,435,826	1,435,826	1,948,494
Warrants	3,502,247	3,502,247	3,502,247	3,502,247	3,502,247	3,502,247	3,502,247	3,502,247
Retained Earnings (deficit)	(7,869,169)	(15,168,131)	(16,182,431)	(17,375,865)	(17,252,719)	(16,238,481)	(16,238,481)	(10,200,437)
Total shareholders equity	34,677,111	27,933,280	34,684,416	50,343,569	50,842,448	52,237,422	52,237,422	59,848,403
Total liabilities and shareholders equity	38,898,244	35,039,471	42,169,897	59,049,370	59,849,309	62,349,796	62,349,796	70,719,764

Source: Company reports, GMP Securities

Figure 38. Mettrum - Cash flow statement

FYE Mar 31 (C\$)	FY2015A	FY2016A	Q1/FY17A	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
Operating activities								
Net earnings	(7,035,936)	(7,298,962)	(1,014,300)	(1,193,434)	123,145	1,014,239	(1,070,350)	6,038,043
Items not affecting cash								
Amortization of PP&E	301,337	1,209,195	457,476	424,966	425,766	505,766	1,813,975	2,585,466
Amortization of intangibles	50,908	206,910	72,732	106,242	106,442	126,442	411,857	646,366
Gain on change in fair value of biological assets	(469,124)	(1,824,695)	(786,140)	-	-	-	(786,140)	-
Stock based comp	484,345	501,061	100,667	105,667	110,667	115,667	432,668	512,668
Finance costs	148,183	90,341	61,584	63,036	62,796	62,556	249,973	147,825
Interest income	-	(8,455)	(7,242)	-	-	-	(7,242)	-
Interest paid	(119,183)	(63,402)	(50,211)	(63,036)	(62,796)	(62,556)	(238,600)	(147,825)
Listing costs	937,226	-	-	-	-	-	-	-
Operating cash flow before changes in NWC	(5,702,244)	(7,188,007)	(1,165,434)	(556,559)	766,020	1,762,114	806,141	9,782,543
Changes in working capital items	1,512,073	(1,680,161)	(336,639)	(134,778)	(494,064)	(611,753)	(1,577,234)	(6,953,444)
Cash flow from operating activities	(4,190,171)	(8,868,168)	(1,502,073)	(691,337)	271,957	1,150,361	(771,092)	2,829,099
Financing activities								
Issuance of promissory notes	230,000	-	-	-	-	-	-	-
Bank indebtedness	-	-	-	-	-	-	-	-
Term loan (repayment)	-	3,239,363	(107,992)	(20,000)	(20,000)	(20,000)	(167,992)	(80,000)
Repayment of finance leases	-	(37,565)	(27,780)	-	-	-	(27,780)	-
Repayment of promissory notes	(3,941,614)	-	-	-	-	-	-	-
Mortgage (repaid) issued on Clarington property	1,985,000	(1,985,000)	-	-	-	-	-	-
Issuance of common shares	32,480,651	54,070	7,664,769	16,216,784	-	-	23,881,553	-
Issuance of convertible debentures	-	-	-	-	-	-	-	-
Repayment of convertible debentures	-	-	-	-	-	-	-	-
Exercise of options/warrants	-	-	-	530,135	265,068	265,068	1,060,270	1,060,270
Cash flows related to financing activities	30,754,037	1,270,868	7,528,997	16,726,919	245,068	245,068	24,746,051	980,270
Investing activities								
Cash acquired from Mettrum Creemore	23,316	-	-	-	-	-	-	-
Acquisition of Mettrum Hemp	-	(271,155)	-	-	-	-	-	-
Cash acquired from Cinaport	229,369	-	-	-	-	-	-	-
Promissory notes receivable	-	(490,787)	(190,000)	-	-	-	(190,000)	-
Purchase of PP&E	(9,481,756)	(5,933,271)	(754,602)	(650,000)	(1,500,000)	(5,750,000)	(8,654,602)	(5,000,000)
Purchase of intangible assets	(430,238)	(348,659)	(79,817)	(50,000)	(50,000)	(50,000)	(229,817)	(200,000)
Cash flow from investing activities	(9,659,309)	(7,043,872)	(1,024,419)	(700,000)	(1,550,000)	(5,800,000)	(9,074,419)	(5,200,000)
Net increase (decrease) in cash	16,904,557	(14,641,172)	5,002,505	15,335,583	(1,032,976)	(4,404,572)	14,900,540	(1,390,631)
Cash, beginning of period	4,792,839	21,697,396	7,056,224	12,058,729	27,394,312	26,361,336	7,056,224	21,956,764
Cash, end of period	21,697,396	7,056,224	12,058,729	27,394,312	26,361,336	21,956,764	21,956,764	20,566,133

Source: Company reports, GMP Securities

Organigram Holdings Inc.^{1,7}

BUY

OGI-TSXV

August 29, 2016

 Last: **C\$1.45**
 Target: **C\$2.00**

Initiating coverage: Strategic location with a differentiated product

Organigram is one of only a handful of LPs that offer organically certified medical marijuana. Organigram is located in Moncton, New Brunswick and currently has a licence to sell 600 kg of medical marijuana. Organigram operates an indoor facility with a unique method of growing vertically on three levels, thereby maximizing square footage. We believe it has lower energy and labour rates than peers due to its preferential access to low cost electricity and affordable labour in New Brunswick.

Under a scenario where marijuana is legalized for recreational purposes, we would expect the organic differentiation of the company's products to gain traction with retailers. With the recent financing, the company has roughly \$33m of cash on hand, which according to our analysis will be enough to carry out the company's medium-term expansion plans.

Our positive stance on Organigram is based on:

- Regional advantages.** OGI is currently the only licensed producer located in Atlantic Canada, providing significant energy, labour, and occupancy cost advantages vs. Ontario where the majority of the LPs are based.
- Highest sales per customer amongst peers.** OGI is targeting an important demographic of Canadian veterans with usage rates over five times other users, on average.
- Differentiated organic product.** OGI is currently the only established licensed producer of scale offering an organic product that is pesticide-free and non-irradiated. We believe having an organic product will be even more advantageous once recreational access is legalized as competition for shelf space will intensify.

We are initiating coverage with a target price of \$2.00. We derive our valuation using a two-stage, 10-year DCF model with a discount rate of 13%. We estimate that Organigram will capture a 3.5% share of the recreational market vs. a 5% share of the medical market today.

