

Intro-Blue, LLC | 617-454-1088 | peter@intro-blue.com | www.intro-blue.com | Volume 22 | 12/4/19

THE FOUR ANCILLARY STOCKS THAT CANNABIS INVESTORS SHOULD EVALUATE

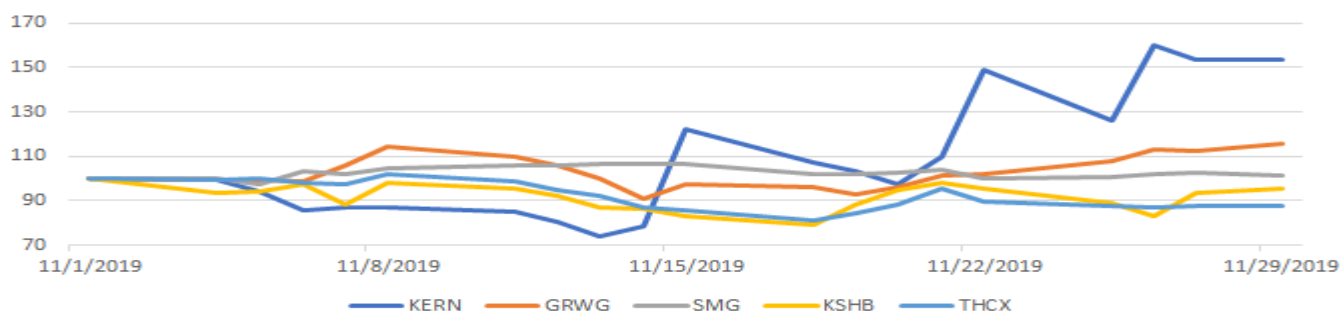
In [last week's Stash report](#) we discussed why we believe cannabis stocks reached a bottom on November 18 and why they can be expected to recover from there. One way to play the recovery is through cannabis producers (Canadian LPs and U.S. MSOs). However, another way to capitalize on this opportunity is by betting on ancillary plays that are leaders in their respective domains and can be expected to outperform the market in the coming months. We discuss four such names in this week's analysis.

Scotts Miracle-Gro (SMG) and **GrowGeneration Corp (GRWG)** are hydroponics names well placed to benefit from growth in the cannabis industry. SMG, best known for its lawn and garden products, has a growing presence in the cannabis space through its subsidiary Hawthorne Gardening which provides hydroponic growing equipment and supplies growers with nutrient, soil, and lighting solutions. Hawthorne sales were up 38% y/y to \$210 million in the September quarter and contributed ~42% to the company's consolidated top line of \$497 million. The increases were driven by contribution from the 2018 acquisition of Sunlight Supply and robust development across all product categories. The company has established a leadership position with indoor growers in key West Coast markets, especially California, as well as emerging markets like Michigan, Florida, and Massachusetts. Hawthorne is also working with [Flower \(FLWPF\)](#) to develop soil, lighting, and genetic solutions aimed at boosting crop yield to an industry-leading 400 grams per square foot by 2022. These factors, coupled with SMG's 2.3% dividend yield, make it one of the best large-cap cannabis ancillary plays. For investors who prefer small-cap stocks, GRWG is worth evaluating. Revenue for GRWG, which owns a chain of specialty hydroponic and organic garden centers across 25 U.S. locations, grew 159% y/y to \$21.8 million in 3Q19, with same store sales growth averaging an impressive 48%. More importantly, GRWG is among the few profitable cannabis companies as its 3Q19 EBITDA stood at \$2.04 million and net income totaled \$1.04 million. The fast and profitable growth has not been lost on investors as the stock has more than doubled YTD, a standout performance in a year when cannabis stocks have lost more than 60% of their market cap on average. GRWG up-listed to the NASDAQ this week, a key milestone which should help drive shareholder confidence and interest even higher and boost the company's market cap.

Packaging leader KushCo Holdings (KSHB), which recently entered the asset-light hemp trading business, is another ancillary play that should be on investors' radar. KushCo is the leading supplier of cannabis packaging and branding solutions with experience working with customers across states and countries, a key differentiator since cannabis regulations are different in the various jurisdictions, making vendors with the ability to meet both regulatory and business requirements a rarity. The company, which also supplies hydrocarbon gases and solvents to the industry, saw its revenue jump 186% y/y to \$149 million in FY19 and has guided for a top line between \$230 million and \$250 million for FY20. KSHB has been making a conscious effort to expand into high margin businesses. As part of this strategy, the company launched its hemp trading business last month. The venture will leverage KushCo's ecosystem of 6,000+ brands, producers, and suppliers to connect buyers and sellers of hemp commodities. The company has entered into a partnership with an unnamed industrial hemp farming leader in the U.S. for this venture, which will be capital light and EBITDA accretive, and is expected to generate \$25 million in revenue in FY20, thus enhancing KSHB's investment potential.

Akerna (KERN), which owns one of the most widely used seed-to-sale tracking platforms in the industry, is the best technology- and compliance-focused ancillary play. KERN's key offerings include its MJ Platform and Leaf Data Systems, which provide clients and government entities with a central data management system for tracking regulated cannabis from seed to product to shelf to customer. Unlike other software vendors that customize existing platforms to meet the cannabis industry's needs, KERN's MJ Platform has been built from the ground up with cannabis businesses and regulators in mind and has clients in 29 of the 33 medical marijuana-legal U.S. states and in more than 10 countries worldwide, a key moat in our view that will only expand thanks to cannabis' illegal status in various geographies which makes tracking its movement a huge but unmet need. In August, KERN and solo sciences partnered to launch solo*TAG, the world's first cryptographically secure cannabis product authentication system developed exclusively for governments and only available with KERN's Leaf Data Systems. KERN's revenue jumped 36% y/y to \$3.2 million in the September quarter with gross margin expanding 200 bps to 56%. The stock has more than doubled from its November lows and is likely to climb higher thanks to KERN's strong competitive position in a niche market with a long growth runway.

Chart 1: KERN, GRWG, SMG, and KSHB All Outperformed Cannabis ETF THCX Last Month



Source: Intro-Blue, Yahoo! Finance

CANNA NEWS

STATE AND REGULATORY NEWS

On first day of Michigan recreational marijuana sales, customers line up for flower. The line outside the Exclusive Brands dispensary in Ann Arbor, Michigan, stretched nearly three blocks on the state's first day of recreational cannabis sales Sunday. Exclusive Brands said the store served more than 900 people on the first day. Most were there to purchase flower. In addition to Exclusive Brands, two other adult-use marijuana shops opened in Ann Arbor: Arbors Wellness and Greenstone Provisions. Sales totaled \$221,000 among the three stores, said David Harns, public information office for the Michigan Department of Licensing and Regulatory Affairs. [Read More](#) (Marijuana Business Daily)

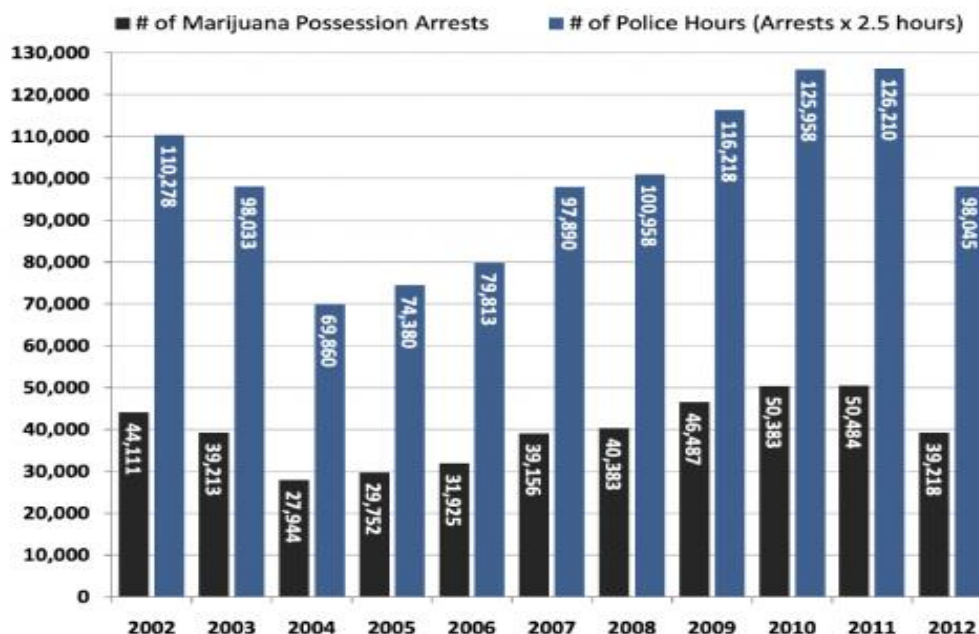
New Jersey Governor backs marijuana decriminalization ahead of 2020 legalization ballot vote. New Jersey Gov. Phil Murphy (D) announced that he will be working with lawmakers to advance legislation to decriminalize marijuana possession after the legislature failed to produce a passable bill to more broadly legalize cannabis. While the question of legalizing and regulating sales is now expected to go before voters as a referendum on the 2020 ballot, removing criminal penalties for mere possession could prove more palatable to some lawmakers in the interim. [Read More](#) (Marijuana Moment)

Detroit says 'no' to recreational marijuana sales. In a last-minute decision, Detroit leaders have decided to temporarily ban adult-use recreational marijuana sales. When legal marijuana sales start in Michigan, residents in the Motor City will have to go elsewhere for cannabis. While Detroit is the largest city to ban marijuana sales in the state of Michigan, it is not alone. About 79 percent of municipalities in Michigan have done the same. The long list is available from the state. [Read More](#) (Green Entrepreneur)

Kamala Harris' MORE Act could decriminalize cannabis — and improve the industry's racial equity problems. The MORE Act would decriminalize cannabis at the federal level by removing it from the Controlled Substances Act. It would also correct many banking and legal issues, and allow minority-owned and small cannabis businesses access to federal Small Business Administration loans. Minority access to financial services has long been an issue in the U.S. For decades, institutionalized financial services favored white borrowers at the expense of nonwhite Americans, while all levels of government turned a blind eye towards the destruction of minority property and the arrest of their American dream. [Read More](#) (San Francisco Chronicle)

Where presidential candidate Michael Bloomberg stands on marijuana. Bloomberg served three terms as mayor of New York City, beginning in 2002. While he changed parties throughout that time, one consistent factor under his administration was a high level of arrests for marijuana possession. From 2002 to 2012, the NYPD made about 440,000 arrests for cannabis possession alone, collectively spending about one million hours processing those cases, according to a report from the Drug Policy Alliance (DPA). Overall, there were more marijuana arrests under Bloomberg than under the mayorships of Ed Koch, David Dinkins and Rudy Giuliani combined. [Read More](#) (Marijuana Moment)

Chart 2: Making 440,000 Marijuana Possession Arrests in New York City, 2000-2012

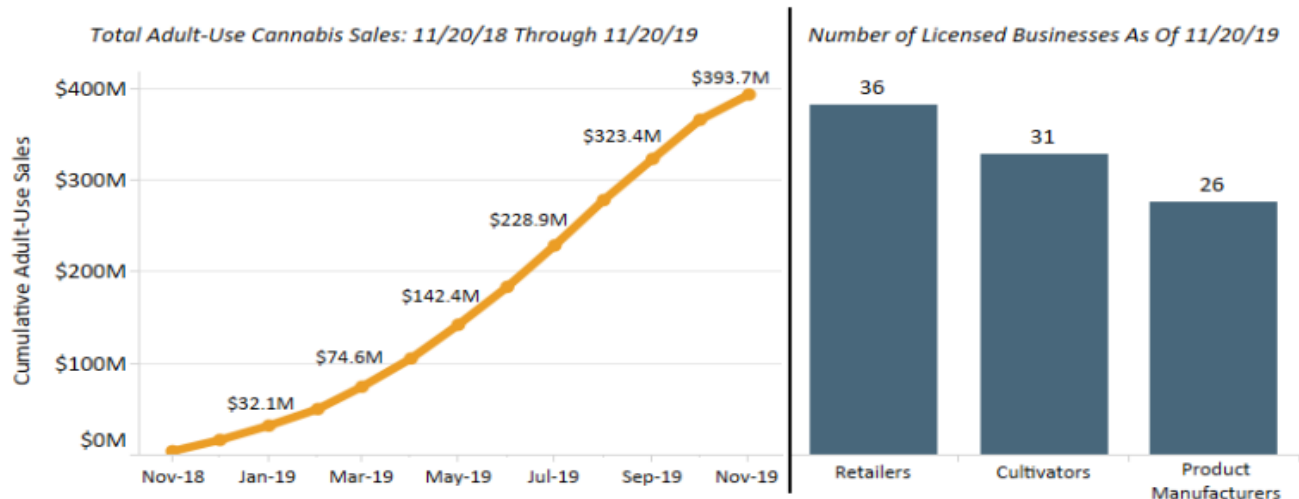


Source: Intro-Blue, Marijuana Moment, DPA

DEA finalizes plan to grow 3.2 million grams of marijuana in 2020. The Drug Enforcement Administration (DEA) finalized its plans to authorize the cultivation of 3,200,000 grams of marijuana for research purposes next year—a 30 percent increase from 2019’s quota. DEA initially proposed 2020 production quotas in a notice published in the Federal Register in September. This latest notice finalizes those numbers, taking into account input it received during a public comment period, which elicited hundreds of submissions from health professionals, state and federal officials and the general public. [Read More](#) (Marijuana Moment)

First year of adult-use cannabis sales in Massachusetts doesn’t disappoint. Massachusetts’ recreational marijuana industry recorded nearly \$400 million in its first full year of sales, a strong initial sum given the dearth of retail stores throughout the state. But the market has significant room for growth, which will come as regulators approve more applications and access to the legal market improves. From August through October, recreational sales in Massachusetts averaged nearly \$46 million per month, putting the state on pace to reach \$420 million-\$430 million in sales for calendar year 2019. By 2021, adult-use sales in Massachusetts could eclipse \$1 billion. [Read More](#) (Marijuana Business Daily)

Chart 3: First Year of Massachusetts’ Adult-Use Market: Sales & Licensed Businesses



Source: Intro-Blue, Marijuana Business Daily, Massachusetts Cannabis Control Commission

Illinois licenses seven more medical cannabis dispensaries to sell to the adult-use market. Illinois has issued licenses to seven more medical cannabis dispensaries that can sell to the adult-use market when sales launch Jan. 1, according to a Chicago Tribune report. Columbia Care and Mission Illinois in Chicago, EarthMed in Addison, HCI Alternatives’ locations in Collinsville and Springfield, Herbal Remedies in Quincy, and Nature’s Treatment in Milan all received licenses Nov. 26, the news outlet reported. The latest round of licensing brings the total to 29 licensed dispensaries that can serve the forthcoming adult-use market in the state, according to the Chicago Tribune, including six in Chicago. [Read More](#) (Cannabis Business Times)

California cannabis industry sending SOS to state leaders. California’s legalization of cannabis for adult recreational use was expected to be massive. In 2016, industry investors claimed sales could top \$6.5 billion by 2020. And as 2019 comes to a close, California is indeed home to the world’s largest cannabis market, totaling close to \$12 billion in estimated sales. But here’s the rub: \$8.7 billion of that is changing hands in the illicit market. Now, members of California’s cannabis industry are sending an S.O.S. to the state capitol, saying they’re struggling to compete against black market operators who don’t have to meet stringent regulations or pay taxes and fees. They’re urging leaders to make swift regulatory changes or risk the collapse of their emerging industry. [Read More](#) (CNN)

More medical cannabis companies bolster operations in lucrative Florida market following smokable flower ban repeal. A new Florida law repealing a ban on smokable medical marijuana products has given the state’s MMJ market a shot in the arm, prompting large multistate companies to aggressively expand their production, operations and retail footprints. That has injected fresh competition into one of the nation’s fastest-growing medical cannabis markets and loosened the grip of the state’s largest MMJ company. Some multistate operators possibly have overpaid to get into Florida’s market, with reports of some acquisitions exceeding \$40 million -- including a \$53 million transaction by MedMen. [Read More](#) (Green Entrepreneur)

