

# the cannin report

# table of contents

**03** | introduction

**05** | subscriptions/contact

**06** | note from the founders

**07** | market & industry update

**08** | fundamental analysis

p. 10 | Innovative Industrial Properties  
p. 13 | Planet 13  
p. 16 | MJardin  
p. 19 | Organigram  
p. 22 | Scott's Miracle Gro  
p. 25 | Supreme Cannabis  
p. 28 | Trulieve Cannabis  
p. 29 | MedMen  
p. 31 | Greenlane Holdings  
p. 32 | KushCo Holdings  
p. 37 | InMed Therapeutics  
p. 40 | Kalytera Therapeutics  
p. 43 | GRN Holdings

**18** | bonus stock recommendations

p. 18 | Village Farms International  
p. 28 | Trulieve Cannabis

**45** | medical research

**52** | glossary

# introduction



## why cannin?

Cannin Investment Group is uniquely positioned to fill unmet needs in the Cannabis & Hemp Industries. Our global team of analysts and cannabis industry veterans supply our subscribers with the tools and information to profit from cannabis stocks.

Cannin's mission is to help our members profit from investing in the best cannabis & hemp stocks. In fact, 78% of Cannin's fundamentals prove true within 30 days or less on 100+ recommendations over the past 2 years.

## cannin's products & services

Cannin provides our subscribers with valuable information to help profit from the volatile cannabis industry.

Cannin members gain exclusive access to algorithmically-driven BUY/SELL signals, daily rankings of 450 cannabis stocks using 10 of the best technical indicators and exclusive weekly content providing fundamental recommendations on the hottest cannabis and hemp stocks.

## risk disclosures

If you are considering investing in a company that is connected to the marijuana industry, be aware that marijuana-related companies may be at risk of federal, and perhaps state, criminal prosecution.

The Department of Treasury recently issued guidance noting: “[T]he Controlled Substances Act (“CSA”) makes it illegal under federal law to manufacture, distribute, or dispense marijuana. Many states impose and enforce similar prohibitions. Notwithstanding the federal ban, as of the date of this guidance, 20 states and the District of Columbia have legalized certain marijuana-related activity.”



# contact

# subscriptions



**cannin rss**  
Free



**CanninPlus™**  
\$99/month



**CanninBot™**  
\$29/month

# contact

Cannin, LLC  
Info@cannin.com  
(720) 254-1374  
3000 Lawrence Street #6  
Denver, CO 80205

## our team

- Stephen Goldman** - CEO
- William Goodin** - COO
- Anna Schott** - CFO
- Brad Hamilton** - Legal Analyst
- Andrew Raines** - Developer
- James Tate** - Webmaster
- Austin Smith** - Analyst
- Michael Gonzalez** - Analyst
- Cheri Gozon** - Contributor
- Aditya Ranguhadt** - Contributor
- Fizza Fatima** - UX, UI Designer



# a note from the founders

It's crazy out there, we know. That's why we put together our quarterly reports; to help you discern gold from fool's gold. In the following pages you'll find helpful terms-to-know for both hemp and investing, deep analyses of 12 of the largest cannabis and CBD cultivation and processing companies in the United States and Canada!

Many of these companies have just recently announced M&A activity. We always follow the hot stocks. Our team of industry experts has made this report easy to read, easy to understand, and easy to digest so that you'll have the information you need to make the most profitable investments this calendar year.

Seventeen states and D.C. now permit the consumption of recreational marijuana. In addition another thirteen U.S. states (including the US Virgin Islands) have decriminalized the use of cannabis. Meanwhile, more than 15 countries around the world have legalized cannabis use. Because of this, it is no wonder that market analysts expect the legal marijuana industry will have an annual value exceeding \$75 Billion in the next decade. The time to invest is now.

Many seasoned investors are doing their homework; and we're thankful that you are considering our Denver, Colorado based company in your investment approach. We would like to thank you for your time and consideration and look forward to recognizing this tremendous opportunity together.