Rating	BUY
Target	\$2.00
Revenue 2016E (mm)	\$6.4
Revenue 2017E (mm)	\$13.6
Revenue 2018E (mm)	\$23.5
EBITDA 2016E	\$0.6
EBITDA 2017E	\$3.6
EBITDA 2018E	\$7.4

Share Data

Share o/s (mm, basic/f.d.)	84 / 95.5
52-week high/low	1.85 / 0.19
Market cap (mm) f.d.	\$132.8
EV (mm)	\$105.1
Net debt (net cash), mm	(\$27.6)
Dividend	n.a.
Dividend yield	n.a.
Projected return	43.9%

Financial Data

FYE Aug 31	2016E	2017E	2018E
Revenue (mm)	\$6.4	\$13.6	\$23.5
EBITDA (mm)	\$0.6	\$3.6	\$7.4
EV/EBITDA	nmf	28.9x	14.2x
EPS (f.d.)	(\$0.02)	\$0.02	\$0.05
P/E	nmf	nmf	55.7x
CFPS	(\$0.02)	\$0.02	\$0.07
P/CF	nmf	nmf	36.4x
Net debt (net cash)	(\$23.8)	(\$17.1)	(\$21.1)
BVPS	\$0.65	\$0.51	\$0.59
P/BV	4.0x	5.1x	4.4x

All figures in C\$ unless otherwise noted

 [Current Chart](#)
 [Previous Research](#)

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Overview – Organigram

Figure 39. Snapshot comparison of publicly traded licensed producers

	Aphria	Canopy	Mettrum	Organigram	Average
VALUATION METRICS					
Recommendation	BUY	BUY	BUY	BUY	
Current price	\$2.58	\$3.85	\$2.60	\$1.39	
Target Price	\$3.50	\$6.00	\$4.50	\$2.00	
Projected return	35.7%	55.8%	73.1%	43.9%	52%
Market Cap, basic (\$mm)	\$225.2	\$447.0	\$119.8	\$116.7	\$227.2
Market Cap, fully diluted (\$mm)	\$283.6	\$479.5	\$129.1	\$132.8	\$256.3
EV (\$mm) ¹	\$234.7	\$427.0	\$104.1	\$105.1	\$174.2
EV/TTM Sales	27.8x	33.6x	9.8x	21.3x	23.1x
EV/NTM Sales	12.1x	11.9x	3.2x	8.9x	9.0x
EV/Patient	\$50,208	\$21,351	\$7,826	\$42,050	\$30,359
EV/Licensed capacity (per kg)	\$156,482	\$61,004	\$29,322	\$175,209	\$105,504
EV/Current production capacity (per kg)	\$93,889	\$14,234	\$17,349	\$38,935	\$41,102
P/BV	4.8x	3.1x	2.8x	6.7x	4.3x
OPERATING METRICS					
Sales (TTM \$mm)	\$8.4	\$12.7	\$10.6	\$4.9	\$7.3
Last reported patient count	4,675	20,000	13,300	2,500	10,119
Grams sold (TTM)	1,038,722	1,698,068	1,185,245	612,207	906,848
Avg selling price (TTM, \$/g)	\$8.08	\$7.45	\$8.18	\$7.97	\$7.92
Cash COGS per gram (Last quarter), \$/g ²	\$1.15	\$2.69	\$2.00	\$1.29	\$1.78
Opex (Last quarter, \$/g) ³	\$5.56	\$7.47	\$9.16	\$4.80	\$6.75
Adj. gross margin ⁴	83%	63%	69%	49%	66%
Est. market share ⁵	9%	24%	13%	5%	13%
Current production capacity	2,500 kg	30,000 kg	6,000 kg	2,700 kg	10,300 kg
Health Canada licensed capacity	1,500 kg	7,000 kg	3,550 kg	600 kg	3,163 kg
Number of licensed facilities	1	3	3	1	2
Cannabis oil extracts license	Production & Sale	Production & Sale	Production & Sale	Production & Sale	

(1) Based on fully diluted shares outstanding.

(2) Cash COGS per gram are reported by the companies and may not be fully comparable.

(3) Includes selling, marketing, general and administrative expenses (excludes depreciation, amortization and stock-based compensation).

(4) Adjusted gross margin excludes the fair value adjustment of biological assets and amortization.

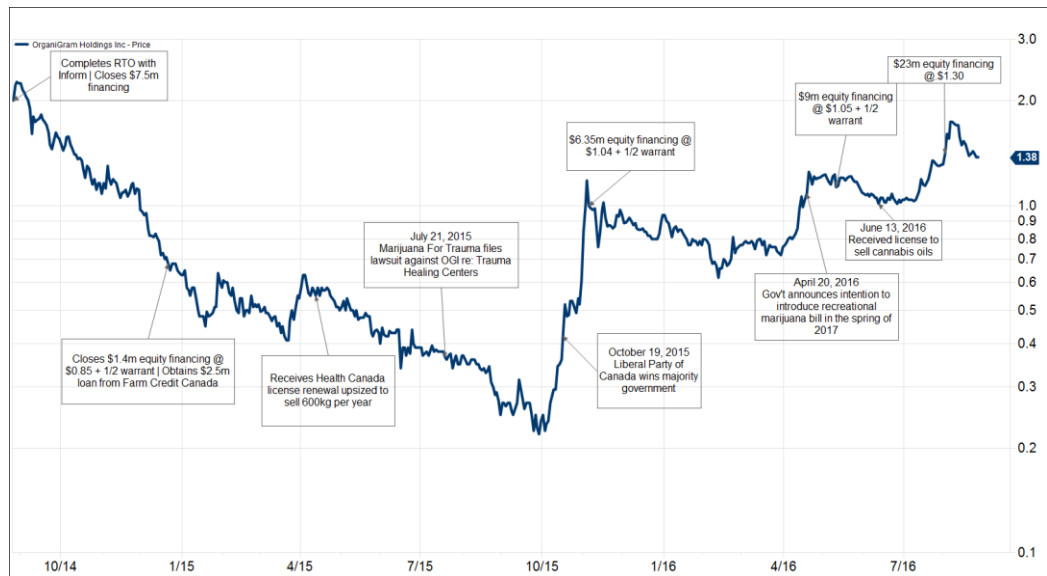
(5) Based on the average estimated market share by number of patients and grams sold.

Source: Company reports, GMP Securities, FactSet

Organigram is a licensed producer and seller of medical marijuana under Health Canada's Access to Cannabis for Medical Purposes Regulations (ACMPR), having received its licence on March 26, 2014. Organigram was founded on March 1, 2013 and the company completed a reverse takeover transaction with Inform Exploration Corp. to become a publicly listed company on the TSX Venture Exchange on August 22, 2014.

Organigram is fully licensed to produce and sell dried marijuana buds and received a Section 56 exemption under the Controlled Drugs and Substances Act from Health Canada to sell cannabis oils on June 22, 2016.