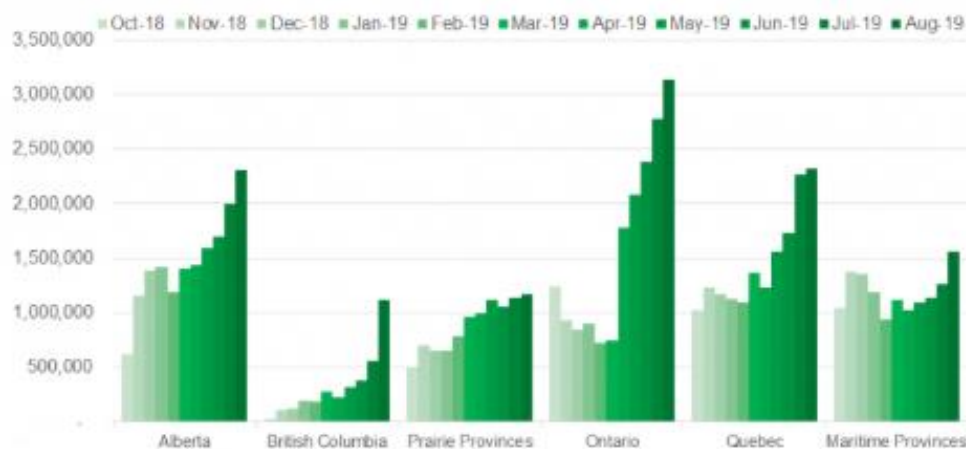
Washington, DC joins several states in suing Juul Labs. The District of Columbia is joining several states in suing the nation’s largest e-cigarette maker Juul Labs, saying the company’s online ads and promotions illegally targeted minors. Washington, D.C., Attorney General Karl Racine announced the lawsuit, alleging that Juul’s viral marketing contributed to the surge in underage vaping by teens in the district and across the U.S. The lawsuit also says that Juul misled consumers about the potent nicotine levels contained in its flavored pods. The move follows similar lawsuits filed by California and New York. North Carolina became the first state to sue the San Francisco startup in May. [Read More](#) (High Times)

Nearly 100 U.S. cities are considering decriminalizing psychedelics. The movement to decriminalize psychedelics has spread so rapidly this year that it can be hard to keep track. But Decriminalize Nature, the group coordinating many of these initiatives, is up to the task. The group recently shared a map with the most up-to-date information about which cities activists are targeting for efforts to remove or reduce penalties for substances like psilocybin and ibogaine, along with the status of those campaigns. All told, the map shows nearly 100 jurisdictions where decriminalization is either being considered or is already in motion. [Read More](#) (Marijuana Moment)

Robust vape market expected to emerge in Canada despite concerns. Canada's nascent vape market is set to become extremely crowded when the products can go on sale this month. BNN Bloomberg reported that Health Canada has received 746 notices to sell cartridge-based vaping systems ahead of the start of next-generation cannabis product sales on Dec. 16. While some of those may reflect a duplicate submission by two separate license holders, it does signal the opportunity that the legal marijuana industry sees for these devices. [Read More](#) (BNN Bloomberg)

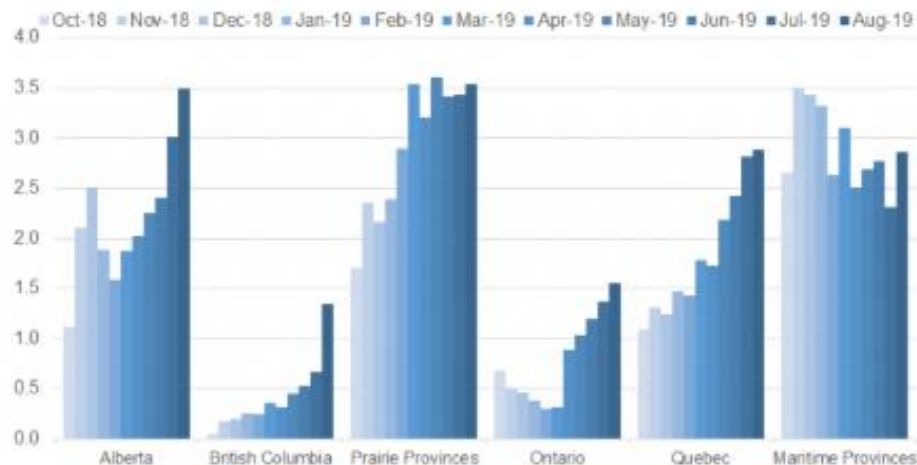
Alberta sees steady sales growth in conjunction with exponential expansion in number of retail stores. On average, each reported cannabis consumer in Alberta purchased 3.5 grams of dry cannabis each month from the licensed market in August. British Columbia's legal cannabis market has seen relatively low purchasing levels. However, data shows a big jump in sales in August, with the rapid increase in the number of physical stores and falling prices leading to licensed sellers becoming more competitive with the illicit market. The Prairie provinces show some of the highest purchase volumes per cannabis user, but that appears to have plateaued at around 3.5 grams per month beginning this spring. Ontario significantly lags below the national average in sales volume per cannabis consumer. Changes to rules around retail licenses, storage, and distribution processes will likely lead to accelerated consumption in Ontario in the future. [Read More](#) (Cannabis Benchmarks)

Chart 4: Total Grams of Cannabis Sold Each Month



Source: Intro-Blue, Cannabis Benchmarks

Chart 5: Average Monthly Purchase Per Cannabis User (gm)



Source: Intro-Blue, Cannabis Benchmarks

Health Canada data reveals roughly 95% of pot samples tested negative for pesticides. Health Canada testing has found that roughly 95% of pot samples from licensed producers came back negative for pesticides in the months following legalization. The data — released to under access-to-information laws — was compiled from the health agency's unannounced inspections that are conducted on Canada's licensed cannabis producers. However, of the 133 tests conducted between November 2018 and February 2019, five samples of dried cannabis tested positive for restricted pesticides. Four were within the so-called acceptable limits for pesticides like metalaxyl — a fungicide — which has a limit of 0.020 parts per million. [Read More](#) (Global News)

British Columbia chamber lobbies province over craft cannabis cultivation. The Chamber of Commerce in British Columbia wants the province to adopt policies encouraging craft cannabis businesses to join the regulated market, including allowing proprietors to keep their doors open during the transition into the legal fold. The proposals were among a number of policies the chamber asked Public Safety Minister Mike Farnworth to consider during a recent lobbying effort, according to records from the Office of the Registrar of Lobbyists. [Read More](#) (Marijuana Business Daily)

COMPANY NEWS

Aurora CEO eyes U.S. amid looming 'carnage' for Canadian pot industry. [Aurora Cannabis \(ACB\)](#) chief executive officer Terry Booth said there could be "carnage" in Canada's cannabis industry over the next year if some producers remain unable to reduce their cost of producing cannabis amidst what has become an oversupplied market. "I think you'll see some carnage in the production area when people are growing it for \$4 and \$5 a gram, [when] we're doing it for less than a buck," Booth said. "We're not going to want to get into any price wars but if the market does go down in pricing because of oversupply, we're best prepared to deal with it." [Read More](#) (BNN Bloomberg)

Canopy Growth outlines "Cannabis 2.0" portfolio. [Canopy Growth \(CGC\)](#) officially unveiled its new portfolio of Cannabis 2.0 products, including its Distilled Cannabis concept, chocolates, vape cartridges and vape pens. "With the coming of Cannabis 2.0, our goal is to provide customers with the best quality products, and I truly believe through the hard work and dedication of our team, we have delivered just that," said Mark Zekulin, CEO, Canopy Growth. "Since our first medical sale in 2014, we've been focused on innovation and quality, and now we're expanding that with the launch of our game-changing recreational beverages, chocolates, and vapes." [Read More](#) (PR Newswire)

Canopy enters U.S. consumer market with new CBD brand. [Canopy Growth \(CGC\)](#) has quietly launched its hemp-derived CBD brand, marking the pot giant's first official presence in the U.S. consumer market. Canopy's new U.S. CBD product brand is dubbed "First & Free" and will be available for sale in 31 U.S. states where CBD products are legally available. The Smiths Falls, Ont.-based company plans to sell softgels, oil drops, and topical cream products, according to the company's website. The website's terms of service page state it's owned and operated by Canopy Growth and has its servers located in Ontario. Canopy's formal entry to the U.S. CBD market comes shortly after the country's Food and Drug Administration issued a statement last month that it cannot conclude the cannabis compound's safety in human or animal food products." [Read More](#) (BNN Bloomberg)

Aleafia Health launches international medical cannabis white label services. [Aleafia Health \(ALEAF\)](#) has completed production of its first white label production run of medical cannabis oils, for distribution in Australia. The cannabis oils were produced at the company's Paris Processing Facility and will be distributed by Melbourne, Australia based Montu Group Pty. Ltd., their newly launched premium medical brand Circle. The transaction represents the first production run of Aleafia Health's newly launched international white label production service. [Read More](#) (Globe Newswire)

Aurora Cannabis products unavailable in Germany until further notice. [Aurora Cannabis' \(ACB\)](#) medical marijuana products are temporarily unavailable in Germany pending a review by health authorities of "a proprietary step" in the Alberta company's production process. According to the pharmacies, the reason is related to a method used by Aurora to ensure the shelf life of the flower, a process German authorities are currently reviewing. The company "stands behind the safety of products previously sold to medical patients and has not initiated a recall," Aurora's spokesperson said. [Read More](#) (Marijuana Business Daily)

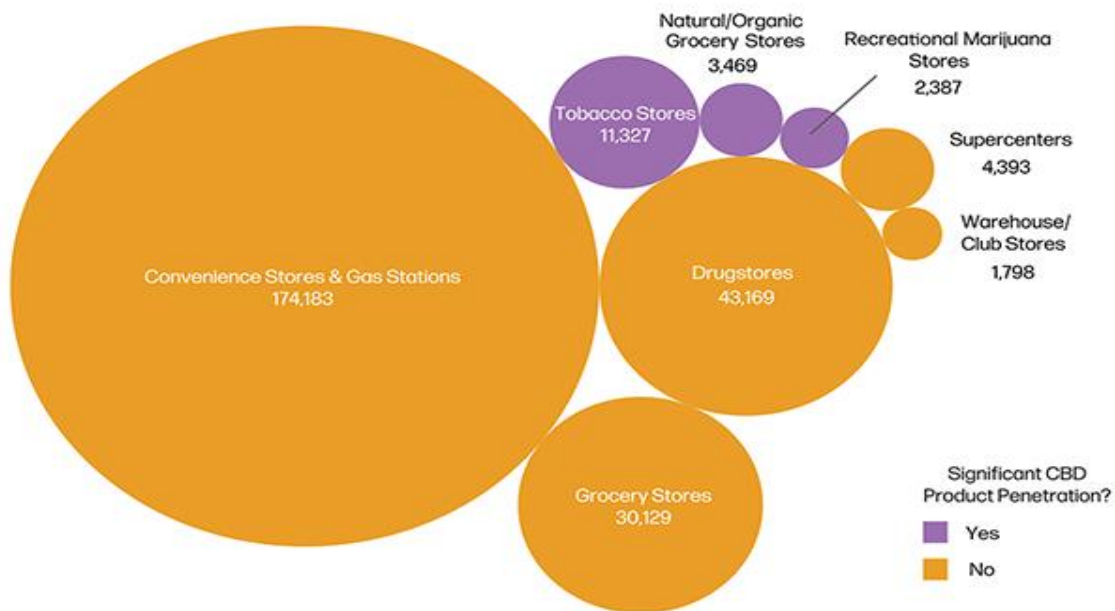
Sunniva and CannaPharmaRx announce extension to outside date of share purchase agreement. [Sunniva \(SNNVF\)](#) and CannaPharmaRx announced that they are extending the outside date of the Share Purchase Agreement previously announced on June 11, 2019 with respect to the sale of the shares of Sunniva Medical Inc. to CannaPharmaRx until December 20, 2019. The terms of the SMI Transaction, as amended on October 2, 2019, otherwise remain unchanged, with the purchase price to be satisfied by way of CAD \$16.0 million in cash and CAD \$4.0 million by way of a promissory note of CannaPharmaRx. [Read More](#) (Newswire)

Auxly Cannabis secures assets of Curative Cannabis. [Auxly Cannabis \(CBWTF\)](#) has officially completed the foreclosure process on the share collateral of Curative Cannabis. Auxly is now in possession and owns all 125 shares of Curative Cannabis, effectively making the LP applicant a wholly owned entity of Auxly. Curative had failed to pay its secured debts, highlighting the risk that such debt within the cannabis sector can hold. Over \$21.2 million was owed to Auxly by the time everything was said and done, with the amount now being paid via share collateral under a court order. [Read More](#) (the deep dive)

Aleafia Health completes \$7.1 million cannabis sale agreement. Aleafia Health (ALEAF) reached a definitive agreement on November 29, 2019, with a Canadian LP. Under the terms of the agreement, Aleafia Health will sell 2,840 kg of dried cannabis flower at a price per gram of \$2.50, generating \$7.1 million in revenue. The transaction will include up to three shipments, all of which will be completed before January 31, 2020. [Read More](#) (Aleafia Health)

Canadian CBD company Isodiol seeks to win shelf space with the help of a convenience-store group. Why would a CBD company want to try and enter the mainstream retail market through the labyrinth that is convenience stores and gas stations? “Just the sheer number of store locations they have access to for distribution points,” Troy Nihart, chief operating officer for Isodiol International, told Marijuana Business Magazine in explaining why [Isodiol \(ISOLF\)](#) joined forces with the Asian-American Trade Associations Channel (AATAC). AATAC has a massive network of about 90,000 independently owned gas stations, convenience stores and corner markets all across the U.S. According to Nihart, his company is paying the Asian-American Trade Associations Channel – he wouldn’t disclose the amount – to make quicker inroads with the organization’s members. [Read More](#) (Hemp Industry Daily)

Chart 6: Retail Store Count by Store Type & CBD Product Penetration



Source: Intro-Blue, Hemp Industry Daily

EARNINGS

Origin House Q3 revenue increases 244% to \$22.8 Million. [Origin House \(ORHOF\)](#) reported revenue growth of 7% vs. Q2-2019 (up 244% vs. Q3-18) while preparing for integration with [Cresco Labs \(CRLBF\)](#) and completing HSR Review process. It continued gross margin expansion (+400bps sequentially in Q3) as optimized brand portfolio continues to scale and ultra-premium flower sales increase, supported by a 3x capacity increase. The company introduced Cresco Labs products through Continuum and drove rapid penetration over a period of four months, positioning Cresco Labs as one of Origin House’s top distributed brands. [Read More](#) (New Cannabis Ventures)