**Stephen Goldman & William Goodin**  
Founders  
Cannin.com



# market & industry update

## cannabis

Two factors influence growth rate: the number of states moving to either legal adult use or legal medical market (current buyers of illegal cannabis transitioning to legal purchases); and the pure growth in the market (new people buying cannabis each year). These two paths give us a high and low range for the market for each year. We will continue to study the market research to determine which starting point is likely more accurate.

### USA legal sales estimate (billions)

2018 - \$8.0  
 2019 - \$9.3  
 2020 - \$10.7  
 2021 - \$17.5  
 2026 - \$41.3

### Canada legal sales estimates

2017 - \$400 mil  
 2018 - \$2.4 bil  
 2019 - \$4.0 bil  
 2020 - \$4.9 bil  
 2021 - \$5.1  
 2026 - \$6.4 bil

### hemp industry projections

#### USA

2018 - \$800 mil  
 2019 - \$1.0 bil  
 2020 - \$1.2 bil  
 2021 - \$1.4 bil  
 2026 - \$36 bil

CBD - 23% (\$184 mil - \$291 mil)

**Personal Care** - 22%

**Industrial** - 18%

**Food** - 17%

**Textiles** - 13%

**Supplements** - 5%

**Other** - 2%

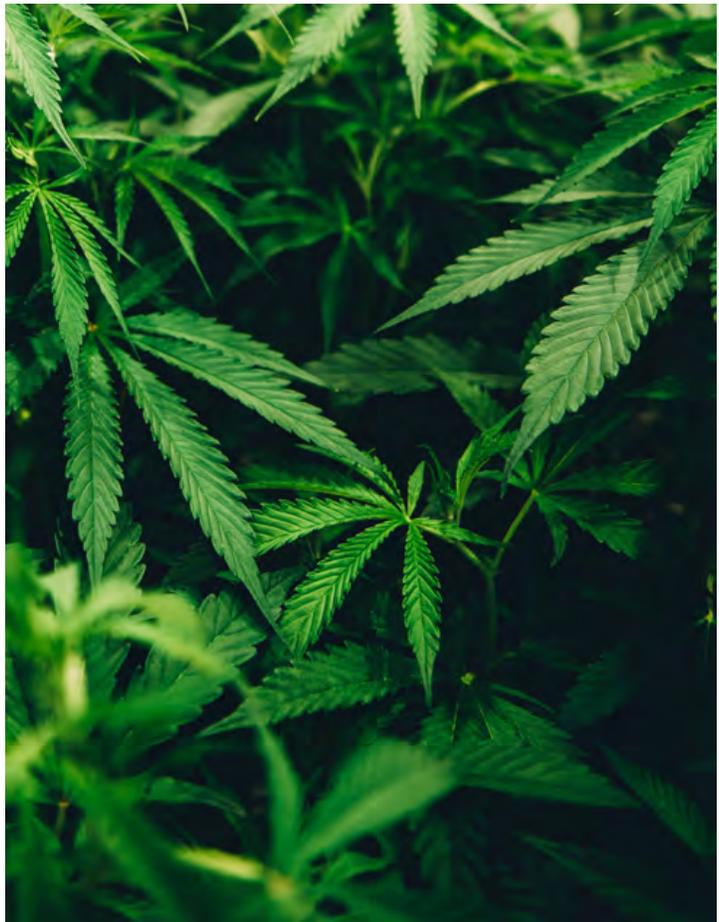
#### Canada

In Canada, consumer sales for 2018 were approx \$20 million USD and are expected to see a growth of up to 40%

2020 - \$2.4 - 4.8 bil

2021 - \$3.7 - 6.7 bil

2027 - \$15.26 bil



# fundamental analysis



# fundamental analysis

## How Does Cannin Evaluate Cannabis Companies?

Prior to investing in any stock, it's important to do your homework. Fundamental analyses and technical analyses are essential to any stock evaluation and should be done with care. Cannin is here to help. The following is how Cannin performs quick fundamental evaluations for our users. For Technical analyses by Cannin experts, please consult our Cannin Chronicle, Cannin Investment YouTube channel, and the Cannin website to perform guided technical analyses of your own.