Figure 40. Organigram Holdings Inc. price action history



Source: FactSet, Organigram

Figure 41. History of public financings

Announcement Date	Units	Shares	Offer price	Gross Proceeds
25-Aug-14		8.9M	\$0.85	\$7.5M
5-Dec-14	2.7M		\$0.70	\$1.9M
5-Nov-2015 (Convertible debentures)		2.1M	\$1.40	\$2.9M
5-Nov-15	3.3M		\$1.04	\$3.4M
11-May-16	9.9M		\$1.05	\$10.4M
4-Aug-16		17.7M	\$1.30	\$23.0M
				<u>\$49.1M</u>

5/11/2016 - units are comprised of one common share and 1/2 common share purchase warrant @ \$1.40
 11/5/2015 - units are comprised of one common share and 1/2 common share purchase warrant @ \$1.04
 12/5/2014 - units are comprised of one common share and one common share purchase warrant @ \$1.00

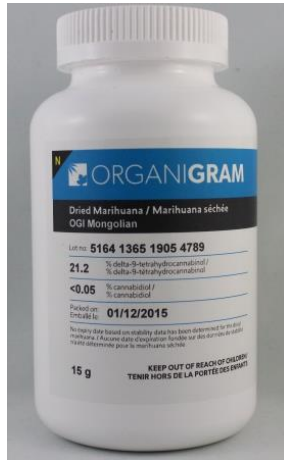
Source: GMP Securities, company reports

Products and pricing

Certified organic marijuana. Organigram is one of only a handful of licensed producers (the others being Whistler Medical Marijuana Corporation and Island Harvest) to produce certified organic marijuana in Canada. The production of organic products in Canada is monitored and enforced by The Canadian Food Inspection Agency (CFIA) through a list of certification bodies. Organigram’s medical marijuana has been certified by the CFIA accredited certification body Ecocert Canada in October 2014. Ecocert Canada ensures organic producers are meeting Organic Production Systems standards through annual and surprise audits. To put it simply, in order to be certified organic, producers must not use any pesticides, herbicides, fungicides or other chemical products in the production process. Organigram instead uses beneficial insects to control pests, soil amended with natural additives, and tightly monitored temperatures and humidity to avoid mold and mildew.

Dried marijuana. At the time of writing, Organigram had eight strains available for sale, six of which were organic. The prices ranged from \$7.50 to \$11.00 per gram, with an average price of ~\$9.60 per gram. Organigram’s organically grown products are priced at a premium and start at \$9.25 per gram and according to management continue to sell briskly.

Figure 42. Organigram dried whole marijuana packaging



Source: Organigram

Organigram introduces “OrganiOils”. Organigram has received its licence to produce and sell cannabis oils and launched its “OrganiOil” line of organic cannabis oils in late August 2016. Organigram is using ethanol as a solvent to extract the oils from the cannabis plant as opposed to the super-critical CO2 extraction method used by Canopy, Aphria and Mettrum. To our knowledge, this is an efficient method for extracting the cannabinoids and terpenes, but also extracts some chlorophyll which could affect the taste. Organigram is initially offering three types of oils, one of which uses a CBD dominant strain. The cannabis oils are being sold in 50ml bottles at \$129 per bottle.

Growth strategy

Targeting military veterans as part of patient acquisition strategy. New Brunswick is home to a large proportion of Canadian veterans accessing medical marijuana through the ACMPR, which numbers over 1,700.⁵ These patients are the only patient group to be insured by a third party in Veterans Affairs Canada, paid for by Blue Cross. This is an important patient demographic as usage rates among veterans can be five times higher or more than the average medical marijuana patient.

Provincial payroll rebate agreement. Organigram announced on March 30, 2016 a collaboration with the province of New Brunswick in which Organigram would be eligible for payroll rebates up to \$990,000 over three years. The province of New Brunswick is offering the program through Opportunities NB Inc., a Crown corporation with a mandate to support SME development and growth in New Brunswick. Organigram currently employs 43 full-time employees in Moncton.

⁵ Data obtained by CBC News through an Access to Information request to Veterans Affairs Canada (<http://www.cbc.ca/news/canada/new-brunswick/cannabis-veterans-drug-payments-1.3598954>)

Assuming the rebate is earned equally across three years, the \$330k in annual rebates would represent half the cash flow used in operating activities for FY2016.

Vertical grow-op. Organigram has optimized its growing space by building a multi-level grow operation three levels high. The system was designed in-house and ensures the exact same micro-climate anywhere in the room in order to ensure all the plants flower at the same time. By growing vertically, Organigram also saves on capex and optimizes its real estate. It took time for the company to optimize its vertical growing operations but management feels they have succeeded. To our knowledge Organigram is the only licensed producer to grow on a multi-level platform.

Figure 43. Organigram’s multi-level grow room



Source: Organigram

Feedback from our channel checks

Positive reviews but less renown. Organigram had generally positive reviews from our channel checks with doctors and clinics but was not often listed as preferred LP (which usually included Tweed, Bedrocan, Mettrum, MedReleaf and Tilray). Positive feedback included: (1) appreciation for the organic nature of the product, (2) the use of “condition-specific” strains (no longer available due to Health Canada regulations), (3) excellent customer service, and (4) the compassionate pricing program (which almost every licensed producer offers). We note that there were some regional differences in opinion with sources from Atlantic Canada having the most positive to say about Organigram and sources from British Columbia rarely dealing with the company. We also tested the company’s call centre several times over the month of August at varying times of the day. Wait times were between one to three minutes which were acceptable.

Current capacity and expansion plans

Organigram currently owns two adjacent land parcels in Moncton, New Brunswick on ~5.5 acres of land. The real estate includes the company’s 31,200 sq. ft. indoor production facility where it grows certified organic marijuana using a multi-level growing technique that is unique to the company, and a smaller building adjacent to the production facility. The use of a multi-level growing system allows Organigram to maximize yield per square foot, leveraging both occupancy and production expenses.

Organigram has a licence to produce 750 kg and sell up to 600 kg of dried marijuana equivalent until March 27, 2017. However, Organigram currently has the capacity to produce ~2,700 kg of marijuana representing a revenue opportunity of \$20m assuming an average price of \$7.50. We would expect Organigram to receive a licence extension in the coming weeks to reflect its updated capacity.

Figure 44. Organigram’s real estate and production facility



Source: Google Maps

Organigram has expansion plans to surpass our near-term revenue forecasts. Organigram is currently completing its “Phase 2” expansion to 3,500 kg per year which the company expects to complete in November 2016. We anticipate the additional capacity to begin contributing to revenues in Q2/FY17 and boost Organigram’s revenue generation potential to \$26m.