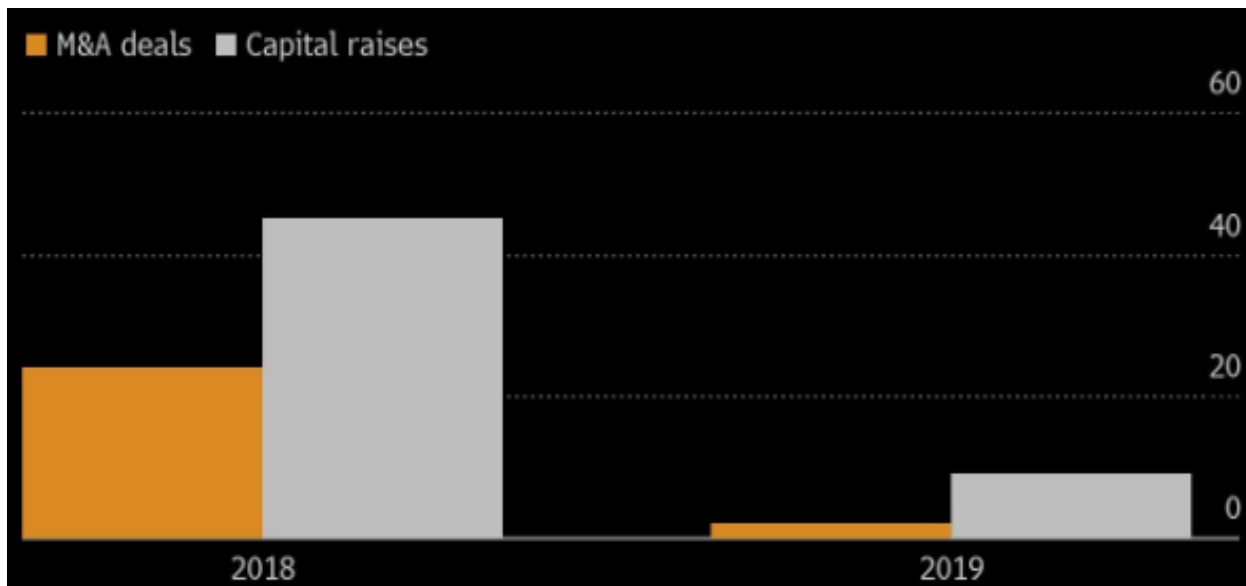
The Flowr Corporation announces 3Q19 results. [The Flowr Corporation \(FLWPF\)](#) generated gross revenue of approximately \$2.1 million and net revenue of approximately \$1.3 million net of excise taxes, pricing concessions and product returns. These figures exclude approximately \$0.3 million of design and construction fees earned from Hawthorne Canada Limited in relation to the construction of the research and development facility on its Kelowna Campus. The company closed on the remaining 80.2% interest in Holigen Holdings Limited in August 2019, creating a global cannabis company with access to 7 million square feet of anticipated low cost EU-GMP compliant outdoor grown cannabis in southern Portugal, to supply the emerging and rapidly growing European and Australasian medicinal cannabis markets. [Read More](#) (Globe Newswire)

WeedMD announces 3Q19 results. [WeedMD \(WDDMF\)](#) reported net revenues of \$6.7 million with a gross margin of 29%. Greenhouse cultivation cost improved to \$0.72/gram in Q3. Strategic acquisition of Starseed strengthens medical position in Canada and consolidates distribution channel in accretive all-stock transaction. A \$25 million strategic investment from The Labourers’ Pension Fund of Central and Eastern Canada will result in a pro-forma cash position of \$54 million. Preliminary outdoor-cultivated test results confirm over 20% THC on some strains and harvest expected to yield more than eight tons of biomass at a cost of approximately \$0.16/gram. [Read More](#) (Globe Newswire)

CAPITAL MARKETS

Deals dry up with pot stocks limping into year end. Deal making has gone quiet in the pot space as the slump in shares removes a vital currency and investors get picky. The sharp drop in deal activity is the result of a confluence of factors, including a 60% decline in share prices across the industry and capital markets that have closed to all but the biggest and best-funded companies. Over the same four-week period, just 11 capital raises worth \$370 million were done, down from 59 worth \$5.2 billion a year ago. [Read More](#) (BNN Bloomberg)

Chart 7: Dearth of Funding Hits Cannabis Deals



Source: Intro-Blue, Viridian Capital Advisors, Bloomberg

Aphria announces \$80 million financing of Aphria Diamond. Aphria (APHA) announced that its subsidiary Aphria Diamond secured a credit facility, on November 29 2019, with a major Canadian chartered bank as sole arranger, sole book runner and administrative agent on behalf of a group of lenders for a committed senior secured credit facility of \$80 million. With the level of automation and scale of the facility, the company anticipates Aphria Diamond to have one of the lowest cost structures in the industry. Aphria expects the dried flower production from the first harvest to be sold to provincial control boards sometime in March 2020. [Read More](#) (Newswire)

Survey: Americans are ready to invest in cannabis. The question of Americans' attitudes toward the cannabis industry was at the core of a survey conducted by GOBankingRates. The survey asked over 800 investors about their thoughts concerning marijuana and whether cannabis stocks could become a part of their nest egg. Here are some of the most intriguing takeaways from the survey results:

- Almost 1 in 10 Americans were already investing in cannabis stocks. However, about 51% said they had no plans to invest in this budding industry.
- Two-thirds of those surveyed thought marijuana should be legalized at the federal level. A whopping 70% of respondents ages 18-34 supported the legalization of marijuana, whereas nearly half of respondents ages 65 and older were against it.
- About one-third of survey respondents said they would start investing in cannabis if marijuana were legalized, but another third said they would never invest in the industry regardless of its legal status. Of those who were open to investing, 27% said they would invest \$1,000 or more.
- Only 10% of Americans view pot stocks as a safe investment. Since the cannabis industry's future appears to be murky, investors might want to diversify their portfolios using safe investments with high returns.

[Read More](#) (Yahoo! Finance)

Wave of European cannabis firms to list in 2020. Up to five companies active in the cannabis industry could go public in 2020 in Europe, a continent whose stock markets have largely missed out on the North American "pot stocks" frenzy. "I think there will be 4 or 5 companies quoted in twelve months time", Nikolaas Faes, an analyst for Bryan Garnier told Reuters. Bryan Garnier and its competitor Canaccord Genuity are among the few investment houses actively seeking to become key players in the fast-growing industry and win mandates to advise on merger and acquisitions or rights issues. There has been speculation that London-based medicinal cannabis company Emmac could go public. In 2019, Emmac took over GreenLeaf, a French hemp-based and cannabis healthcare company and Swiss cannabis-based health company Blossom. [Read More](#) (Reuters)

Toronto Stock Exchange warns CannTrust about possible delisting. The Toronto Stock Exchange (TSX) said it would delist CannTrust's shares if the Ontario cannabis producer is unable to file relevant financial statements by March 25, 2020. A review will be conducted on the company's eligibility for continued listing on the stock exchange, CannTrust disclosed this week. The review is a result of CannTrust being late in satisfying certain disclosure requirements, particularly:

- Restated audited financial statements for the year ended Dec. 31, 2018.
- Restated interim financial statements for the first quarter of 2019.
- Interim financial statements for the second and third quarters of 2019.
- Management's discussion and analysis (MD&A) for the corresponding periods.

[Read More](#) (Marijuana Business Daily)

Deloitte acquires Canadian consultancy Cannabis Compliance. Deloitte has acquired Mississauga, Ontario-based Cannabis Compliance, an industry leader in marijuana industry consultancy, the companies announced. Financial terms of the transaction were not disclosed. The newly created CCI Deloitte plans to offer businesses with end-to-end services in the cannabis industry, according to the announcement. Deloitte said CCI's 75 employees will work out of its headquarters in Toronto. CCI Chair and founder Brian Wagner will be retained by Deloitte as a senior adviser. [Read More](#) (Marijuana Business Daily)

MEDICAL CANNABIS

Minnesota OKs medical cannabis for chronic pain, eye disease. Minnesota is expanding the state's medical marijuana program to include chronic pain and age-related macular degeneration as conditions that can qualify for treatment. The state Department of Health also said it would allow more sites where patients can access medical cannabis. The changes take effect in August. Minnesota's medical marijuana program began in 2014. Originally, only nine conditions were on the list, but now it covers such conditions as obstructive sleep apnea, post-traumatic stress disorder and cancer. [Read More](#) (AP News)

Two medicinal cannabis products approved for use in Ireland. Two medicinal cannabis products have been approved and registered for use in Ireland under the new Medical Cannabis Access Programme. The two products are Aurora High CBD Oil Drops and CannEpiL. The two companies approved to supply the products are Aurora Cannabis Enterprises Inc and MGC Pharmaceuticals, which have both been recommended as being suitable for use under programme. [Read More](#) (The Journal)

The world's largest observational study of medical cannabis. Cannabis Tech spoke with Noah Kauffman, Head of Sales at Canada-based Strainprint Technologies, about their free Strainprint App - a technology designed to combat the lack of reviewed medical data in the cannabis industry. It aims to be useful to consumers and doctors both. Strainprint has developed a real-time system that relies on self-reporting from users. Patient data on a specific cannabis product is only collected when there are ten unique individuals with one hundred datapoints. Each product is categorized by what symptoms people use it to treat, and the efficacy of the product. [Read More](#) (Cannabis Tech)

Cannabis can relieve headaches and migraine pain, study finds. Inhaled cannabis can reduce the painful effects of headaches and migraines, according to a new self-reported study. Published in the Journal of Pain, the research found that inhaled cannabis reduced the severity of the headaches and migraines of participants by 49.6 percent and 47.3 percent, respectively. More than 1,300 participants were asked to enter their painful symptoms into a medical cannabis app before and after using different cannabis strains and doses. [Read More](#) (Analytical Cannabis)

More medical marijuana patients are seeing doctors in virtual visits. Throughout the healthcare industry, telemedicine technologies and services are becoming increasingly popular. Typically, these products provide ways for patients to interact with healthcare providers. And now, the trend is catching on in the medical marijuana space. While not all states allow for remote medical marijuana doctor's visits, a growing number of them do. Most recently, Oklahoma has seen a boom in the popularity of remote, telemedicine visits between patients trying to get their medical marijuana cards and physicians licensed to give recommendations. [Read More](#) (High Times)

CBD/HEMP

U.S. federal agencies clarify requirements for providing financial services to hemp-related businesses. Four federal agencies in conjunction with the state bank regulators issued a statement clarifying the legal status of hemp growth and production and the relevant requirements under the Bank Secrecy Act (BSA) for banks providing services to hemp-related businesses. The statement emphasizes that banks are no longer required to file suspicious activity reports (SAR) for customers solely because they are engaged in the growth or cultivation of hemp in accordance with applicable laws and regulations. For hemp-related customers, banks are expected to follow standard SAR procedures, and file a SAR if indicia of suspicious activity warrants. This statement provides banks with background information on the legal status of hemp, the U.S. Department of Agriculture's (USDA) interim final rule on the production of hemp, and the BSA considerations when providing banking services to hemp-related businesses. This statement also indicates that the Financial Crimes Enforcement Network (FinCEN) will issue additional guidance after further reviewing and evaluating the USDA interim final rule. [Read More](#) (Federal Reserve)

Wisconsin governor signs hemp expansion into law. Wisconsin has become the first state to adopt hemp expansion after seeing how federal agriculture regulators want to manage the new crop. Wisconsin Gov. Tony Evers signed a bill into law directing the state's agriculture department to mirror production guidelines released in October by the U.S. Department of Agriculture. The new Wisconsin hemp law:

- Charges farmers \$5 per acre to grow hemp, with license fees capped at \$1,000.
- Does not require any particular THC testing or sampling method.
- Requires state agriculture officials to create a seed-certification plan.
- Bans drug felons from growing hemp for 10 years.
- Requires anyone buying hemp biomass under contract to pay the farmer within seven days of taking possession of the hemp.

[Read More](#) (Hemp Industry Daily)

CBD forecasts likely to be slashed on FDA warning. CBD wholesalers should "have big concerns" about the U.S. Food and Drug Administration's growing unease about the safety of the cannabis compound, according to one chief executive officer. The FDA said that it "cannot conclude that CBD is generally recognized as safe among qualified experts for its use in human or animal food." It added that "some of the available data raise serious concerns about potential harm from CBD," including liver injury, drowsiness, diarrhea and changes in mood, and raised questions about its impact on children and pregnant or breastfeeding women. This could cause big retailers to shy away from products containing cannabidiol, a non-intoxicating compound found in the cannabis plant, said Peter Horvath, CEO of Green Growth Brands Inc. [Read More](#) (BNN Bloomberg)

Price of biomass continued to decline on a month-to-month basis. This is largely due to the outdoor growing season's flood of supply into the market. For November, biomass transacted in the range of \$0.80 to \$1.40 per percentage point of CBD content per pound (/point). This is compared to October, which saw the general biomass market transact in the range of \$1.61 to \$2.71 per percentage point of CBD content per pound. Although the posted low for the Kentucky benchmark in November is \$0.80/point, there were transactions even lower at local auctions such as those in Tennessee and Indiana earlier this month. [Read More](#) (Cannabis Tech, PanXchange)

Chart 8: Biomass Spot Pricing – November 2019

Region	Midpoint	▲	Low	High
Colorado (per % CBD Content/lb.)	\$ 1.14	-47%	\$ 0.93	\$ 1.35
Kentucky (per % CBD Content/lb.)	\$ 1.03	-53%	\$ 0.80	\$ 1.25
Oregon (per % CBD Content/lb.)	\$ 1.13	-45%	\$ 0.85	\$ 1.40
Refined Product Pricing - November 2019				
Product	Midpoint	▲	Low	High
Colorado Winterized Crude (per kg.)	\$ 1,025	-16%	\$ 750	\$1,300
Colorado Full Spectrum Distillate (per kg.)	\$ 2,600	-15%	\$2,000	\$3,200
Colorado Broad Spectrum Distillate (per kg.)	\$ 4,450		\$3,900	\$5,000
Colorado Isolate (per kg.)	\$ 2,400	-20%	\$1,800	\$3,000

Source: Intro-Blue, Cannabis Tech, PanXchange

Hemp stakeholders, lawmakers call for flexibility on THC. Hemp stakeholders and lawmakers supporting hemp in the USA have labeled proposed hemp rules from the United States Department of Agriculture (USDA) as too restrictive, and called for tolerance up to a full 1% THC. The U.S. Farm Bill sets the THC level for hemp at no more than 0.3 percent THC on a dry weight basis, but USDA rules allow for tolerance levels up to 0.5 percent THC. Any hemp crop with amounts of THC over that limit would violate the regulations. Proponents say that level should be increased to 1%. [Read More](#) (Hemp Today)

PRODUCTS

Canadian pot producers going full bore on vaping despite health risks, competition. Hundreds of new vaping devices are set to hit the Canadian market as early as next month, a sign that emerging health concerns, taxes, and even a provincial ban isn't enough to deter what some Canadian cannabis producers are hoping will be a big money maker. Health Canada told BNN Bloomberg that it has received close to 50 applications from licensed cannabis processors who have requested regulatory authority to sell the new classes of pot products. According to the regulator, those applications cover a total of 747 different cartridge-based vaping systems that industry players are hoping to sell when next-generation cannabis product sales begin on Dec. 16. [Read More](#) (BNN Bloomberg)

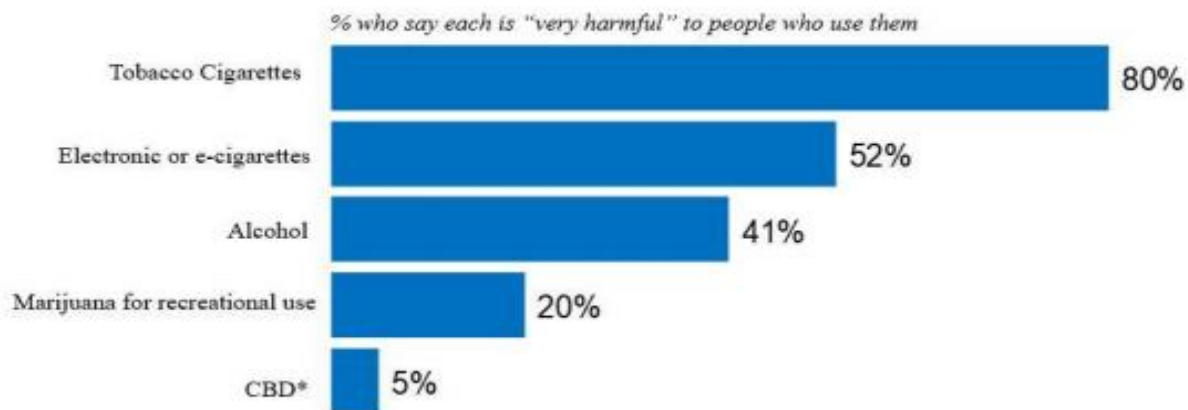
Massachusetts enacts first statewide ban on vape flavors and menthol cigarettes. Massachusetts became the first state to ban the sale of flavored tobacco and vaping products, including menthol cigarettes, after the Republican governor signed a bill that responds to recent deaths linked to e-cigarettes and attempts to reduce their appeal to young people. Anti-smoking groups hailed the ban signed by Gov. Charlie Baker, which outlaws the sale of flavored vaping products immediately and of menthol cigarettes starting June 1, 2020. [Read More](#) (High Times)

Michigan temporarily suspends sale of marijuana e-cigarettes. Michigan halted the sale of marijuana vaping products until they are tested for a compound that has been identified as a culprit in e-cigarette-related lung illnesses. The state Marijuana Regulatory Agency's emergency rules, which prohibit vitamin E acetate, apply to existing medical marijuana businesses and those in the process of being licensed to sell for recreational use as soon as Dec. 1. Regulators noted that U.S. health officials found the compound in the damaged lungs of 29 patients across the country who were sickened from vaping. [Read More](#) (High Times)

CONSUMER AND SOCIAL TRENDS

Americans believe marijuana is safer than tobacco, alcohol. A majority of adults living in the U.S. think marijuana is safer than tobacco and alcohol, according to the findings of a new survey. Conducted by Harvard University and Politico, the survey found that just one in five Americans think marijuana is "very harmful" to those who use it. Meanwhile, two in five say alcohol is harmful and 80 percent said tobacco is harmful. [Read More](#), [And More](#) (Green Entrepreneur, Politico)

Chart 9: Views on the Harmfulness of Various Products to People Who Use Them



*Asked of those who say they are very or somewhat familiar with CBD products.