Cannin uses a simple **Green/Yellow/Red** rating system. Green means strong, Yellow means neutral and Red means weak. In this manner you can quickly see a company's strengths and weaknesses. Cannin performs these analyses based on these ten main categories:

1. Business Focus
2. Size
3. Markets
4. Operations
5. Financials
6. Management
7. Branding
8. Valuation
9. Risks
10. Overall Recommendation

Look for Cannin featured companies as well as stock analysis on Cannin's blog and chronicle pieces located at [cannin.com](http://cannin.com)!



Innovative Industrial Properties (NYSE: IIPR)

# fundamental analysis



## Location

**HQ:** San Diego, California, USA  
**Facilities:** 15 States

## Focus: Strong

**Primary:** Innovative Industrial Properties, Inc. is a Maryland REIT corporation (with HQ in San Diego) focused on the acquisition, ownership and management of industrial properties which it leases to licensed cannabis operators for their medical-use facilities. As a REIT, it must distribute at least 90% of its taxable income to its shareholders. It does this in the form of quarterly dividends.

IIPR purchases industrial real estate for medical cannabis operators and through a sale-leaseback offer, generates cash.

**Secondary:** none

## Size: Strong

**Market Cap:** US \$4.63 bil  
**Enterprise Value:** US \$4.65 bil  
**Number of employees:** 13

## Markets: Neutral

**Primary:** USA only, 15 states  
**Secondary:** None

IIPR is currently in 15 states, holding properties for roughly 40 companies. They have properties in AZ, CA, CO, FL, IL, MD, MA, MI, MN, NV, NY, ND, OH, PA, VA

## Operations: Strong

IIPR is growing fast. In 2019, they bought 15 properties in six states, including five in CA. In total, it now owns and leases 40 properties to medical cannabis operators totaling over 5 million sf and 100% is leased with an average 15-year lease. It has invested over \$400 million in properties and committed an additional millions to develop them. Its average current yield on invested capital is 4.3% on the 40 properties. It is essentially a finance company, with only 13 employees, most of them senior and well paid. It does not handle the cannabis plant at all.

A typical lease for IIPR:

- Deal size – \$5 to \$30+ million
- Lease term – 10 to 20 years
- Initial base rent – 10% to 16% on total investment
- Annual base rent escalations – 3% to 4.5%
- Security deposit and corporate guaranty based on credit underwriting
- Transaction timeline – closing 30 to 60 days from signed purchase

Innovative Industrial Properties (NYSE: IIPR)

# fundamental analysis



## Financials: Strong

Revenue (ttm): \$116.9 million  
 EBITDA: \$97.7 million  
 Shares Outstanding (diluted): 23.9 mil  
 EPS (diluted): 2.45

## Management: Neutral

Executive Chairman: Alan D. Gold (Salary \$1.96 mil)  
 President & CEO: Paul E. Smithers (Salary \$808 k)  
 CFO: Catherine Hastings (Salary \$478 k)  
 VP & General Counsel: Brian J. Wolfe (Salary \$468 k)

## Branding: Strong

IIPR has a strong brand reputation in the industry. It is the first publicly traded company on the NYSE to provide real estate capital to the medical cannabis industry.

## Valuation: Neutral

Current share price: US \$188.9  
 Price to Sales: 32.35 (REIT industry average = 7.03)  
 EV / Revenue: 39.80  
 52 week low/high: US \$66.86-\$222.08  
 Price/Book: 3.06

## Financing: Strong

In May 2020 they completed a public offering of 1,348,389 shares of common stock for gross proceeds of \$100 million. The proceeds will be used to continue investing in real estate properties.



Innovative Industrial Properties (NYSE: IIPR)

# fundamental analysis



## Risks: **Neutral**

The risks of investing in any cannabis or hemp company are currently high given the newness of the market. The risks of investing in this company may be lower due to its being able to set comfortable leasing terms that build profit into its future years. However, if the price of cannabis falls a lot, it is possible that its lessors could have trouble paying these lease terms 10 years from now, or if there is another pandemic!

## Recommendation: **Strong**

IIPR has a very impressive business model. They are essentially landlords to medical cannabis companies. These cannabis companies need cash to grow, so they sell their real estate to IIPR and lease it back. This allows them to deploy the money previously sunk into real estate, into operations.