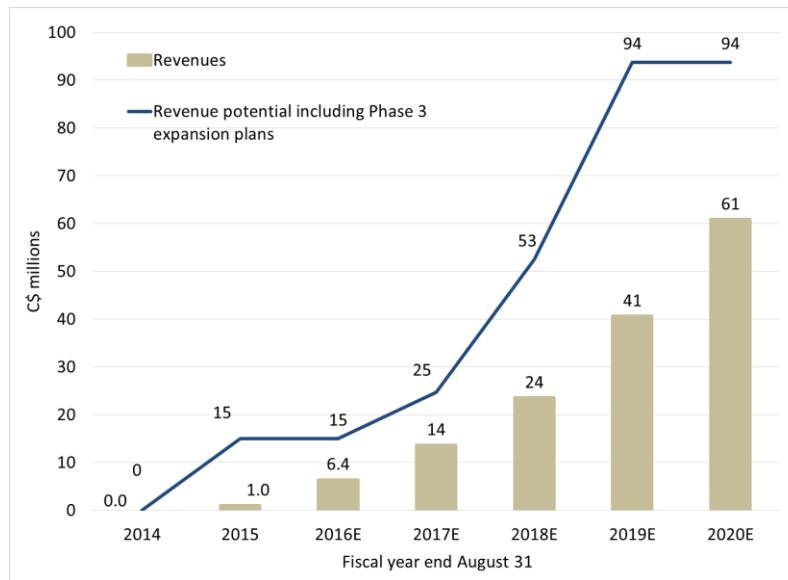
Figure 45. Organigram’s facilities and expansion potential

Facility	Expansion phase	Estimated capacity added (kg/yr)	Estimated completion date	Cumulative capacity (kg/yr)
Moncton indoor facility	Current Capacity			2,700
	Phase 2	800	Q1/FY17	3,500
	Phase 3	9,000	Q1/FY18	<u>12,500</u>

Source: Organigram, GMP Securities

OGI’s development plan includes a further “Phase 3” expansion of the entire facility to bring capacity to 12,500kg annually, capable of supporting revenues of ~\$94m. Hence, the company has already established plans to rapidly reach 12,500kg of production per year, which will be more than ample to support our forecasted revenue growth for at least the next four years.

Figure 46. Organigram’s expansion opportunities and revenue potential



Source: Organigram, GMP Securities

Well capitalized to get to positive free cash flow phase. Following its most recent equity financing round that closed on August 24, 2016, Organigram has an estimated cash balance of ~\$33m which we estimate should be enough capital to complete its announced expansion plans, including finishing three additional grow rooms in Q1/FY17, and a further 12 grow rooms expected to be completed in Q2/FY18. We forecast that Organigram will generate positive free cash flow in FY18 once current expansion plans are completed, having spent a total of ~\$30m to attain 12,500kg of dried marijuana production per year.

Figure 47. Organigram’s capex and funding requirements to carry expansion plans

FYE Aug 31, C\$000s unless otherwise noted	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Estimated production capacity (kg)	-	2,000	2,000	3,300	7,000	12,500	12,500
Capex	1,452	7,523	4,131	12,000	5,000	1,000	1,000
Cash balance - Beginning	78	5,727	1,474	31,371	24,502	28,438	34,230
Cash from operations	(1,197)	(2,772)	(1,230)	2,358	6,814	6,793	11,001
Free cash flow	(2,649)	(10,295)	(5,361)	(9,642)	1,814	5,793	10,001
Equity financing	8,295	1,301	34,763	-	-	-	-
Exercise of warrants & options ¹	-	-	35	3,288	2,630	-	-
Other source (uses) of cash	3	4,742	460	(514)	(508)	-	-
Cash balance - End	5,727	1,474	31,371	24,502	28,438	34,230	44,231

(1) We are assuming that 45% of the options and warrants outstanding are exercised in FY17 and FY18. Most of Organigram’s options and warrants are in the money currently

Source: Organigram, GMP Securities

Ultimately, the company has identified potential capacity for an expansion to 19,000 kg per year on its existing property, which would represent almost \$150m in revenues at current prices.

Figure 48. Facility expansion blueprint


Source: Organigram

Recent results

Organigram reported Q3/FY16 results on July 25, 2016 for the quarter ended May 31, 2016.

Figure 49. Organigram Q3/FY16 results

Year-end Aug-31 (C\$)	Q3/FY16	Q2/FY16	QoQ Chg (%)	Q3/FY15	YoY Chg (%)
Grams sold	213,270	169,215	26%	31,890	569%
Average selling price (\$/g)	\$8.47	\$8.42	1%	\$7.21	17%
Revenues	1,806,849	1,425,466	27%	230,053	685%
COGS*	912,538	640,533	42%	215,391	324%
COGS per gram	\$4.28	\$3.79	13%	\$6.75	-37%
Adj. gross profit*	894,311	784,933	14%	14,662	nmf
Gross profit margin	49.5%	55.1%	-557bps	6.4%	nmf
Total operating expenses	1,023,428	861,675	19%	431,511	137%
% of sales	56.6%	60.4%	-381bps	187.6%	nmf
Adj. EBITDA (before stock-based comp)*	74,625	119,123	-37%	(269,389)	nmf
Margin (%)	4.1%	8.4%	-423bps	-117.1%	nmf
Stock-based compensation	66,562	46,699	43%	62,459	7%
Depreciation & amortization	203,742	195,865	4%	147,460	38%
Adj. EBIT	(195,679)	(123,441)	59%	(479,308)	nmf
Net financing costs (income)	124,259	119,007	4%	38,161	226%
Net income	(319,938)	(242,448)	nmf	(517,469)	nmf
Margin (%)	nmf	nmf	nmf	nmf	nmf
Adjusted EPS (f.d.)	(\$0.01)	(\$0.00)	nmf	(\$0.01)	nmf
Weighted avg. shares o/s	56,402,954	53,127,104		53,026,787	

* Excludes the change in fair value adjustment on biological assets

Source: Company reports

Revenues increased 27% QoQ to \$1.8m. Revenues increased 27% QoQ to \$1.8m driven by 213kg of marijuana sold at an average price of \$8.47, the highest average price achieved for the company and amongst peers. Organigram continued to be capacity constrained in the quarter which resulted in the company purchasing 136kg wholesale from another licensed producer to satisfy some of the demand. Organigram has since received Health Canada approval for three additional grow rooms, with another three expected to be operational over the coming months.

Adj. gross profit increased 14% QoQ to \$0.89m. Excluding the change in fair value of biological assets, adjusted gross margin increased 14% QoQ to \$894,311, representing an adjusted gross margin of 49.5% and a decrease of ~550bps QoQ. COGS per gram excluding the change in fair value of biological assets amounted to \$4.28 per gram, a 13% increase QoQ.

Positive adj. EBITDA reported for third consecutive quarter. Q3/FY16 adj. EBITDA excluding stock-based compensation of \$75k decreased 37% QoQ and was the second consecutive quarter of positive EBITDA excluding the fair value adjustment on biological assets and stock-based compensation. By this measure and amongst our peer group, only Organigram and Aphria have reported positive EBITDA.

Investment risks

Valuation under medical market only scenario. Under the unlikely scenario that the pursuit to legalize the recreational use of marijuana is abandoned, we estimate the value of Organigram under a medical only scenario would be ~\$1.00 per share. We arrive at this valuation by removing the recreational marijuana market opportunity and related capex, and double the rate of medical patient acquisitions from 1,000 to 2,000 annually. Given our target price of \$2.00, this would imply the recreational market adds ~\$1.00 per share to our valuation.