Source: Intro-Blue, Politico, Harvard T.H. Chan School of Public Health

Why some marijuana firms are rebranding in response to cannabis industry's changing business climate. As the cannabis industry has moved to shed the "stoner" stereotype many have held of its consumers, several marijuana businesses are rebranding themselves via name changes and other steps to try to reflect the companies they've become. Whether the decision revolves around an initial public offering (IPO), including Akerna's, or the acquisition of multiple dispensaries such as Cresco Labs, many companies are working toward creating a unified, professional brand. [Read More](#) (Marijuana Business Daily)

RETAIL

Aurora Cannabis opens experiential flagship store in North America's largest mall. [Aurora Cannabis \(ACB\)](#) announced the grand opening of its flagship retail store in the West Edmonton Mall, North America's largest mall. At approximately 11,000 square feet, Aurora has combined both a retail cannabis store and an immersive experiential space, encouraging visitors from around the world to explore unique products and participate in a rotating calendar of programming and events. Aurora's flagship store offers visitors a safe, age-gated retail experience in full compliance with all relevant federal and provincial regulations. [Read More](#) (Newswire)

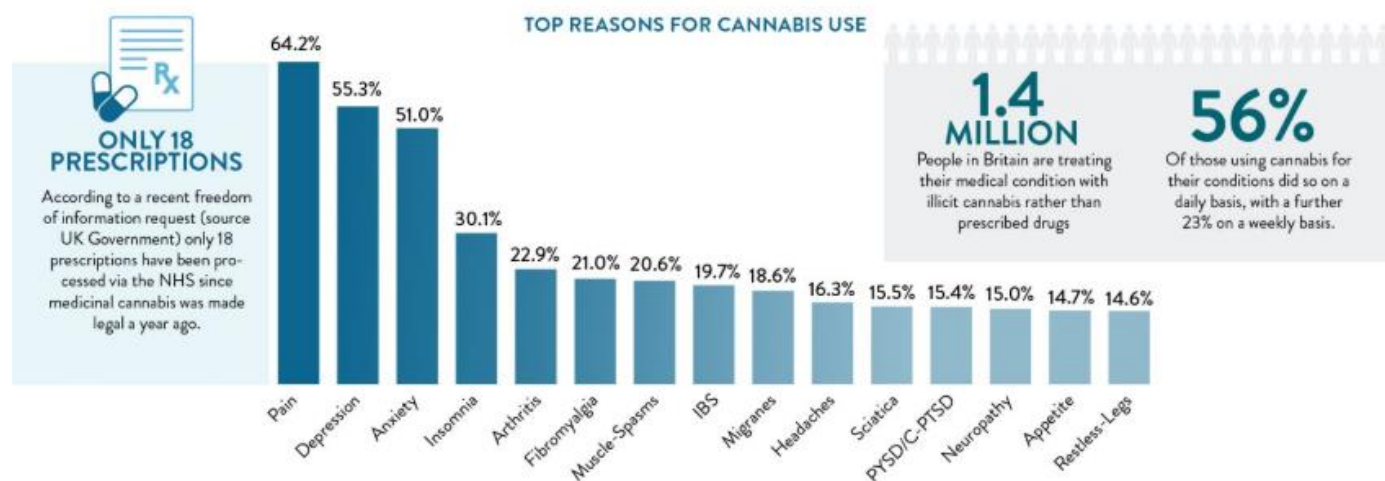
Five new Tokyo Smoke licensee retail locations advance in Ontario public process. Tokyo Smoke, [Canopy Growth Corporation's \(CGC\)](#) retail subsidiary announced that after working closely with recently-announced Ontario retail license winners, it has entered into agreements with five retailers who have progressed to key, public stages in the licensing process. In particular, three locations have been posted to the AGCO website and the two others have received official confirmation and will post the required on-site notice today prior to locations being posted online. [Read More](#) (PR Newswire)

Fire & Flower receives two additional cannabis retail store licenses in Alberta. [Fire & Flower Holdings \(FFLWF\)](#) announced that it has received two additional cannabis retail store licenses in Edmonton, Alberta from the Alberta Gaming Liquor and Cannabis Commission. Fire & Flower now owns or has an interest in 38 cannabis retail store licenses across the provinces of Alberta, Saskatchewan, Manitoba, Ontario, and Yukon. The Company anticipates the locations to open and be selling cannabis products during the week of December 16, 2019. [Read More](#) (Yahoo! Finance)

INTERNATIONAL

Cannabis on the tickets in the coming UK elections. As voters in the United Kingdom prepare to head to the polls on December 12, political conversation revolves mainly around the Brexit question, though there are other issues on the ballot. While cannabis does not lead the agenda, it has gained sufficient social traction for inclusion in most party manifestos, marking an historic first in UK politics. References to cannabis cover medicinal and recreational use, if without mention of either CBD or hemp, mainly because CBD is already readily available (and perceived despite legal uncertainties as fully legal) while hemp remains off the general electorate's political radar. [Read More](#) (New Frontier Data)

Chart 10: Medical Cannabis Use in the UK



Source: Intro-Blue, New Frontier Data

Brazil regulator greenlights medicinal cannabis products. Brazil's health regulator has approved guidelines for the sale of medicinal products derived from cannabis. The agency known as Anvisa said it has outlined procedures for the manufacture and import of such products and established requirements for prescription, sale, and oversight. Families of ill children have advocated for legalization of medicinal cannabis and said its prohibition has forced many to turn to drug traffickers. The regulation takes effect 90 days after its publication in the government's official gazette. [Read More](#) (CTV News)

Early talks underway on future of Denmark's medical cannabis pilot program. The Danish government is engaging stakeholders about the future of the country's medical cannabis pilot program, but industry and government sources say the talks are at an early stage and a decision won't be made until after the scheme's formal evaluation next year. Denmark's four-year medical cannabis trial program launched Jan. 1, 2018. Nearly three dozen companies have invested hundreds of millions of dollars into the country via cultivation and processing facilities, including Canadian firms Atlas Biotechnologies, Aurora Cannabis, Aphria, ICC International Cannabis, The Green Organic Dutchman and Canopy Growth. [Read More](#) (Marijuana Business Daily)

Trinidad and Tobago government introduces marijuana reform bills. The government of Trinidad and Tobago brought two marijuana reform bills before Parliament—one to decriminalize low-level possession and another to legalize cannabis for medical and religious purposes. During a speech before the House of Representatives, Attorney General Faris Al-Rawi said the administration wants to reduce the prison population, curb costs associated with marijuana-related incarceration and free up law enforcement resources to pursue serious crimes. [Read More](#) (Marijuana Moment)

New Zealand's adult-use cannabis law would allow consumption lounges but impose cultivation limits. New Zealand has unveiled a draft law detailing the strict controls that would apply to recreational marijuana businesses and consumers if voters choose to legalize adult use in a 2020 referendum. The draft Cannabis Legalization and Control Bill would allow for a wide range of business opportunities, including those related to cultivation, manufacture and retail. However, the law would effectively ban online sales and advertising and authorize a regulatory body to establish limits on THC and cultivation. [Read More](#) (Marijuana Business Daily)

CANNA SCIENCE – EXTRACTION, TESTING, BIOSYNTHESIS

THC detection that goes beyond law enforcement. While the media tends to focus on THC detection technology in law enforcement initiatives, one team of researchers from the University of Texas at Dallas understands the scope is much larger. Regardless of the purpose of the test, designing a rapid response field test starts with deciding what bodily fluid to go after. Naturally, the sample needs to be easily obtained, and the test needs to be easy to perform, efficient, and inexpensive, as well as accurate. Blood tests, although highly accurate, are complex and generally require a medical professional to assist. [Read More](#) (Cannabis Tech)

Acing the CoA: Remediation for contaminated crops. Although there are currently no federal regulations within the cannabis industry, there are independent tests available across the nation, and in state-sanctioned labs in legal states. Packaging rules dictate that all products must be stored in childproof containers and all merchandise must be tested by one of the approved labs, and include a Certificate of Analysis, or CoA, along with the results. Although state regulations are strictly enforced, cannabis and hemp cultivators can expect to see federal enforcement of regulations coming soon. [Read More](#) (Cannabis Tech)

Proper trimming, curing are key to creating a quality marijuana product. Trimming and curing marijuana are two crucial steps in the final stages of getting flower to market. All the time and effort a marijuana cultivation company spends caring for its plants could be for naught if there's a poor trim or cure. Ryan Gomez, co-founder and head of cultivation for PurLife in New Mexico, said the end process is "like running a race." Several cannabis cultivation experts shared tips with Marijuana Business Magazine for growers seeking to fine-tune their trimming and curing processes, including:

- Don't be in a hurry.
- Consider hand-trimming.
- Maintain a consistent workforce, and the product will benefit.

[Read More](#) (Marijuana Business Daily)

Terpenes, hydrosols, and essential oils: A primer. If the recent outbreak of vape-related illnesses has taught the cannabis industry anything, it's that we're just scratching the surface of what we know about this plant and its compounds. These recent reports have highlighted the need to take a closer look at how concentrated cannabis compounds, even in their purest form, respond to 21st-century methods of extraction and high-heat consumption. [Read More](#) (Cannabis Business Times)

TECHNOLOGY

Akerna to combat fake cannabis products with \$18 million investment in solo sciences. To strengthen its leading technology platform and increase transparency in the global cannabis supply chain, [Akerna \(KERN\)](#) has taken a majority stake in privately-held solo sciences inc., a recognized leader of patented anti-counterfeiting and consumer engagement technologies. The investment is another step in Akerna's commitment to creating the pre-eminent global technology platform to address the entire supply chain and its regulatory bodies through accountability and transparency. [Read More](#) (New Cannabis Ventures)

Alt Thirty Six's new payment platform aims to solve cash and card problem in the weed industry. Alt Thirty Six is a digital payments platform that is tackling the cannabis industry's current reliance on cash only and deceptive use of debit and credit cards issue. Thanks to their proprietary technology and established banking relationships, Alt Thirty Six allows cannabis merchants to seamlessly process electronic payments in-store and online. Simultaneously, transaction records are stored on a Dash blockchain for record-keeping, which prevents money laundering and other financial-related crimes. [Read More](#) (Green Entrepreneur)

IP

Kansas hemp companies in trademark dispute over name. A hemp processor in Kansas stands accused of trademark violations by a nearby CBD manufacturer with a similar name. The case started in October, when KHC Enterprises, which does business as KC Hemp Co. in Overland Park, Kansas, sued KC Hemp Company in Lenexa, Kansas. The towns where the businesses are located about 5 miles apart. The Overland Park company, which is about 12 miles from Kansas City, Missouri, makes CBD supplements; the latter is a hemp extraction processor. [Read More](#) (Hemp Industry Daily)

SUSTAINABILITY

Can indoor cannabis ever be sustainable? While indoor growing has benefits—it allows minimal use of pesticide and better water preservation among other things—it's much more of an energy drain than outdoor growing. To minimize the impact, Illinois has set aggressive energy rules. They require cultivators to use energy-efficient lighting and HVAC equipment and to report their energy and water use on an annual basis. Some stats on indoor growing:

- A typical 5,000-square-foot indoor cannabis cultivation facility uses 66 times more energy than the average US household.
- In 2018, cannabis cultivation accounted for 4% of Denver's electricity consumption.
- Total electricity demand from legal marijuana cultivation in the U.S. is estimated to rise 162% by 2022.

[Read More](#) (Leafly)

Boston green-lights independent cannabis board to boost diversity in industry. Boston is overhauling its process of reviewing marijuana businesses to boost involvement of minority entrepreneurs in Massachusetts' burgeoning pot industry. The City Council approved an ordinance calling for the creation of an independent Cannabis Board to oversee local review of prospective marijuana businesses. The proposal by Councilor Kim Janey also requires Boston to ensure that at least half of its marijuana licenses go to companies from communities affected by the war on drugs. And it creates Massachusetts' first local fund supporting minority-owned marijuana companies, according to Janey and other city officials. [Read More](#) (High Times)

CANNA FACTS

Chart 11: Lighting Use Across the Cannabis Industry

LIGHTING USED IN PROPAGATION

	2016	2017	2018	2019	2016-2019 % point difference
T5 (high output/HO) lights (or other HO fluorescents)	65%	63%	51%	50%	↓ 15 pts.
light emitting diodes (LEDs)	21%	36%	47%	47%	↑ 26 pts.
high-pressure sodium (HPS) lights	16%	X	X	30%	↑ 14 pts.
metal halide (MH) lights - ceramic	10%	X	X	X	X
compact fluorescent lights	9%	19%	9%	10%	↑ 1 pt.
metal halide (MH) lights - quartz	6%	X	X	X	X
sulphur plasma lights	2%	X	X	X	X
magnetic induction lights	1%	11%	7%	3%	↑ 2 pts.
other	6%	21%	23%	11%	↑ 5 pts.

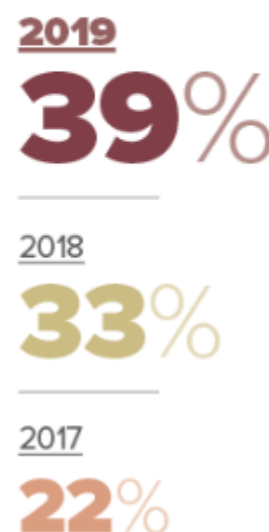
LIGHTING USED IN VEGETATION

	2016	2017	2018	2019	2016-2019 % point difference
T5 (high output/HO) lights (or other HO fluorescents)	37%	38%	28%	31%	↓ 6 pts.
high-pressure sodium (HPS) lights	31%	30%	25%	19%	↓ 12 pts.
metal halide (MH) lights - quartz	23%	15%	12%	12%	↓ 11 pts.
metal halide (MH) lights - ceramic	20%	31%	24%	26%	↑ 6 pts.
light emitting diodes (LEDs)	17%	36%	46%	46%	↑ 29 pts.
compact fluorescent lights	3%	X	X	X	X
sulphur plasma lights	2%	5%	2%	2%	0 pts.
magnetic induction lights	2%	4%	3%	3%	↑ 1 pt.
other	8%	8%	7%	6%	↓ 2 pts.

LIGHTING USED IN FLOWERING

	2016	2017	2018	2019	2016-2019 % point difference
high-pressure sodium (HPS) lights	62%	68%	51%	51%	↓ 11 pts.
light emitting diodes (LEDs)	15%	36%	45%	45%	↑ 30 pts.
T5 (high output/HO) lights (or other HO fluorescents)	8%	7%	7%	7%	↓ 1 pt.
metal halide (MH) lights - ceramic	7%	13%	8%	13%	↑ 6 pts.
metal halide (MH) lights - quartz	5%	6%	3%	9%	↑ 4 pts.
compact fluorescent lights	3%	X	X	X	X
sulphur plasma lights	1%	5%	1%	3%	↑ 2 pts.
magnetic induction lights	1%	3%	4%	3%	↑ 2 pts.
other	5%	9%	9%	9%	↑ 4 pts.

Portion of growers who said they are planning on implementing LED lighting **during the flowering** period within the next 12 months:



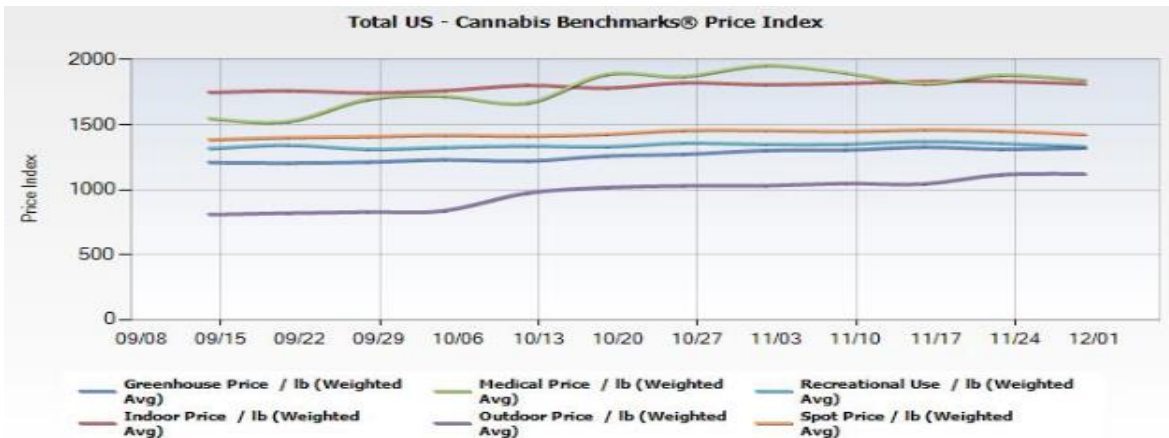
Source: Intro-Blue, Special Report: State of the Lighting Market, Cannabis Business Times

Note: Total may exceed 100% because respondents could select all that apply. 2018 results are based on the 114 research participants who grow only indoors and/or in greenhouses using supplemental lighting. 2017 results are based on the 294 research participants who grow only indoors and/or in greenhouses using supplemental lighting. 2016 results are based on 117 research participants who grow indoors and/or in greenhouses (with or without supplemental lighting) and/or outdoors.

CANNA PRICES – WEEKLY TREND

Chart 12: U.S. Cannabis Market Prices

Commodity	November 30	November 22	\$ Change	% Change
Spot Price / lb (Weighted Avg)	\$1,428.00	\$1,456.00	(\$28.00)	-1.9 %
Indoor Price / lb (Weighted Avg)	\$1,817.00	\$1,837.00	(\$20.00)	-1.1 %
Greenhouse Price / lb (Weighted Avg)	\$1,324.00	\$1,316.00	\$8.00	0.6 %
Outdoor Price / lb (Weighted Avg)	\$1,126.00	\$1,119.00	\$7.00	0.6 %
Medical Price / lb (Weighted Avg)	\$1,847.00	\$1,885.00	(\$38.00)	-2.0 %
Recreational Use / lb (Weighted Avg)	\$1,336.00	\$1,360.00	(\$24.00)	-1.8 %



Source: Intro-Blue, Cannabis Benchmarks Price Index

Chart 13: U.S. Implied Forward Prices (Week Ending November 29, 2019)

Delivery Month	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20
This Week's Forward Price	\$ 1,470	\$ 1,475	\$ 1,475	\$ 1,475	\$ 1,435	\$ 1,455
Last Week's Forward Price	\$ 1,470	\$ 1,475	\$ 1,475	\$ 1,475	\$ 1,435	\$ 1,455
Change	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Premium/Discount to Spot	2.9%	3.3%	3.3%	3.3%	0.5%	1.9%

Source: Intro-Blue, Cannabis Benchmarks Price Index








Chart 14: Canada Cannabis Spot Index



Source: Intro-Blue, Cannabis Benchmarks Price Index











CANNA BRANDS AND PRODUCTS RANKING – STATE IN FOCUS: WASHINGTON

Chart 15: Best-Selling Flower Brands and Products in Washington

	BRAND	PRODUCT	AVG. PRICE	SALES (30 DAY)
1		OG Chem (Eighth) PHAT PANDA	\$23.17	
2		Alaskan Thunder Fuck (Eighth) WA GROWER	\$11.17	
3		Blue Dream (Eighth) NORTHWEST CANNABIS SOLUTIONS	\$12.55	
4		Grape Ape (Eighth) ARTIZEN CANNABIS	\$21.40	
5		Legends - Blue Dream (Eighth) NORTHWEST CANNABIS SOLUTIONS	\$12.61	

Source: Intro-Blue, Headset

Chart 16: Best-Selling Concentrates Brands and Products in Washington

	BRAND	PRODUCT	AVG. PRICE	SALES (30 DAY)
1		Maui Wowie Wax (Gram) FORBIDDEN FARMS	\$7.06	
2		Plushberry Wax (Gram) FORBIDDEN FARMS	\$7.10	
3		God's Gift Wax (Gram) FORBIDDEN FARMS	\$6.44	
4		Regulator - Jack Herer Wax (Gram) SMOKEY POINT PRODUCTIONS (SPP)	\$10.33	
5		Regulator -DJ Short Blueberry Sugar Wax (Gram) SMOKEY POINT PRODUCTIONS (SPP)	\$9.98	

Source: Intro-Blue, Headset

Chart 17: Best-Selling Vapor Pens Brands and Products in Washington

	BRAND	PRODUCT	AVG. PRICE	SALES (30 DAY)
1		Super Sour Diesel Cartridge (Gram) REFINE SEATTLE	\$17.29	
2		Sour Diesel Cartridge (Gram) LEAFWERX	\$22.65	
3		Hardcore OG Cartridge (Gram) DABULOUS	\$17.46	
4		Animal Crackers Distillate Cartridge (Gram) MFUSED	\$23.24	
5		Clementine Cartridge (Gram) DABULOUS	\$17.30	

Source: Intro-Blue, Headset

Chart 18: Best-Selling Beverage Brands and Products in Washington

	BRAND	PRODUCT	AVG. PRICE	SALES (30 DAY)
1		Pink Lemonade (100mg) MAJOR	\$9.71	
2		Volcanic Orange Mango (100mg) MAJOR	\$9.66	
3		Orange Mango (100mg) MAJOR	\$9.16	
4		Orange Cream Pie Soda (100mg) STONE COLD SODA	\$12.37	
5		Happy Apple – Infused Apple Cider (100mg) HAPPY APPLE	\$18.03	






Source: Intro-Blue, Headset

Chart 19: Best-Selling Tincture & Sublingual Brands and Products in Washington

	BRAND	PRODUCT	AVG. PRICE	SALES (30 DAY)
1		CBD:THC 5:1 Tincture (250mg CBD, 50mg THC, 1oz) GREEN REVOLUTION (FORMERLY ETHOS INNOVATES)	\$33.25	
2		CBD:THC 5:1 Bacon Companion Tincture (120mg CBD, 24mg THC) FAIRWINDS	\$22.86	
3		CBD:THC:CBN 4:8:1 Beauty Sleep Tincture (40mg CBD, 80mg THC, 20mg CBN, 1oz) GREEN REVOLUTION (FORMERLY ETHOS INNOVATES)	\$23.07	
4		Deep Sleep Tincture (45mg CBD, 75mg THC) FAIRWINDS	\$21.70	
5		Paradise - Indica Water Tincture (100mg, 1oz) GREEN REVOLUTION (FORMERLY ETHOS INNOVATES)	\$18.86	

Source: Intro-Blue, Headset

Chart 20: Best-Selling Capsules Brands and Products in Washington

	BRAND	PRODUCT	AVG. PRICE	SALES (30 DAY)
1		Indica Capsules 10-Pack (100mg) DOUBLE DELICIOUS	\$9.22	
2		Sativa Capsules 10-Pack (100mg) DOUBLE DELICIOUS	\$9.50	
3		CBD Capsules 10-Pack (100mg) DOUBLE DELICIOUS	\$10.26	
4		CBD/THC 20:1 Ratio Capsule (190mg CBD / 10mg THC) FAIRWINDS	\$25.01	
5		Hybrid Capsules 10-Pack (100mg) DOUBLE DELICIOUS	\$9.13	

Source: Intro-Blue, Headset

CANNA EVENTS CALENDAR

Chart 21: Cannabis Company Events Calendar – Upcoming Conference Calls

Date	Company	Ticker	Web Access	Phone Dial-In
12/10/19 - 5:00 P.M. ET	James E. Wagner Cultivation	(TSXV: JWCA)/(OTC: JWCAF)	Webcast	1-877-407-9208 passcode 13697211
12/13/19 - 4:15 P.M. ET	Veritas Farms	(OTC:VFRM)		1-888-567-1602
12/17/19 - 8:30 A.M. ET	Fire & Flower	(TSX: FAF)/(OTC: FFLWF)	Webcast	1-888-664-6383 passcode 87723481

Source: Intro-Blue, New Cannabis Ventures

Chart 22: Cannabis Company Events Calendar – Recent Conference Calls

Date	Company	Ticker	Replay
12/03/19 - 4:30 P.M. ET	Akerna	(NASDAQ: KERN)	Webcast
12/02/19 - 9:00 A.M. ET	4Front	(CSE: FFNT)/(OTC: FFNTF)	1-844-512-2921 passcode 13696657
12/02/19 - 8:30 A.M. ET	Indus Holdings	(CSE:INDS)/(OTC: INDXF)	Webcast
12/02/19 - 8:30 A.M. ET	PLUS Products	(CSE: PLUS)/(OTC: PLPRF)	Webcast
11/29/19 - 1:00 P.M. ET	WeedMD	(TSX-V:WMD)/(OTC:WDDMF)	1-800-319-6413 passcode 3858
11/29/19 - 9:00 A.M. ET	Lift & Co.	(TSXV: LIFT)/(OTC: LFCOF)	Webcast
11/27/19 - 11:00 A.M. ET	Sunniva	(CSE: SNN)/(OTC: SNNVF)	Webcast
11/27/19 - 8:30 A.M. ET	Flower One	(CSE: FONE)/(OTC: FLOOF)	Webcast
11/27/19 - 8:30 P.M. ET	Vireo Health	(CNSX: VREO)/(OTC: VREOF)	Webcast
11/26/19 - 6:00 P.M. ET	Origin House	(CSE: OH)/(OTC: ORHOF)	Webcast
11/26/19 - 6:00 P.M. ET	Cresco Labs	(CSE: CL)/(OTC: CRLBF)	Webcast
11/26/19 - 5:30 P.M. ET	Flowr	(TSXV: FLWR)/(OTC: FLWPF)	Webcast
11/26/19 - 5:00 P.M. ET	MedMen	(CSE: MMEN)/(OTC: MMNFF)	Webcast
11/26/19 - 12:00 P.M. ET	Golden Leaf Holdings	(CSE:GLH)/(OTC:GLDFF)	Webcast
11/26/19 - 10:00 A.M. ET	SLANG Worldwide	(CNSX: SLNG)/(OTC: SLGWF)	Webcast
11/26/19 - 9:00 A.M. ET	Indus Holdings	(CSE:INDS)/(OTC: INDXF)	Webcast
11/26/19 - 8:30 A.M. ET	Biome Grow	(CSE: BIO)/(OTC: BIOIF)	Webcast
11/26/19 - 8:30 A.M. ET	Planet 13	(CSE: PLTH)/(OTC: PLNHF)	Webcast
11/26/19 - 8:30 A.M. ET	Green Growth Brands	(CSE: GGB)/(OTC: GGBXF)	Webcast
11/26/19 - 8:30 A.M. ET	48North	(TSX: NRTH)	1-888-231-8192 passcode 8672507
11/25/19 - 5:00 P.M. ET	PharmaCielo	(TSXV:PCLO)/(OTC:PCLOF)	Webcast
11/25/19 - 10:00 A.M. ET	MJardin Group	(CSE: MJAR)/(OTC: MJARF)	Webcast
11/25/19 - 8:00 A.M. ET	Organigram	(TSX: OGI)/(NASDAQ: OGI)	Webcast
11/22/19 - 11:00 A.M. ET	Harborside	(CSE: HBOR)	Webcast
11/21/19 - 10:00 A.M. ET	Abacus Health Products	(CSE: ABCS)/(OTC: ABAHF)	1-855-859-2056 passcode 3343986
11/21/19 - 8:30 A.M. ET	iAnthus	(CSE: IAN)/(OTC: ITHUF)	Webcast
11/20/19 - 5:00 P.M. ET	TILT Holdings	(CSE: TILT)/(OTC: TLLTF)	Webcast
11/20/19 - 5:00 P.M. ET	Green Thumb Industries	(CSE: GTII)/(OTC: GTBIF)	Webcast
11/20/19 - 4:00 P.M. ET	Surna	(OTC: SRNA)	Webcast

11/20/19 - 8:00 A.M. ET	Harvest Health & Recreation	(CSE: HARV)/(OTC: HRVSF)	Webcast
11/19/19 - 5:00 P.M. ET	Curaleaf	(CSE: CURA)/(OTC: CURLF)	Webcast
11/19/19 - 9:00 A.M. ET	3 Sixty Risk Solutions Ltd.	(CSE: SAFE)/(OTC: SAYFF)	1-888-390-0541 passcode 120171
11/19/19 - 8:30 A.M. ET	Ayr Strategies	(CSE: AYR.A)/(OTC: AYRSF)	Webcast
11/19/19 - 8:00 A.M. ET	Trulieve	(CSE: TRUL)/(OTC: TCNNF)	Webcast
11/15/19 - 12:00 PM ET	Alcanna	(TSX: CLIQ)/(OTC: LQSIF)	1-800-408-3053 passcode 5420415
11/15/19 - 10:00 A.M. ET	VIVO Cannabis	(TSX-V: VIVO)/(OTC: VVCIF)	Webcast
11/15/19 - 9:00 A.M. ET	The Green Organic Dutchman Holdings	(TSX: TGOD)/(OTC: TGODF)	Webcast
11/15/19 - 9:00 A.M. ET	Halo Labs	(NEO: HALO)/(OTC: AGEEF)	1-866-211-3166 passcode 9063097
11/15/19 - 8:30 A.M. ET	Jushi Holdings	(NEO: JUSH.B)/(OTC: JUSHF)	Webcast
11/15/19 - 8:30 A.M. ET	Village Farms International	(TSX:VFF)/(NASDAQ:VFF)	Webcast
11/14/19 - 6:00 P.M. ET	Aurora Cannabis	(NYSE TSX: ACB)	Webcast

Source: Intro-Blue, New Cannabis Ventures

Chart 23: Cannabis IPO Pipeline

S. No	Company	Filing	Market	Description
1	AAA Medic Montreal	SEDAR	TSX-V	Quebec ACMPR Applicant
2	Blackshire Capital	SEDAR	CSE	Invests in Private Cannabis Companies
3	Breath of Life International	SEDAR	TSX	Israeli Licensed Medical Cannabis Producer
4	CWE European Holdings	SEDAR	TSX-V	German Hemp Operator
5	HollyWeed North Cannabis	SEDAR	TSX-V	Canadian LP Focused on Processing & Ancillary Solutions
6	Innovate Phytotechnologies	SEDAR	CSE	Canadian Hemp Services Provider and ACMPR Applicant
7	Lifted Innovations	SEDAR	CSE	Cannabis accessories e-commerce company in U.S. and Canada
8	Lobo Genetics	SEDAR	TSX-V	Genetics Testing for Cannabis Consumers
9	ManifestSeven	SEDAR	CSE	California Retail and Distribution
10	Merced Holdings	SEDAR	CSE	California Extraction
11	Merrco Payments	SEDAR	TSX-V	Canadian Payments Processor Focused on Cannabis
12	Molecular Science	SEDAR	TSX-V	Canadian Mobile Lab for Testing and Research
13	Mota Ventures	SEDAR	CSE	Colombian Licensed Producer
14	OG DNA Genetics	SEDAR	CSE	Seeds and Genetics
15	Potbotics	SEDAR	CSE	U.S.-Based Data Aggregation and Technology
16	Province Brands	SEDAR	TSX-V	Canadian Developer of Cannabis Beverages
17	Southern Sun	SEDAR	TSX-V	Canadian Company Focused on Africa
18	Starling Brands	SEDAR	CSE	California Cannabis Operator
19	Terrace. Inc	SEDAR	TSX-V	Multi-Country Operator in Spain and Entering Uruguay and Portugal
20	The Hacienda Company	SEDAR	CSE	California Cannabis Brand Owner
21	Theracann International Benchmark	SEDAR	TSX-V	Panama-Based Provider of Technology, Operations and Analytics
22	Varianz	SEDAR	TSX-V	Colombian Applicant