Veteran Affairs Canada (VAC) may limit medical marijuana program. The federal government is considering putting a cap on the amount of marijuana Canadian veterans can receive, as the cost of funding the program continues to climb quickly. VAC is currently the only publicly funded payer for medical marijuana, which is processed through Blue Cross. Minister of Veterans Affairs Kent Hehr has launched an internal investigation into the 12-fold increase in claims for medical marijuana since 2013/14 (and only five claimants when the program launched in 2008). During that two-year period, reimbursements for medical marijuana jumped from \$409k to \$12.1 million, with the number of Veterans being reimbursed increasing from 112 in the 2013/14 fiscal period to over 1,300 as of December 2015.⁶ With the onset of the MMPR (now ACMPR), VAC is proposing putting a cap of 5 grams per day at a maximum price of \$9 per gram.⁷

⁶ <http://www.cbc.ca/news/politics/veterans-marijuana-bill-forces-1.3487516>

⁷ <http://ottawacitizen.com/news/national/government-looks-to-limit-medical-marijuana-for-canadas-veterans>

Forecasts and valuation

We derive a target price of \$2.00. Our target price of \$2.00 represents an expected return of 44% from the current share price. We base our target price on a discounted cash flow analysis given the high growth nature of the industry and high near-term capital outlays for capacity expansion. We model a two-stage, 10-year DCF using a discount rate of 13% and terminal growth rate of 3% based on fully diluted shares outstanding of ~96m.

Figure 50. Comparable table of publicly listed licensed producers

August 26, 2016	Ticker	Price	Basic Shares O/S (m)	Market Cap (\$m)	EV (\$m, f.d.)	Current EV / sales			Reported patients	EV/patient (\$000s)	HC licensed cap. (kg)	EV/HC cap. (\$000s/kg)
						CY16	CY17	CY18				
<i>Select publicly listed licensed marijuana producers</i>												
APHRIA INC	APH-CA	2.58	87	225	235	17.3x	9.4x	4.8x	4,675	50.2	1,500	156.5
AURORA CANNABIS INC	ACB-CA	0.73	129	94	120	n.a.	n.a.	n.a.	6,500	18.4	1,500*	79.8
CANOPY GROWTH CORP	CGC-CA	3.85	116	447	427	14.0x	8.7x	4.2x	20,000	21.4	7,000	61.0
METRUM HEALTH CORP	MT-CA	2.60	46	120	104	5.1x	2.5x	1.6x	13,300	7.8	3,550	29.3
ORGANIGRAM HOLDINGS INC	OGI-CA	1.39	84	117	105	12.9x	7.0x	3.6x	2,500*	42.1	600	175.2
SUPREME PHARMACEUTICALS INC	SL-CA	0.52	97	50	70	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Average				176	177	12.3x	6.9x	3.5x	9,395	28.0	2,830	105.5
Organigram premium (discount) to peers						5%	1%	2%	-73%	50%	-79%	66%

* GMP estimate

Source: Company reports, FactSet, GMP Securities

Forecasting \$6.4m in sales and \$0.6m of EBITDA in FY16. We are forecasting sales of \$6.4m on a total of 777k grams of dried marijuana sold at an average price of ~\$8.22 per gram. Organigram purchased wholesale product from another licensed producer to cover its production shortfall in FY16 which has led to a depressed adjusted gross margin assumption of 53%, below peers despite having lower production costs, on average. OGI stopped purchasing wholesale in the fourth quarter which is expected to help improve gross margin going forward. EBITDA is forecast to come in at \$0.6m before stock-based compensation, representing the first year of positive EBITDA.

Forecasting \$13.6m in sales and \$3.6m of EBITDA in FY17. We are expecting sales to ramp-up to \$13.6m in FY17, an increase of 113% YoY on the back of a production capacity run-rate of 3,500 kg per year completed in Q1/FY17 and contributions from cannabis oil sales of ~\$2.4m. This assumes average growth of 450 patients per quarter for an average patient count estimate of just under 3,900. We are assuming a price of \$8.30 per dried gram of marijuana based on recent average price trends, and the equivalent of \$12.90 per gram for cannabis oils. Our EBITDA forecast of \$3.6m represents an EBITDA margin of 27%, an improvement from the 10% we are anticipating in FY16 as the company begins to benefit from its increased scale and operating leverage.

Forecasting \$24m in sales and \$7.4m of EBITDA in FY18. Our FY18 revenue forecast of \$24m assumes that Organigram completes its planned production expansion to support ~12,500kg of marijuana annually in Q2/FY18 for harvest in Q3/FY18. Sales of cannabis oils are expected to contribute ~\$3.5m assuming 20% of the patient base order a 50ml bottle twice per month at a price of \$129 per bottle. We have also assumed recreational sales beginning on April 1, 2018 with an initial sales contribution of \$4.2m in FY18.

Our main model assumptions are as follows:

1. **Medical marijuana patient acquisition to slow once recreational legalized.** We are forecasting Organigram to onboard 1,800 medical marijuana patients per year in FY17 and FY18, declining to 1,000 patients per annum in FY19 and beyond. We assume that once a recreational marijuana market is established, a portion of customers who would have otherwise gone to their physician for a script will instead choose to source their supply from retail.
2. **Forecasting a selling price per gram slightly higher than peers for medical.** We are assuming Organigram's average price per gram for medical marijuana in dried form at \$8.00 in the first stage of our DCF and \$7.50 in the second stage. For cannabis oils we are forecasting a flat price of \$12.50 per equivalent gram. Our assumption for the wholesale price to retailers in the recreational market is consistent across licensed producers at \$5.00 per gram but would increase under the assumption that the regulatory framework would allow for direct sales to consumers.
3. **Assuming Organigram commands a 4.0% share of the recreational market.** We are forecasting recreational demand to start on April 1, 2018 and contribute ~\$4.2m to Organigram's revenues in FY18. We expect the addressable market to be ~\$415m in FY19 (~\$830m at retail). We assume Organigram initially commands 4.0% of the recreational market, declining by 75bps through the first stage of our DCF to account for new market entrants, a slower decline vs. peers given Organigram's differentiated organic product which we expect will help protect its market share.
4. **Average EBITDA margin of 34%.** We anticipate Organigram's EBITDA margin to average 33% in our first stage of our DCF, increasing slightly to 34% in stage two to account for increased operating efficiency and higher margin cannabis oils representing a larger proportion of sales.
5. **Capex.** We are assuming a capex budget of ~\$12m in FY17 to complete the expansion build-out to 3,500kg and to begin the next phase of expansion to 12,500kg. We estimate capex to decrease to \$5m in FY18 to account for the remaining capex spend related to the second phase of expansion.