Source: Intro-Blue, New Cannabis Ventures

Chart 24: Cannabis Industry Events Calendar

S. No	Event Name	Place	Date
1	CannaBiz Innovation Hub	LONDON, UK	December 4 - 5, 2019
2	CBD Expo Tour West	SAN DIEGO, CA	December 5 - 6, 2019
3	Cannabinoid & Natural Products Expo	SAN DIEGO, CA	December 5 - 6, 2019
4	MCBA Tri-State Cannabis Equity Summit	NEW YORK, NY	December 7, 2019
5	Arcview Investor Group Forum Vegas	LAS VEGAS, NV	December 8 - 10, 2019
6	Cannabis Globe Forum	LAS VEGAS, NV	December 10, 2019
7	Hemp Industry Daily Forum	LAS VEGAS, NV	December 10, 2019
8	National Women of Cannabis Conference	LAS VEGAS, NV	December 10, 2019
9	Ensuring Product Safety, Compliance and Social Responsibility in the Cannabis Industry	LAS VEGAS, NV	December 10, 2019
10	MJBizCon	LAS VEGAS, NV	December 11 -13, 2019
11	Cannabis & Hemp Extraction: Process selection and regulation	WEBINAR	December 12, 2019
12	December 2019 CannaGather	NEW YORK, NY	December 17, 2019
13	Cannabis Dealmakers Summit: Entrepreneurship Summit & Expo	MIAMI, FL	January 8, 2020
14	Lift & Co Cannabis Expo	VANCOUVER, BC	January 9 - 11, 2020
15	Midwest iHemp Expo	LANSING, MI	January 10 - 11, 2020
16	The Headies: Vermont Growers Cup	ESSEX, VT	January 11, 2020
17	NCIA Washington Industry Social	SEATTLE, WA	January 14, 2020
18	NCIA Arizona Industry Social	PHOENIX, AZ	January 14, 2020
19	NCIA Nevada Industry Social	LAS VEGAS, NV	January 14, 2020
20	NCIA Oregon Industry Social	EUGENE, OR	January 15, 2020
21	NCIA Northern California Industry Social	SAN JOSE, CA	January 16, 2020
22	Winter Hemp Summit 2020	BOULDER, CO	January 16, 2020
23	HempWorld Expo & National Vape Expo	ATLANTA, GA	January 18 - 19, 2020
24	NCIA Utah Industry Social	SALT LAKE CITY, UT	January 21, 2020
25	NCIA Florida Industry Social	FT. LAUDERDALE, FL	January 21, 2020
26	CannaTech Davos 2020	SWITZERLAND	January 20 - 24, 2020
27	NCIA Missouri Industry Social	KANSAS CITY, MO	January 22, 2020
28	Canna West	LOS ANGELES, CA	January 22 - 24, 2020
29	NCIA Southern California Industry Social	IRVINE, CA	January 23, 2020
30	The American Conference on Controversies on Cannabis-Based Medicine	ORLANDO, FL	January 23 - 24, 2020
31	Texas Hemp Convention	DALLAS, TX	January 28 - 30, 2020
32	Hemp CBD Connex	PORTLAND, OR	January 29 - 30, 2020
33	Cannabis Europa	MADRID, ES	February 5, 2020
34	Cannabis Packaging Summit	ANAHEIM, CA	February 11 - 12, 2020
35	Seed to Sale Show	BOSTON, MA	February 18 - 19, 2020
36	Northeast Cannabis Business Conference	BOSTON, MA	February 19 - 20, 2020
37	Indoor Agriculture Energy Solutions (IAES) Conference	SAN DIEGO, CA	February 24 - 26, 2020
38	Women Grow Strong	NEW ORLEANS, LA	March 4 - 6, 2020
39	Cannabis Meets Healthcare	NEW ORLEANS, LA	March 4 - 6, 2020
40	The 6th Annual New England Cannabis Convention	BOSTON, MA	March 20 - 22, 2020
41	Oklahoma Cannabis Expo	OKLAHOMA, OK	March 23 - 24, 2020
42	Cannabis 2020: Pros & Cons	NEW YORK, NY	April 3, 2020
43	NECANN New England Cannabis Convention	CHICAGO, IL	April 3 - 4, 2020
44	Cannabis Business Asia 2020	THAILAND	April 7 - 8, 2020
45	The Cannabis Consumer & Business Expo	MONTREAL, QC	April 10 - 12, 2020
46	Women in Cannabis Summit	BURLINGTON, VT	April 11, 2020
47	Cannabis Conference 2020	LAS VEGAS, NV	April 21 - 23, 2020
48	Cannabis Business France 2020	PARIS, FRANCE	May 5 - 6, 2020
49	10th Annual Cannabis Industry Lobby Days	WASHINGTON, D.C.	May 19 - 21, 2020
50	NECANN Cannabis & Hemp Convention	BURLINGTON, VT	May 30 - 31, 2020

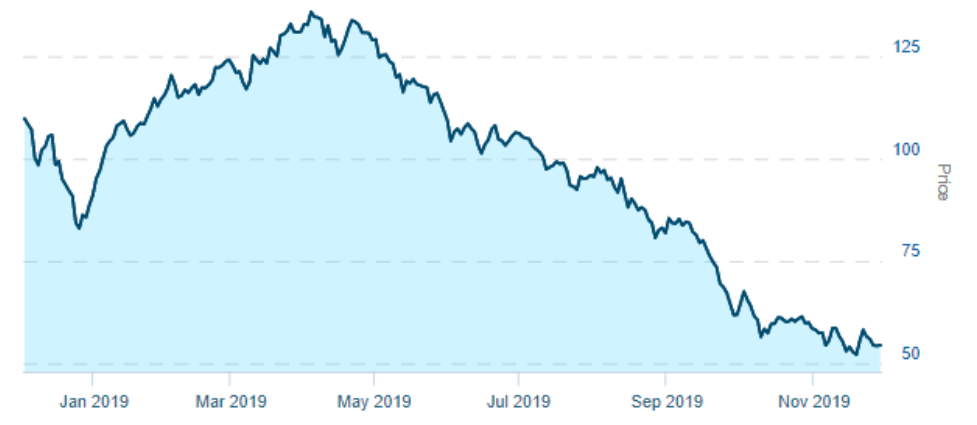
51	MJBizConNEXT Executive Summit	NEW ORLEANS, LA	June 11 - 12, 2020
52	Cannabis Business Summit & Expo	SAN FRANCISCO, CA	June 15 - 17, 2020
53	NECANN Cannabis & Hemp Convention	SPRINGFIELD, MA	June 20 - 21, 2020
54	Cannabis Business Poland 2020	WARSAW, PL	July 1 - 2, 2020
55	Great Alaskan Cannabis Bowl	WASILLA, AK	July 24 - 26, 2020
56	Be Part Of The New Cannabis Drinks Category	SAN FRANCISCO, CA	July 30, 2020
57	Cannabis Drinks Expo Chicago	NORTHLAKE, IL	August 3, 2020
58	Midwest Cannabis Business Conference	DETROIT, MI	August 26 - 27, 2020
59	CannaOne BizCon + Expo	LAS VEGAS, NV	August 26 - 28, 2020
60	NECANN Cannabis & Hemp Convention	ATLANTIC CITY, NJ	September 11 - 12, 2020
61	NECANN Cannabis & Hemp Convention	PORTLAND, ME	October 10 - 11, 2020
62	Michigan's Commercial Cannabis Conference & Expo	DETROIT, MI	October 16 - 17, 2020

Source: Intro-Blue, Cannabis Business Times, CannabisFN, Cannabis Business Executive

CANNA INDEX

Chart 25: U.S Cannabis Index

Constituents	25
% Change	0.13%
Open Price	54.21
Total Volume	7.23 m
52 Week High	137.07
52 Week Low	51.40



Source: Intro-Blue, The Marijuana Index

Chart 26: Canada Cannabis Index

Constituents	20
% Change	-1.16%
Open Price	219.91
Total Volume	29.34 m
52 Week High	727.25
52 Week Low	195.73



Source: Intro-Blue, The Marijuana Index

COMPARABLES & COMPANY PROFILE LINKS

						Shares		Price Performance			
						Daily Out	Vol	% to		% in	
								High	Low	Range	H-L % YTD
Peer Set											
Canadian LP - Cultivation, Processing (and Dispensing)											
1	CANOPY GROWTH CORP	CGC	18.98	6,616	5,284	349	1.4%	178%	-27%	13%	-29%
2	AURORA CANNABIS INC	ACB	2.47	2,595	3,017	1,051	1.7%	318%	-13%	4%	-50%
3	CRONOS GROUP INC	CRON	6.88	2,365	868	344	1.6%	265%	-12%	4%	-34%
4	HEXO CORP	HEXO	2.16	555	458	257	1.3%	289%	-28%	9%	-37%
5	SUNDIAL GROWERS INC.	SNDL	2.30	237	285	103	0.9%	475%	-6%	1%	
6	TERRASCEND CORP	TRSSF	2.41	128	370	128	0.0%	191%	-1%	0%	-77%
7	SUPREME CANNABIS CO INC	SPRWF	0.50	176	216	354	0.1%	261%	-13%	5%	-48%
8	FLOWR CORP (THE)	FLWPF	1.71	114	128	67	0.1%	268%	-22%	8%	-44%
9	ZENABIS GLOBAL INC	ZBISF	0.14	49	133	348	0.1%	1625%	-89%	5%	
10	GREEN ORGNC DUTCHMN HLD	TGODF	0.63	174	128	276	0.4%	595%	-26%	4%	-65%
11	HERITAGE CANNABIS HLDGS CORP	HERTF	0.20	84	74	425	0.0%	175%	-45%	20%	76%
12	RUBICON ORGANICS INC	ROMJF	1.08	43	50	40	0.0%	142%	-7%	5%	-17%
13	AGRAFLORA ORGANICS INTL INC	PUFXF	0.13	118	133	930	0.1%	404%	-29%	7%	-24%
14	DELTA 9 CANNABIS INC	VRNDF	0.32	29	43	88	0.1%	335%	-11%	3%	-64%
15	VIVO CANNABIS INC	VVCIF	0.18	49	32	278	0.0%	422%	-6%	1%	-65%
16	EPHS HOLDINGS, INC.	STNN	0.36	27	28	74	0.0%	450%	-17%	4%	-76%
17	EVE & CO INC	EEVVF	0.13	31	27	241	0.0%	284%	-23%	8%	-25%
18	SPROUTLY CANADA INC	SRUTF	0.15	35	25	162	0.1%	459%	-1%	0%	-29%
19	JAMES E. WGNR CLTIVION CORP	JWCAF	0.21	19	22	91	0.0%	355%	-14%	4%	-59%
20	GTEC HOLDINGS LTD	GGTTF	0.14	16	21	113	0.0%	321%	-16%	5%	-60%
21	BELEAVE INC	BLEVF	0.03	15	22	419	0.2%	305%	-52%	15%	-54%
22	TERRANUEVA CORP.	TEQ-CA	0.21	13	15	63	0.0%	519%	-82%	14%	-55%
23	48NORTH CANNABIS CORP	NCNNF	0.25	44	14	176	0.0%	419%	-20%	5%	-40%
24	SUGARBUD CRAFT GROWERS CORP	SUGR-CA	0.05	18	12	229	0.3%	334%	-13%	4%	67%

25	LOTUS VENTURES INC	LTTSF	0.11	9	9	83	0.0%	236%	-36%	13%	57%
26	INDIVA LTD	NDVAF	0.16	10	14	65	0.0%	203%	-29%	12%	-45%
27	GROWN ROGUE INTL INC	NVSIF	0.10	7	9	72	0.0%	488%	-48%	9%	-65%
28	NORTH BUD FARMS INC	NOBDF	0.14	9	8	63	0.0%	168%	-8%	5%	-15%
29	MATICA ENTERPRISES INC	MQPXF	0.02	8	5	315	0.0%	400%	-17%	4%	-62%
30	EXPERION HOLDINGS LTD	EXPFF	0.10	9	4	99	0.0%	530%	-79%	13%	-76%
31	LEANLIFE HEALTH INC	LNLHF	0.03	3				58%	0%	0%	
32	BLISSCO CANNABIS CORP	BLIS-CA				107	0.0%				
33	SPEAKEASY CANNABIS CLUB LTD	EASY-CA	0.32	0		87	0.0%	188%	-56%	23%	-100%
CBD/Hemp											
34	CHARLOTTES WEB HLDGS INC	CWBHF	9.14	484	880	98	0.9%	176%	-9%	5%	-55%
35	CV SCIENCES INC	CVSI	1.05	104	100	99	0.9%	528%	5%	-1%	-76%
36	BETTER CHOICE COMPANY INC.	BTTR	2.50	114	122	45	0.0%	430%	-48%	10%	-78%
37	ELIXINOL GLOBAL LTD	ELLXF	0.68	93	63	138	0.0%	529%	-5%	1%	-63%
38	CBDMD INC (LEVEL BRANDS)	YCBD	3.03	84	70	28	0.8%	139%	-16%	10%	-2%
39	GREEN HYGIENICS HOLDINGS INC.	GRYN	2.00	75	76	37	0.0%	24%	-95%	80%	515%
40	VERITAS FARMS INC	SSWH	1.40	58	53	41	0.1%	554%	-29%	5%	6%
41	UPPER STREET MARKETING INC.	UPPR	0.30	24	24	80	0.0%	641%	-83%	12%	-12%
42	EUREKA 93	LXLLF	0.38	28	39	74	0.0%	4197%	-96%	2%	-95%
43	CBD UNLIMITED, INC.	EDXC	0.09	24	27	262	0.2%	705%	-57%	7%	87%
44	FREEDOM LEAF, INC.	FRLF	0.08	48	27	311	0.0%	288%	-31%	10%	-30%
45	KONA GOLD SOLUTIONS, INC.	KGKG	0.04	22	22	497	1.6%	243%	-8%	3%	-48%
46	ALTERNATE HEALTH CORP	AHGIF	0.08	7	22	78	0.1%	644%	2%	0%	-75%
47	EXACTUS, INC.	EXDI	0.59	24	26	41	0.1%	578%	-92%	14%	290%
48	HEMP INC	HEMP	0.01	3	18	274	6.2%	414%	-5%	1%	-72%
49	KALYTERA THERAPEUTICS	KALTF	0.03	15	16	510	0.0%	194%	-48%	20%	-37%
50	NEWLEAF BRANDS INC	NWGFF	0.25	8	8	33	0.0%	1097%	-16%	1%	-87%
51	NATURALLY SPLENDID ENTPRS	NSPDF	0.06	7	8	133	0.0%	179%	-13%	7%	-45%
52	APPLIED BIOSCIENCES CORP	APPB	0.40	5	7	14	0.0%	460%	-25%	5%	-68%

53	WEEKEND UNLIMITED INC.	WKULF	0.02	8	8	405	0.0%	1653%	-6%	0%	
54	EARTH SCIENCE TECH INC	ETST	0.13	7	7	53	0.1%	684%	-25%	3%	-84%
55	ISODIOL INTERNATIONAL INC	ISOLF	0.13	5	7	42	0.0%	1224%	-11%	1%	-86%
56	MAPLE LEAF GREEN WORLD INC	MGWFF	0.03	5	6	149	0.0%	877%	-21%	2%	-69%
57	GLOBAL HEMP GROUP INC	GBHPF	0.03	5	5	188	0.1%	492%	-23%	4%	-74%
58	EMPOWER CLINICS INC	EPWCF	0.03	4	6	137	0.0%	520%	-51%	9%	-61%
59	PHIVIDA HLDGS INC	PHVAF	0.09	8	2	89	0.0%	740%	-13%	2%	-77%
60	EASTWEST BIOSCIENCE INC	EAST-CA	0.03	1	3	51	0.0%	497%	-42%	8%	-75%
61	REVIVE THERAPEUTICS LTD	RVVTF	0.03	2	2	72	0.0%	417%	-62%	13%	-63%
62	EVIANA HEALTH CORP	EVNNF	0.04	1	1	24	0.0%	1202%	-31%	3%	-94%
63	GRIDIRON BIONUTRIENTS INC	GMVP	0.01	1	1	135	0.0%	1530%	-76%	5%	-86%
64	CBD OF DENVER INC.	CBDD	0.00	0	0	84	4.9%	1067%	0%	0%	-82%
65	HEMPCO FOOD & FIBER INC	HMPPF				62	0.0%				
66	ABACUS HEALTH PRODUCTS, INC.	ABCS-CA	4.74	0		22	0.3%	186%	-34%	16%	
Diversified											
67	ALTRIA GROUP INC	MO	50.10	93,593	120,022	1,868	0.5%	16%	-22%	58%	1%
68	CONSTELLATION BRANDS	STZ	184.49	30,902	48,692	189	0.4%	16%	-18%	53%	15%
69	PYXUS INTERNATIONAL, INC.	PYX	7.90	72	1,429	9	2.3%	314%	-6%	2%	-33%
70	AUXLY CANNABIS GROUP INC	CBWTF	0.48	294	299	618	0.1%	73%	-7%	8%	-28%
71	GREEN GROWTH BRANDS	GGBXF	0.88	181	194	238	0.1%	491%	-16%	3%	-78%
72	MJARDIN GROUP INC	MJARF	0.15	10	143	62	0.3%	3576%	17%	0%	-96%
73	MPX INTL. CORPORATION	MPXOF	0.32	43	43	135	0.0%	99%	-87%	47%	
74	1933 INDUSTRIES INC	TGIF	0.16	43	47	261	0.1%	180%	-10%	5%	-35%
75	WEED, INC	BUDZ	0.38	41	42	108	0.1%	492%	-20%	4%	-64%
76	STEM HLDGS INC	STMH	0.92	36	35	40	0.0%	226%	-13%	5%	-54%
77	AMERICAN CANNABIS INNOVATIONS CONGLOMERATED	PURA	0.04	26	27	595	0.6%	246%	-10%	4%	-55%
78	NUTRITIONAL HIGH INTL INC	SPLIF	0.06	20	27	363	0.0%	363%	-6%	2%	-71%
79	WESTLEAF INC.	WSLFF	0.16	20	29	121	0.0%	2958%	-56%	2%	126%
80	RAVENQUEST BIOMED INC	RVVQF	0.10	12	22	123	0.0%	489%	-35%	7%	-71%

81	MJ HOLDINGS INC	MJNE	0.24	16	19	65	0.0%	442%	-17%	4%	-77%
82	MYM NUTRACEUTICALS INC	MYMMF	0.11	16	14	150	0.0%	452%	-34%	7%	-72%
83	MCIG INC	MCIG	0.03	14	14	517	0.2%	700%	-9%	1%	-82%
84	NEXT GREEN WAVE HLDGS INC	NXGWF	0.09	14	14	158	0.0%	1112%	-5%	0%	-66%
85	HARVEST ONE CANNABIS INC	HRVOF	0.14	22	23	160	0.1%	563%	-5%	1%	-53%
86	INTERNATIONAL CANNABRANDS IN	GEATF	0.02	5	11	299	0.0%	529%	-65%	11%	-67%
87	INDIA GLOBALIZATION CAPITAL	IGCC	0.74	29	10	40	0.9%	346%	-66%	16%	164%
88	ROTO-GRO INTL LTD	RGI-ASX	0.10	12	10	130	0.0%	215%	-11%	5%	-58%
89	FUTURE FARM TECHNOLOGIES INC	FFRMF	0.04	6	8	165	0.0%	671%	-14%	2%	-74%
90	INDUS HOLDINGS, INC.	INDXF	0.42	4	24	9	0.6%	2546%	5%	0%	
91	LIFESTYLE DELIVERY SYSTEMS	LDSYF	0.52	12	11	23	0.3%	492%	-65%	12%	-60%
92	ACACIA DIVERSIFIED HLDGS INC	ACCA	0.08	3	4	42	0.1%	247%	-71%	22%	-56%
93	INTERNATIONAL ENDEAVORS CORP	IDVV	0.00	0	1	14	0.0%	1115%	-24%	2%	-75%
94	MJ VENTURE PARTNERS, INC. (NVEST INC.)	MJVP	0.02	0				7912%	-55%	1%	-60%
Downstream - Distribution/Marketing/Retail/Delivery											
95	ALCANNA INC	LQSIF	3.28	122	430	37	0.0%	70%	-23%	24%	6%
96	MEDMEN ENTERPRISES INC	MMNFF	0.42	88	422	167	1.0%	823%	-10%	1%	-81%
97	ORIGIN HOUSE	ORHOF	2.93	213	222	73	0.1%	233%	-6%	3%	-38%
98	PLANET 13 HLDGS INC	PLNHF	1.64	134	217	137	0.2%	65%	-47%	42%	-10%
99	IGNITE INTERNATIONAL BRANDS, LTD.	BILZF	1.23	130	133	106	0.1%	225%	-86%	28%	603%
100	GREENLANE HOLDINGS INC	GNLN	3.13	31	87	10	0.5%	827%	-1%	0%	
101	SLANG WORLDWIDE INC.	SLGWF	0.32	72	65	223	0.0%	679%	-24%	3%	
102	NATIONAL ACCESS CANNABIS CORP.	NACNF	0.15	25	40	175	0.0%	452%	-84%	16%	-62%
103	DIONYMED BRANDS INC	HMDEF	0.02	1	31	33	0.0%	16362%	-31%	0%	-99%
104	DRIVEN DELIVERIES INC	DRVD	0.64	28	28	44	0.3%	814%	-89%	10%	559%
105	INNER SPIRIT HLDGS LTD	INSHF	0.08	16	26	206	0.0%	191%	-9%	4%	-19%
106	PASHA BRANDS LTD.	CRFTF	0.06	13	12	194	0.0%	970%	-84%	8%	
107	WILDFLOWER BRANDS INC	WLDFF	0.18	12	18	68	0.0%	290%	-16%	5%	-55%
108	CHOOM HOLDINGS INC	CHOOF	0.13	25	18	70	0.1%	404%	-15%	4%	12%

109	GABY INC.	GABLF	0.09	16	20	176	0.0%	319%	-29%	8%	-71%
110	DIEGO PELLICER WORLDWIDE INC	DPWWD	0.01	1	9	322	0.3%	2786%	-19%	1%	-98%
111	GSRX INDUSTRIES INC	GSRX	0.07	6	7	81	0.0%	2929%	14%	0%	-96%
112	SMOKE CARTEL INC	SMKC	0.13	3	5			1300%	0%	0%	-89%
113	ROCKY MTN HIGH BRANDS INC	RMHB	0.03	4	4	134	1.0%	946%	-5%	1%	-87%
114	HIGH HAMPTON HLDGS CORP	HHPHF	0.03	3	2	104	0.0%	943%	-23%	2%	-82%
115	HIGH TIDE INC	HITI-CA	0.14	0		207	0.1%	233%	-5%	2%	-100%
Extraction, Genetics, Canna Science, etc.											
116	MEDIPHARM LABS CORP	MEDIF	2.71	355	328	131	0.3%	108%	-66%	38%	117%
117	NEPTUNE WELLNESS SOLUTION IN	NEPT	2.75	257	240	94	0.4%	139%	-12%	8%	8%
118	VALENS GROWWORKS CORP	VGWCF	2.20	256	204	116	0.1%	66%	-61%	48%	100%
119	22ND CENTURY GROUP, INC.	XXII	1.00	126	84	126	0.5%	212%	-30%	12%	-60%
120	ENWAVE CORP	NWVCF	1.37	152	135	111	0.0%	54%	-33%	38%	39%
121	PLUS PRODUCTS INC	PLPRF	1.32	57	104	53	0.2%	355%	-18%	5%	-65%
122	RADIANT TECHNOLOGIES	RDDTF	0.40	104	108	264	0.1%	135%	-32%	19%	-28%
123	WILLOW BIOSCIENCES INC.	CANSF	0.44	35	17	79	0.0%	395%	-4%	1%	-48%
124	DIXIE BRANDS INC.	DXBRF	0.21	26	24	126	0.5%	489%	-2%	0%	
125	WORLD-CLASS EXTRACTIONS	PUMP-CA	0.05	32	21	599	0.1%	218%	-27%	11%	-59%
126	CANNAPOWDER INC	CAPD	1.00	12	12	12	0.0%	300%	-49%	14%	0%
127	CANNABIS ONE (METROPOLITAN ENERGY CORP)	CBIS-CA	0.12	9	8	73	0.1%	2810%	-6%	0%	-73%
128	HALO LABS INC	AGEEF	0.26	2	6	9	1.9%	157%	-42%	21%	15%
129	BHANG INC.	BHNGF	0.07	3	3	51	0.1%	2061%	-70%	3%	-85%
130	MICRON WASTE TECHNOLOGIES IN	MICWF	0.09	7	5	79	0.0%	363%	-30%	8%	-57%
131	AREV BRANDS INTL LTD	AREVF	0.05	3	3	55	0.0%	589%	-99%	14%	
132	NEUTRISCI INTERNATIONAL INC	NRXCF	0.02	3	2	110	0.0%	239%	-41%	15%	-54%
133	KALI INC	KALY	0.00	1	1	266	4.6%	1208%	-47%	4%	-86%
134	ESENSE-LAB LTD	ESE-ASX	0.01	1				341%	-1%	0%	-57%
135	ALTERNET SYSTEMS INC	ALYI	0.00	1	1	117	2.8%	1348%	-17%	1%	-38%
136	QUADRON CANNATECH CORP	QUDCF				72	0.0%				

137	CANNA-V-CELL SCIENCES INC	CNVC-CA	0.11	0		97	0.0%	130%	-30%	19%	-100%
138	CLS HOLDINGS USA INC	CLSH-CA	0.20	26		126	0.0%	80%	-22%	22%	
139	NEXTLEAF SOLUTIONS LTD	OILS-CA	0.25	24		97	0.1%	149%	-21%	12%	-43%
Input Materials - Nutrients, Hydroponic Equipment, etc.											
140	SCOTTS MIRACLE-GRO CO	SMG	101.65	5,673	7,536	55	0.8%	13%	-43%	77%	66%
141	MARRONE BIO INNOVTIONS	MBII	1.05	140	163	133	0.0%	83%	-3%	3%	-29%
142	GROWGENERATION CORP	GRWG	4.01	147	139	37	0.5%	43%	-49%	53%	78%
143	GROWLIFE INC	PHOT	0.50	13	18	26	2.3%	245%	-36%	13%	-53%
144	SURNA INC	SRNA	0.09	20	19	228	0.2%	46%	-76%	62%	20%
145	SHARC INTL SYS INC	INTWF	0.07	3	6	39	0.0%	380%	-74%	16%	-73%
146	AFFINOR GROWERS INC	RSSFF	0.02	2	2	100	0.0%	263%	-39%	13%	-51%
Medical Cannabis											
147	ABBVIE INC	ABBV	85.95	127,105	155,234	1,479	0.4%	11%	-27%	72%	-7%
148	FSD PHARMA INC	FSDDF	4.74	37	7,127	1,506	0.0%	1350%	-28%	2%	-100%
149	GW PHARMACEUTICALS PLC	GWPH	101.39	3,115	2,588	31	1.9%	93%	-11%	11%	4%
150	TILRAY INC	TLRY	19.55	1,639	2,280	101	1.6%	459%	-4%	1%	-72%
151	ARENA PHARMACEUTICALS INC	ARNA	45.93	2,301	1,581	50	0.7%	40%	-24%	37%	18%
152	GREEN THUMB INDUSTRIES INC	GTBIF	8.42	1,083	1,374	156	0.1%	98%	-12%	11%	-14%
153	TRULIEVE CANNABIS CORP	TCNNF	12.85	460	1,514	110	0.3%	26%	-48%	65%	59%
154	APHRIA INC	APHA	4.74	1,192	1,221	252	1.0%	131%	-21%	14%	-17%
155	CARA THERAPEUTICS INC	CARA	16.94	791	602	47	1.3%	63%	-28%	31%	30%
156	HARVEST HEALTH & RECREATION	HRVSF	2.31	218	814	285	0.1%	371%	-12%	3%	-85%
157	COLUMBIA CARE INC.	COLXF	2.10	454	414	216	0.0%	243%	-24%	9%	
158	ORGANIGRAM HOLDINGS INC	OGI	2.83	442	443	156	1.6%	198%	-29%	13%	-21%
159	CORBUS PHARMACEUTICALS HLDGS	CRBP	4.77	308	262	65	0.6%	91%	-12%	12%	-18%
160	ITEM 9 LABS CORP	INLB	1.50	95	223	147	0.0%	460%	-16%	3%	-88%
161	PHARMACIELO LTD	PHCEF	2.07	132	132	64	0.0%	381%	-8%	2%	
162	22ND CENTURY GROUP INC	XXII	1.00	126	84	126	0.5%	212%	-30%	12%	-60%
163	CANSORTIUM INC	CNTMF	0.49	94	145	195	0.0%	415%	-30%	7%	

164	ONE WORLD PHARMA, INC.	OWPC	1.95	87	87	45	0.0%	156%	-60%	28%	67%
165	LIBERTY HEALTH SCIENCES INC	LHSIF	0.50	171	176	342	0.3%	120%	-49%	29%	-27%
166	ALEAFIA HEALTH INC	ALEAF	0.50	136	132	272	0.1%	346%	-9%	2%	-52%
167	CURE PHARMACEUTICAL HLDG COR	CURR	3.00	114	108	38	0.1%	94%	-60%	39%	100%
168	MEDICAL MARIJUANA INC	MJNA	0.03	93	99	3,654	0.1%	313%	-21%	6%	-66%
169	CANNTTRUST HLDGS INC	CTST	0.78	111	90	141	0.9%	1201%	-1%	0%	-84%
170	WEEDMD INC	WDDMF	0.75	72	93	96	0.2%	125%	-9%	7%	-23%
171	VIREO HEALTH INTERNATIONAL	VREO-CA	1.03	25	79	85	0.1%	400%	-93%	19%	791%
172	TPI/PALLA PHARMA LTD	TPE-ASX	0.57	72	85	114	0.1%	73%	-5%	7%	-16%
173	PHARMAGREEN BIOTECH INC.	PHBI	1.01	75	75	75	0.0%	247%	-36%	13%	-41%
174	GENEREX BIOTECHNOLOGY CORPORATION	GNBT	0.65	29	58	44	1.6%	407%	-9%	2%	-36%
175	ZYNERBA PHARMACEUTICALS INC	ZYNE	6.03	140	62	23	1.6%	173%	-54%	24%	103%
176	BOTANIX PHARMA LTD	BOT-ASX	0.07	69	66	965	0.4%	181%	-34%	16%	46%
177	MEDLAB CLINICAL LTD	MDBBF	0.29	62	55	215	0.0%	18%	-13%	43%	-6%
178	EMERALD HEALTH THERAPEUTICS	EMHTF	0.27	43	59	146	0.2%	1177%	5%	0%	-86%
179	PHARMACYTE BIOTECH, INC.	PMCB	0.03	44	44	1,328	0.2%	103%	-4%	4%	-10%
180	CARDIOL THERAPEUTICS INC.	CRTPF	2.97	77	69	26	0.0%	237%	-45%	16%	
181	CANN GROUP LTD	CNGGF	0.34	48	16	142	0.0%	456%	-22%	5%	-77%
182	ZELDA THERAPEUTICS LTD	ZLDAF	0.05	36	34	759	0.0%	68%	-55%	45%	34%
183	EMERALD BIOSCIENCE INC	NMUS	0.20	27	29	134	0.2%	475%	-2%	0%	-49%
184	THC GLOBAL GROUP LTD	HDRPF	0.26	36	32	137	0.0%	54%	-4%	7%	-24%
185	OPIANT PHARMACEUTICALS, INC.	OPNT	14.18	58	36	4	0.4%	29%	-30%	51%	-2%
186	LEXARIA BIOSCIENCE CORP	LXRP	0.43	34	33	79	0.1%	290%	-8%	3%	-54%
187	AXIM BIOTECHNOLOGIES INC	AXIM	0.44	28	33	63	0.0%	468%	-19%	4%	-41%
188	MGC PHARMACEUTICALS LTD	MGCLF	0.03	39	37	1,367	0.0%	77%	-96%	56%	11%
189	AVICANNA INC.	AVCIF	1.02	23	23			246%	-2%	1%	
190	RHINOMED LTD	RHNMF	0.14	24	23	169	0.0%	323%	-65%	17%	12%
191	KHIRON LIFE SCIENCES CORP	KHRNF	0.69	74	40	106	0.2%	375%	-14%	4%	-38%