Figure 51. Organigram's valuation summary

Organigram Holdings Inc., FYE Aug 31	Forecasted		Stage 1					Stage 2				
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
C\$ thousands												
Recreational market												
Estimated addressable market size (C\$ mlns)		104	417	833	1,333	1,833	2,333	2,583	2,713	2,848	2,991	3,140
Organigram's estimated market share		4.0%	4.0%	4.0%	4.0%	3.8%	3.5%	3.3%	3.3%	3.3%	3.3%	3.3%
Average price per gram (\$/gram)		\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
Implied number of kilos sold		833	3,333	6,667	10,667	13,750	16,333	16,792	17,631	18,513	19,438	20,410
Total revenues recreational market		4,167	16,667	33,333	53,333	68,750	81,667	83,958	88,156	92,564	97,192	102,052
Medical market												
Avg customers for period	3,886	5,686	6,686	7,686	8,686	9,686	10,686	11,686	12,686	13,686	14,686	15,686
Number of kilos sold (dried equivalent)	1,538	2,250	2,440	2,805	3,170	3,535	3,900	4,265	4,630	4,995	5,360	5,725
Average price per gram equivalent	\$8.86	\$8.59	\$9.80	\$9.80	\$9.80	\$9.80	\$9.80	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
Total revenues medical market	13,621	19,337	23,916	27,493	31,070	34,647	38,224	42,654	46,304	49,954	53,604	57,254
Total revenues	13,621	23,504	40,582	60,826	84,403	103,397	119,890	126,612	134,460	142,518	150,796	159,306
EBITDA	3,642	7,387	12,958	19,726	27,794	34,565	40,678	43,048	45,716	48,456	51,271	54,164
margin	26.7%	31.4%	31.9%	32.4%	32.9%	33.4%	33.9%	34.0%	34.0%	34.0%	34.0%	34.0%
Depreciation & Amortization	1,165	1,515	1,715	1,755	1,795	1,944	2,300	2,611	2,725	2,875	3,028	3,186
Net finance costs & other	731	854	939	1,033	1,137	1,250	1,375	1,513	1,664	1,831	2,014	2,215
EBT	1,747	5,018	10,303	16,937	24,862	31,371	37,003	38,924	41,327	43,751	46,229	48,764
Cash taxes	0	559	3,091	5,081	7,459	9,411	11,101	11,677	12,398	13,125	13,869	14,629
NOPAT	2,477	5,313	8,152	12,889	18,540	23,210	27,277	28,760	30,593	32,456	34,374	36,349
+ Depreciation & Amortization	1,165	1,515	1,715	1,755	1,795	1,944	2,300	2,611	2,725	2,875	3,028	3,186
- Net increase in working capital	(1,284)	(14)	(3,074)	(3,644)	(4,244)	(3,419)	(2,969)	(1,210)	(1,413)	(1,450)	(1,490)	(1,532)
- CAPEX	(12,000)	(5,000)	(1,000)	(1,000)	(3,720)	(8,916)	(7,762)	(2,858)	(3,738)	(3,835)	(3,936)	(4,043)
Free cash flow to the firm	(9,642)	1,814	5,793	10,001	12,371	12,819	18,847	27,303	28,168	30,046	31,976	33,960
PV factor	1.0000	0.8850	0.7831	0.6931	0.6133	0.5428	0.4803	0.4251	0.3762	0.3329	0.2946	0.2607
PV of Free Cash Flows	(9,642)	1,605	4,536	6,931	7,588	6,958	9,053	11,605	10,596	10,002	9,420	8,853

Valuation	
PV of Free cash flow to the firm	77,504
Terminal value	91,189
Enterprise value	168,693
Current net debt (net cash)	(27,643)
Equity value (C\$, 000s)	196,336
Shares O/S (fully diluted)	95,517
Equity value per share	\$ 2.06

Recreational - Stage 1 key assumptions	
Organigram's average market share	3.9%
Average \$/gram	\$5.00
EBIT margin	32.9%

Medical - Stage 1 key assumptions	
Annual customer acquisition	1,000
Price of dried marijuana (\$/gram)	\$8.00
Price of cannabis oil (\$/gram)	\$12.50
Proportion of sales - dried marijuana	60%
Proportion of sales - oils/extracts	40%
EBITDA margin	32.9%

Recreational - Stage 2 key assumptions	
Organigram's average market share	3.3%
Average \$/gram	\$5.00
EBIT margin	32.9%

Medical - Stage 2 key assumptions	
Annual customer acquisition	1,000
Price of dried marijuana (\$/gram)	\$7.50
Price of cannabis oil (\$/gram)	\$12.50
Proportion of sales - dried marijuana	50%
Proportion of sales - oils/extracts	50%
EBITDA margin	34.0%

Terminal Value	
Terminal FCFF	34,979
Terminal growth rate	3.0%
WACC	13.0%
WACC - g	10.0%
TCF/(WACC-g)	349,789
Present value	91,189

Source: GMP Securities

Recommendation

Initiating coverage with a BUY rating and \$2.00 target price. Our positive thesis on Organigram is predicated on:

- **Atlantic Canada provides regional advantages.** Organigram is currently the only producer located in Atlantic Canada licensed to sell marijuana. Headquartered in Moncton, New Brunswick, the province offers significant energy, labour and occupancy cost advantages vs. Ontario where 55% of the MMPR (now ACMPR) licenses have been issued. Organigram's electricity costs are ~70% cheaper than in Ontario, wages are ~3.5% cheaper based on a lower minimum wage, and occupancy costs are much more affordable than Ontario and below the national average.
- **Heavy consumption rates due to large veteran user demographic.** New Brunswick veterans account for the largest percent of medical marijuana reimbursement in Canada.⁸ Canadian veterans use medical marijuana to help alleviate symptoms associated with PTSD and chronic pain and are amongst the heaviest users of medical marijuana, with daily consumption rates up to five times the average user.
- **Differentiated organic product.** Organigram is currently the only established licensed producer of significant scale offering an organic product that is pesticide-free and not irradiated. The company uses beneficial organisms to control unwanted insects and avoids gamma irradiation which has the potential to negatively impact the terpene profile of the flower. We believe having an organic product will be even more advantageous once recreational access is legalized as competition for shelf space will be fierce, and having an organic product should allow Organigram to differentiate itself from the many other producers attempting to get into retail.

⁸ <http://www.cbc.ca/news/canada/new-brunswick/medical-marijuana-payouts-to-veterans-highest-in-new-brunswick-1.3160217>

Select officers and directors

Denis Arsenault, CEO and Director

Mr. Arsenault was appointed CEO in August of 2014 and is currently the largest shareholder of Organigram with ~7.5% equity ownership. A serial entrepreneur with a background in construction, Mr. Arsenault has spent 25 years building and running successful businesses. Mr. Arsenault holds a Bachelor of Administration from the Université de Moncton.

Larry Rogers, COO and Director

Mr. Rogers was appointed COO in February 2016 and is the second largest shareholder of Organigram with ~2.8% equity ownership. Prior to joining Organigram, Mr. Rogers was CEO of CLS Lexi-tech Ltd. for approx. six years, a language and documentation services specializing in translation, and president of Lexitech International for ~8.5 years previously. Mr. Rogers holds a Bachelor of Science Degree, with a major in computer science from the University of New Brunswick.