192	TETRA BIO-PHARMA INC	TBPMF	0.36	75	71	211	0.2%	153%	-61%	29%	-43%
193	GOLDEN LEAF HOLDINGS LTD	GLDFF	0.02	14	16	584	0.1%	894%	-19%	2%	-77%
194	AUSCANN GROUP HLDGS LTD	ACNNF	0.13	41	16	317	0.0%	337%	-3%	1%	-67%
195	CRESO PHARMA	CPH-ASX	0.09	16	15	152	9.7%	352%	3%	-1%	-69%
196	INMED PHARMACEUTICALS INC	IMLFF	0.19	33	22	172	0.1%	230%	-13%	5%	-25%
197	BOD AUSTRALIA LTD	BDA-ASX	0.20	18	16	91	0.1%	153%	-21%	12%	-28%
198	PREMIER HEALTH GROUP INC	PHGRF	0.22	13	18	63	0.0%	265%	-20%	7%	-68%
199	BENCHMARK BOTANICS INC	BHHKF	0.26	37	34	143	0.0%	98%	-100%	50%	47%
200	THC BIOMED INTL LTD	THCBF	0.11	15	18	146	0.0%	429%	-19%	4%	-56%
201	CANNABICS PHARMACEUTICALS	CNBX	0.13	17	14	134	0.1%	285%	-8%	3%	-55%
202	PIVOT PHARMACEUTICALS INC	PVOTF	0.11	19	14	171	0.0%	383%	-86%	18%	-48%
203	PREVECEUTICAL MED INC	PRVCF	0.01	4	8	396	0.1%	1718%	-95%	5%	-67%
204	CANADA HOUSE WELLNSS GRP INC	SARSF	0.01	3	4	194	0.0%	977%	-54%	5%	-90%
205	TREE OF KNOWLEDGE INTL CORP	TRKWF	0.04	8	9	202	0.0%	722%	-45%	6%	-76%
206	CANNTAB THERAPEUTICS LTD	TLFTF	0.30	8	7	25	0.0%	402%	-17%	4%	-58%
207	CANNPAL ANIMAL THE	CP1-ASX	0.10	9	7	93	0.1%	42%	-23%	35%	1%
208	THERAPIX BIOSCIENCES LTD	TRPX	1.29	5	4	4	14.6%	367%	9%	-2%	-53%
209	WAYLAND GROUP CORP	MRRCF	0.02	1	3	73	0.7%	6150%	-38%	1%	-97%
210	AURA HEALTH INC	LMLLF	0.03	2	4	83	0.0%	815%	-17%	2%	-85%
211	INTEC PHARMA LTD	NTEC	0.65	23	9	35	1.2%	1323%	-37%	3%	-91%
212	RELEVIM TECHNOLOGIES INC	RLLVF	0.02	3	5	131	0.0%	344%	-7%	2%	-73%
213	NANOSPHERE HLTH SCIENCES INC	NSHSF	0.04	4	4	108	0.0%	875%	-36%	4%	-76%
214	VODIS PHARMACEUTICALS INC	VDQSF	0.03	2	3	60	0.0%	296%	19%	-7%	-47%
215	WIZE PHARMA LTD	WIZP	0.16	2	2	11	0.3%	994%	-38%	4%	-81%
216	ALLIANCE GROWERS CORP	ALGWF	0.02	2	2	86	0.0%	1441%	-55%	4%	-63%
217	VERITAS PHARMA INC	VRTHF	0.11	1	1	12	0.0%	835%	-5%	1%	-85%
218	ABATTIS BIOCEUTICALS CORP	ATTBF	0.01	3	(0)	353	0.1%	1100%	-67%	6%	-86%
219	XPHYTO THERAPEUTICS CORP.	XPHYF	0.63	30				8%	-92%	92%	

220	INSYS THERAPEUTICS INC	INSY	0.07	5	(65)	75	0.2%	9841%	-56%	1%	-98%
221	BLUEBERRIES MEDICAL CORP	BBM-CA	0.06	7		107	0.1%	930%	-89%	9%	785%
222	CANNARA BIOTECH, INC.	LOVE-CA	0.09	0				177%	-24%	12%	
223	ORION NUTRACEUTICALS INC	ORI-CA	0.04	0		47	0.6%	908%	-60%	6%	-100%
224	CANN GLOBAL LIMITED	ASX-CGB									
Real Estate & Investors											
225	COMPASS DIVERSIFIED HOLDINGS	CODI	23.03	1,379	2,111	60	0.6%	4%	-50%	93%	85%
226	FRANKLIN STREET PROPERTIES CORP.	FSP	8.63	925	1,872	107	0.3%	4%	-32%	89%	39%
227	INNOVATIVE INDUSTRIAL PPTYS	IIPR	78.09	926	765	12	2.5%	79%	-46%	37%	72%
228	CANOPY RIVS INC	CNPOF	1.04	160	136	191	0.0%	362%	-25%	6%	-63%
229	FIRE & FLOWER HOLDINGS CORP.	FFLWF	0.62	79	79	128	0.0%	142%	-10%	6%	
230	C21 INVTS INC	CXXI-CA	0.55	45	83	82	0.4%	244%	-38%	14%	-4%
231	CANNEX CAPITAL HOLDINGS INC	CNXXF	0.41	52	55	125	0.1%	444%	-33%	7%	-39%
232	CANNAPHARMARX, INC.	CPMD	1.60	58	67	36	0.0%	87%	-25%	22%	-6%
233	FIRST COLOMBIA DEVELOPMENT CORP. / REDWOOD GREEN CORP.	FCOL	0.66	69	66	105	0.0%	53%	-98%	65%	6450%
234	ICC INTERNATIONAL CANNABIS CORP.	WLD CF	0.03	21	41	706	0.0%	1755%	-40%	2%	-89%
235	AUSTRALIS CAPITAL INC	AUSCF	0.32	54	33	158	0.0%	242%	-23%	9%	-37%
236	SMART CANNABIS CORP.	SCNA	0.01	31	31	4,880	0.0%	652%	-44%	6%	-71%
237	LEVIATHAN CANNABIS GP INC	LVCNF	0.30	28	29	95	0.0%	587%	-100%	15%	#####
238	CANNABIS STRATEGIC VENTURES	NUGS	0.06	11	28	188	0.2%	5125%	-25%	0%	-97%
239	GENERAL CANNABIS CORP.	CANN	0.74	29	31	39	0.2%	270%	-32%	11%	-51%
240	MJ HARVEST INC	MJHI	1.30	25	25			441%	-50%	10%	
241	TIDAL ROYALTY CORP.	TDRYF	0.05	13	13	292	0.0%	789%	-78%	9%	-85%
242	INVICTUS MD STRATEGIES CORP	IVITF	0.09	12	20	125	0.1%	946%	-18%	2%	-83%
243	LGC CAPITAL LTD	LGGCF	0.04	18	22	524	0.0%	471%	-100%	17%	-72%
244	JUSHI HOLDINGS INC.	JUSHF	1.25	111	16	14	0.1%	101%	-88%	46%	5366%
245	NABIS HOLDINGS INC.	INNPF	0.06	7	11	110	0.1%	1191%	-30%	2%	
246	TARGET GROUP INC	CBDY	0.02	12	11	569	0.0%	614%	-37%	6%	-79%
247	CORDOVACANN CORP	LVRLF	0.20	8	9	41	0.0%	400%	-37%	8%	-73%

248	VENTURA CANNABIS & WELLNESS	CVHIF	0.16	6	8	35	0.0%	358%	-2%	0%	-30%
249	FINCANNA CAPITAL CORP	FNNZF	0.08	8	7	99	0.0%	95%	-25%	21%	-4%
250	SOL GLOBAL INVESTMENTS CORP	SOLCF	0.36	17	51	23	0.4%	773%	-20%	3%	-56%
251	HEMP NATURALS, INC.	HPMM	0.02	7	8	329	0.0%	15582%	-14%	0%	-97%
252	JETBLACK CORP.	JTBK	0.06	4	4	67	0.0%	1631%	-27%	2%	-62%
253	CROP INFRASTRUCTURE CORP	CRXPF	0.01	2	5	171	0.1%	2673%	-83%	3%	-95%
254	CANADABIS CAPITAL INC	CANB-CA	0.14	6	7	43	0.0%	254%	-38%	13%	-64%
255	REDFUND CAP CORP	PNNRF	0.23	11	11	47	0.0%	295%	-96%	24%	-26%
256	VENCANNA (TOP STRIKE RES CORP)	TPPRF	0.03	5	2	170	0.0%	339%	-16%	5%	-77%
257	ASCENT INDUSTRIES CORP.	PGTMF	0.03	0	0	2	0.0%	478%	-100%	17%	-77%
258	LIBERTY LEAF HOLDINGS LTD	LIBFF	0.05	2	1	31	0.0%	267%	-52%	16%	-28%
259	BELGRAVIA CAPITAL INTL INC	BLGVF	0.01	3	(6)	237	0.0%	408%	-68%	14%	-38%
260	QUINSAM CAPITAL CORP	QCAAF	0.11	12	(17)	113	0.0%	152%	-100%	40%	-40%
261	CANNABIS GROWTH OPRTUNITY	CWWBF	0.63	10	(25)	16	0.0%	217%	-100%	31%	-10%
262	CAPTOR CAP CORP	CPTRF	0.23	9	(19)	39	0.2%	992%	-93%	9%	-75%
263	MMJ GROUP HLDGS LTD	MMJJF	0.11	24	(43)	224	0.0%	127%	-43%	25%	-32%
264	BOUGAINVILLE VENTURES INC	BOG-CA	0.02	1		59	0.2%	693%	-25%	3%	-41%
265	YIELD GROWTH CORP	BOSS-CA	0.19	0				282%	-35%	11%	-100%
Technology, Ancillary Products and Services											
266	KUSHCO HOLDINGS INC	KSHB	1.68	180	188	107	0.5%	329%	-25%	7%	-69%
267	TILT HOLDINGS INC	SVVTF	0.34	84	196	305	0.2%	782%	-50%	6%	-87%
268	MEDICINE MAN TECHNOLOGIES IN	MDCL	2.84	113	98	40	0.1%	47%	-63%	57%	125%
269	NEXTECH AR SOLUTIONS CORP	NEXCF	1.57	67	66	43	0.3%	52%	-84%	62%	118%
270	HELIX TCS INC	HLIX	0.60	56	59	93	0.0%	450%	-32%	7%	-33%
271	NAMASTE TECHNOLOGIES INC	NXTTF	0.26	78	36	300	0.1%	391%	-9%	2%	-56%
272	AKERNA CORP.	KERN	12.50	137	114	11	8.2%	481%	-75%	13%	24%
273	CANNABIX TECHNOLOGIES INC	BLOZF	0.39	41	33	104	0.0%	305%	-13%	4%	-61%
274	CANNVAS MEDTECH INC	CANVF	0.04	14	13	349	0.0%	2400%	-97%	4%	-24%
275	LEAFBUYER TECHNOLOGIES INC	LBUY	0.15	12	11	79	0.2%	1078%	-44%	4%	-67%

276	VEXT SCIENCE INC.	VEXTF	0.55	11	11			211%	-59%	22%	
277	YPB GROUP LTD	YPB-ASX	0.00	7	9	1,507	0.4%	200%	-44%	18%	-60%
278	NUGL INC	NUGL	0.18	8	9	46	0.1%	1272%	-48%	4%	-90%
279	LIFT & CO CORP	LFCOF	0.07	3	2	41	0.0%	767%	-23%	3%	
280	GLOBAL CANNABIS APPLICATIONS	FUAPF	0.02	2	3	101	0.1%	361%	-44%	11%	-62%
281	ADVANTIS CORP	ADVT	0.00	0	1	978	0.0%	14900%	-67%	0%	-99%
282	BRAINGRID CORP.	BGRD-CA	0.00	0	0	1	10.2%	4873%	0%	0%	19%
283	GLOBAL HEALTH CLINICS LTD	LRSNF	0.01	1	(0)	49	0.0%	3802%	-78%	2%	-87%
284	CB2 INSIGHTS INC	CBII-CA	0.10	7		70	0.1%	267%	-59%	18%	
Testing											
285	PSYCHEMEDICS CORP	PMD	9.09	50	49	6	0.2%	116%	-22%	16%	-43%
286	EVIO INC	EVIO	0.13	4	18	29	3.1%	562%	19%	-4%	-63%
287	FLUROTECH	FLURF	0.13	6	3	43	0.0%	275%	-92%	25%	1224%
US - Cultivation, Processing (and Dispensing) - MSO & SSO											
288	ACREAGE HOLDINGS INC	ACRGF	5.21	343	3,565	672	0.0%	476%	-26%	5%	-73%
289	CURALEAF HOLDINGS INC	CURLF	5.96	2,104	2,864	464	0.1%	97%	-35%	26%	-4%
290	CRESCO LABS INC	CRLBF	4.81	324	717	124	0.2%	199%	-99%	33%	-61%
291	VILLAGE FARMS INTL INC	VFFIF	6.39	314	349	49	1.1%	183%	-54%	23%	97%
292	MARIMED INC	MRMD	0.58	127	168	218	0.2%	819%	12%	-1%	-82%
293	FLOWER ONE HOLDINGS INC	FLOOF	0.56	99	164	177	0.1%	402%	0%	0%	-47%
294	AYR STRATEGIES INC.	AYRSF	9.25	134	217	19	0.0%	113%	-18%	14%	-12%
295	IANTHUS CAPITAL HOLDINGS INC	ITHUF	1.32	226	181	58	0.5%	363%	-20%	5%	-5%
296	4FRONT VENTURES CORP.	CNXXF	0.41	52	55	125	0.1%	444%	-33%	7%	-39%
297	SUNNIVA INC	SNNVF	0.26	10	53	38	0.4%	1526%	-52%	3%	-89%
298	TERRA TECH CORP	TRTC	0.18	20	50	115	0.2%	974%	-6%	1%	-69%
299	CHEMESIS INTERNATIONAL INC	CADMF	0.14	13	24	93	0.1%	1115%	-20%	2%	-81%
300	CITATION GROWTH CORP	MRPHF	0.16	10	23	62	0.1%	573%	-7%	1%	-63%
301	KAYA HOLDINGS INC	KAYS	0.07	13	18	188	0.2%	85%	-28%	25%	-40%
302	GABRIELLAS KITCHEN INC	GABLF	0.09	16	20	176	0.0%	319%	-29%	8%	-71%

303 [KOIOS BEVERAGE CORP](#)

KBEVF	0.12	9	4	50	0.0%	495%	-5%	1%	-14%
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304 [BODY AND MIND INC](#)

BMMJ	0.48	9	0	19	0.4%	461%	-26%	5%	18%
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