Peter Hanson, Interim CFO

Mr. Hanson was appointed interim CFO of Organigram in March 2016 following the departure of Roger Rogers, then CFO. Prior to the appointment to interim CFO, Mr. Hanson held the position of Director of Finance and Administration since joining the company in August 2014. Peter holds a Bachelor of Commerce degree from Mount Allison University. Peter also holds a Chartered Professional Accountant designation and a Certified Human Resource Professional designation in the Province of New Brunswick.

Raymond Gracewood, Chief Commercial Officer

Mr. Gracewood joined Organigram in February 2016 from Moosehead Breweries Ltd. where he held the position of Senior Director of Sales and Marketing. Mr. Gracewood has over 15 years of experience in brand positioning and packaging throughout North America. Mr. Gracewood earned a Bachelor of Business Administration degree from the University of New Brunswick.

Figure 52. Organigram - Insider and institutional ownership

Major shareholders	# of shares	% ownership
Insiders		
Denis Arsenault, CEO & Director	6,319	7.52%
Larry Rogers, COO & Director	2,335	2.78%
Kenneth Mitton, Director	707	0.84%
Keay household (Aaron & Anne)	571	0.68%
Monique Imbeault, Director	111	0.13%
Michel Bourque, Director	56	0.07%

Source: SEDI, FactSet

Organigram Holdings Inc. - Financial statements

Figure 53. Organigram - Income statement and operating metrics

FYE Aug 31 (C\$)	FY2015A	FY2016E	Q1/FY17E	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
Total sales of equivalent dried marijuana (grams)	132,099	776,526	316,123	363,903	408,633	449,030	1,537,690	3,083,284
Avg. selling price per equivalent dried gram	\$7.47	\$8.22	\$8.86	\$8.86	\$8.86	\$8.86	\$8.86	\$7.62
Revenues	986,676	6,384,762	2,801,068	3,222,485	3,618,584	3,978,720	13,620,857	23,503,615
Growth YoY %	n.a.	547.1%	172.1%	126.1%	100.3%	87.4%	113.3%	72.6%
COGS (excluding adj. for biological assets)	736,892	2,975,813	1,260,480	1,353,444	1,519,805	1,671,062	5,804,792	9,871,518
Adj. gross margin	249,784	3,408,949	1,540,587	1,869,042	2,098,779	2,307,658	7,816,065	13,632,097
Gross margin %	25.3%	53.4%	55.0%	58.0%	58.0%	58.0%	57.4%	58.0%
Operating expenses	1,813,602	2,781,089	881,951	975,687	1,152,097	1,164,199	4,173,934	6,245,024
% of sales	183.8%	43.6%	31.5%	30.3%	31.8%	29.3%	30.6%	26.6%
Operating expense per gram sold	\$16.87	\$4.57	\$3.56	\$3.43	\$3.56	\$3.36	\$3.47	\$2.52
Adj. EBITDA (before stock based compensation)	(1,563,818)	627,860	658,636	893,355	946,682	1,143,458	3,642,131	7,387,073
Margin %	-158.5%	9.8%	23.5%	27.7%	26.2%	28.7%	26.7%	31.4%
Stock-based compensation	256,743	349,590	76,562	81,562	86,562	91,562	336,248	466,248
Depreciation & amortization	414,801	764,453	243,742	273,742	303,742	343,742	1,164,968	1,514,968
EBIT	(2,235,362)	(486,183)	338,332	538,051	556,378	708,154	2,140,915	5,405,857
Interest expense (income)	115,405	419,729	99,193	98,781	98,368	97,956	394,297	387,697
EBT	(2,350,767)	(905,912)	239,139	439,270	458,010	610,199	1,746,618	5,018,159
Income taxes	-	-	-	-	-	-	-	559,495
Tax rate (%)	-	-	-	-	-	-	-	11.1%
Net income	(2,350,767)	(905,912)	239,139	439,270	458,010	610,199	1,746,618	4,458,664
Margin %	nmf	nmf	8.5%	13.6%	12.7%	15.3%	12.8%	19.0%
Growth YoY %	n.a.	nmf	nmf	nmf	nmf	nmf	nmf	155.3%
EPS (f.d)	(\$0.04)	(\$0.02)	\$0.00	\$0.00	\$0.00	\$0.01	\$0.02	\$0.05
Total one-time items (after-tax)	(1,073,913)	906,548	-	-	-	-	-	-
Reported net income	(1,276,854)	636	239,139	439,270	458,010	610,199	1,746,618	4,458,664
Reported EPS (f.d.)	(0.02)	0.00	0.00	0.00	0.00	0.01	0.02	0.05
Shares outstanding (f.d.)	52,404,328	58,024,599	95,517,003	95,517,003	95,517,003	95,517,003	95,517,003	95,517,003
OPERATING METRICS	FY2015A	FY2016E	Q1/FY17E	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
CASH FLOW STATEMENT								
TTM Operating cash flow (levered)	(2,887,618)	(1,649,670)	(497,321)	1,061,036	1,215,655	1,963,643	1,963,643	6,425,944
TTM Operating cash flow (un-levered)	(2,772,213)	(1,229,941)	(55,256)	1,482,874	1,611,602	2,357,940	2,357,940	6,813,642
TTM CAPEX	(7,523,181)	(4,130,649)	(5,984,808)	(8,441,717)	(10,000,000)	(12,000,000)	(12,000,000)	(5,000,000)
TTM Free cash flow (levered)	(10,410,799)	(5,780,319)	(6,482,129)	(7,380,681)	(8,784,345)	(10,036,357)	(10,036,357)	1,425,944
Levered TTM Free cash flow yield (on market cap)	-7.9%	-4.4%	-4.9%	-5.6%	-6.7%	-7.6%	-7.6%	1.1%
TTM Free cash flow (un-levered)	(10,295,394)	(5,360,590)	(6,040,064)	(6,958,843)	(8,388,398)	(9,642,060)	(9,642,060)	1,813,642
Un-levered TTM Free cash flow yield (on EV)	-9.9%	-5.1%	-5.8%	-6.7%	-8.1%	-9.3%	-9.3%	1.7%
CAPITAL STRUCTURE								
Total debt	4,858,866	7,540,139	7,510,139	7,480,139	7,450,139	7,420,139	7,420,139	7,300,139
Total cash	1,473,694	31,370,620	31,104,631	29,108,050	27,138,819	24,501,865	24,501,865	28,437,891
Net debt (Net cash)	3,385,172	(23,830,481)	(23,594,492)	(21,627,911)	(19,688,680)	(17,081,726)	(17,081,726)	(21,137,752)
Current market cap (f.d.)	131,813,464	131,813,464	131,813,464	131,813,464	131,813,464	131,813,464	131,813,464	131,813,464
Current enterprise value (f.d.)	104,170,521	104,170,521	104,170,521	104,170,521	104,170,521	104,170,521	104,170,521	104,170,521
Total capital employed	11,239,304	19,329,000	21,195,731	24,340,664	27,481,987	31,448,223	31,448,223	34,947,191
Net debt/TTM EBITDA	nmf	nmf	-19.9x	-11.0x	-7.0x	-4.7x	-4.7x	-2.9x
Net debt/Total cap	0.3x	-1.2x	-1.1x	-0.9x	-0.7x	-0.5x	-0.5x	-0.6x
Net debt/Equity	0.4x	-0.6x	-0.5x	-0.5x	-0.4x	-0.4x	-0.4x	-0.4x
EFFICIENCY RATIOS								
ROA (TTM) (%)	nmf	-2.7%	-1.0%	0.8%	3.6%	3.1%	3.1%	6.6%
ROE (TTM) (%)	nmf	-3.6%	-1.4%	1.0%	5.0%	3.8%	3.8%	8.5%
ROIC (TTM) (%)	nmf	-2.2%	0.2%	2.4%	4.6%	5.9%	5.9%	11.4%

Source: Company reports, GMP Securities

Figure 54. Organigram - Balance sheet

FYE Aug 31 (C\$)	FY2015A	FY2016E	Q1/FY17E	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
ASSETS								
Cash	1,473,694	31,370,620	31,104,631	29,108,050	27,138,819	24,501,865	24,501,865	28,437,891
Short term investments	-	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
Accounts receivable	766,788	1,644,048	2,169,070	2,495,404	2,802,132	3,081,011	3,081,011	6,320,217
Biological assets	1,309,814	2,417,236	2,417,236	2,417,236	2,417,236	2,417,236	2,417,236	2,417,236
Inventory	969,263	2,923,630	3,381,376	4,015,904	4,663,853	5,158,294	5,158,294	7,314,787
Prepaid expenses	73,182	326,371	326,371	326,371	326,371	326,371	326,371	326,371
Total current assets	4,592,741	40,481,905	41,198,684	40,162,965	39,148,411	37,284,777	37,284,777	46,616,502
PP&E	9,583,376	12,949,210	14,705,468	17,431,726	20,127,984	23,784,242	23,784,242	27,269,274
Intangible assets	-	-	-	-	-	-	-	-
Total assets	14,176,117	53,431,115	55,904,152	57,594,691	59,276,395	61,069,019	61,069,019	73,885,776
LIABILITIES								
Accounts payable, accrued liabilities	1,463,119	2,731,495	3,603,790	4,145,977	4,655,589	5,118,931	5,118,931	10,500,695
Current portion of LT debt	284,713	326,096	326,096	326,096	326,096	326,096	326,096	326,096
Current liabilities	1,747,832	3,057,591	3,929,886	4,472,073	4,981,685	5,445,027	5,445,027	10,826,791
Long-term debt	4,574,153	7,214,043	7,184,043	7,154,043	7,124,043	7,094,043	7,094,043	6,974,043
Total liabilities	6,321,985	10,271,634	11,113,929	11,626,116	12,105,728	12,539,070	12,539,070	17,800,834
SHAREHOLDERS EQUITY								
Share capital	16,753,777	51,418,505	51,495,067	51,576,629	51,663,191	51,754,753	51,754,753	52,221,001
Reserve for options and warrants	812,027	1,294,369	2,609,410	3,266,930	3,924,451	4,581,971	4,581,971	7,212,053
Retained Earnings (deficit)	(9,711,672)	(9,553,393)	(9,314,254)	(8,874,984)	(8,416,974)	(7,806,775)	(7,806,775)	(3,348,111)
Total shareholders equity	7,854,132	43,159,481	44,790,222	45,968,575	47,170,668	48,529,949	48,529,949	56,084,943
Total liabilities and shareholders equity	14,176,117	53,431,115	55,904,152	57,594,691	59,276,395	61,069,019	61,069,019	73,885,776

Source: Company reports, GMP Securities

Figure 55. Organigram - Cash flow statement

FYE Aug 31 (C\$)	FY2015A	FY2016E	Q1/FY17E	Q2/FY17E	Q3/FY17E	Q4/FY17E	FY2017E	FY2018E
Operating activities								
Net earnings	(1,276,854)	158,279	239,139	439,270	458,010	610,199	1,746,618	4,458,664
Items not affecting cash								
Stock based compensation	256,743	349,590	76,562	81,562	86,562	91,562	336,248	466,248
Amortization of deferred financing	1,667	1,875	-	-	-	-	-	-
Change in fair value of biological assets	(693,983)	(614,731)	-	-	-	-	-	-
Depreciation	414,801	764,453	243,742	273,742	303,742	343,742	1,164,968	1,514,968
Loss (gain) on disposal of asset	2,490	(7)	-	-	-	-	-	-
Operating cash flow before changes in NWC	(1,295,136)	659,459	559,443	794,574	848,314	1,045,503	3,247,834	6,439,880
Financing costs included in financing activities	115,405	419,729	99,193	98,781	98,368	97,956	394,297	387,697
Changes in working capital items	(1,592,482)	(2,309,129)	(110,473)	(418,675)	(445,066)	(309,978)	(1,284,191)	(13,936)
Cash flow from operating activities	(2,772,213)	(1,229,941)	548,163	474,680	501,617	833,481	2,357,940	6,813,642
Financing activities								
Share capital issued, net of cash issuance costs	1,300,620	34,762,880	-	-	-	-	-	-
Payment of long-term debt	(120,301)	(225,601)	(30,000)	(30,000)	(30,000)	(30,000)	(120,000)	(120,000)
Proceeds from long-term debt	5,000,000	2,900,000	-	-	-	-	-	-
Deferred financing costs	(22,500)	4,999	-	-	-	-	-	-
Cash received from exercise of options & warrants	-	34,600	1,315,041	657,520	657,520	657,520	3,287,602	2,630,082
Financing costs	(115,405)	(419,729)	(99,193)	(98,781)	(98,368)	(97,956)	(394,297)	(387,697)
Cash flows related to financing activities	6,042,414	37,057,149	1,185,848	528,740	529,152	529,565	2,773,305	2,122,384
Investing activities								
(Increase) decrease in short-term investments	-	(1,800,000)	-	-	-	-	-	-
Purchase of PP&E	(7,523,181)	(4,130,649)	(2,000,000)	(3,000,000)	(3,000,000)	(4,000,000)	(12,000,000)	(5,000,000)
Reclassification of PP&E	-	(33)	-	-	-	-	-	-
Purchase of intangible assets	-	-	-	-	-	-	-	-
Cash flow from investing activities	(7,523,181)	(5,930,282)	(2,000,000)	(3,000,000)	(3,000,000)	(4,000,000)	(12,000,000)	(5,000,000)
Net increase (decrease) in cash	(4,252,980)	29,896,926	(265,989)	(1,996,580)	(1,969,231)	(2,636,954)	(6,868,755)	3,936,026
Cash, beginning of period	5,726,674	1,473,694	31,370,620	31,104,631	29,108,050	27,138,819	31,370,620	24,501,865
Cash, end of period	1,473,694	31,370,620	31,104,631	29,108,050	27,138,819	24,501,865	24,501,865	28,437,891

Source: Company reports, GMP Securities

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