This business model works very well for IIPR. They can write lease terms that guarantee them adequate and rising profit each year. This is great for cash flow. Since they are a finance company, they need few employees, and they can pay them well.

Investors are enamored with IIPR, sending the stock price above \$100 prior to the 2020 covid-19 slide where it dropped to around \$40 dollars and it has now rebounded to the mid-\$90's. This high stock price allows them to raise a lot of cash selling few shares, which minimizes share dilution—unusually good for cannabis investors. Many cannabis firms are deeply diluting their stock with equity raises.



IIPR is growing fast. They have 40 properties in 15 states with many of them being the largest cannabis companies in the USA. Typical deals are from \$5 to \$30 million with lease terms of 10-20 years and annual base rent escalations of 10 to 16%.

One of the many attractive points for this business, as mentioned, is that IIPR revenue has grown consistently and predictably. So investors have flocked to the stock. They have just increased dividends by 6% to \$1.06 per share and raised another \$100 million to continue purchasing additional properties.

With all this in mind, we think IIPR is a good investment offering investors stable dividends and growth in the coming years. Even if cannabis prices tank and their clients hit hard times, IIPR can sell their real estate. This decreases their risk considerably.

Given the financial position of the company, we give the stock a Strong rating now. We think it provides great dividends to its shareholders and has a great chance to continue to grow.

Planet 13 Holdings (OTC: PLNHF)

# fundamental analysis



## Location

HQ: Las Vegas, NV, USA

Founded: 2002

Facilities: Las Vegas, Beatty, NV

## Focus: **Neutral**

Planet 13 is focused on becoming a vertically integrated cannabis company with cultivation, production, and distribution in Las Vegas. Planet 13's vision is to be a leading global brand known for the best distribution operations and manufacturing of innovative cannabis products. Planet 13 is currently investing in strategic technologies for the growing demand of high quality and diverse cannabis oils and extracts for the medical use in the U.S.

## Size: **Strong**

Market Cap: US \$1.26 bil

Enterprise Value: US \$1.21 bil

Number of employees: 34

## Markets: **Strong**

**Primary:** Nevada

**Secondary:** California

**Subsidiaries:** MM Development Company, Inc.

## Operations: **Strong**

### Cultivation:

Present capacity: 112,000 sq. ft. facility in Las Vegas

Future capacity: 14,000 sq. ft. production facility for processing 600 lbs of plant biomass per day in Las Vegas

### Distribution:

Direct sales: Planet 13 is operating at one licensed dispensary facility while holding 5 dispensary licenses

Store networks: Planet 13 Superstore with approximately 40,000 square feet of retail space. Opening a new store in Southern CA

Supply Agreements: Supply agreement with Shango, 8Fold, Vegas M Stick, Redwood, Matrix NV, Taproot and Select for Concentrates, Cartridges and Tinctures (19,000+ patients)

### Integration/Diversification:

Vertically integrated: Yes

Horizontally diversified: No

Planet 13 Holdings (OTC: PLNHF)

# fundamental analysis



## Financials: Strong

Revenue (2019): \$63 million  
 EBITDA: \$10.1 million  
 Shares Outstanding (diluted): 139.7 mil  
 EPS (diluted): (0.05)

## Management: Neutral

CEO: Robert Groesbeck  
 Co-CEO: Larry Scheffler  
 Founder and VP Ops: Christopher Wren  
 CFO: Dennis Logan



## Branding: Strong

The Planet 13 Superstore brand is quite well known for its close proximity to Las Vegas strip and growing portfolio of cannabis products. Brands include Trendi (vapes), Medizin (vapes), Leaf&Vine, Dreamland chocolates, HaHa Gummies, Planet CBC

## Valuation: Strong

Current share price: US \$7.18  
 Price to Sales: 14.95  
 EV / Revenue: 17.11  
 52 week low/high: US \$5.09-\$8.67  
 Price/Book: 10.45

## Financing: Strong

They have \$14 million in cash and less than a million in long term debt. This is more than enough to continue operations for the net quarter. Inside ownership is 60%.

## Risks: High

The risks of investing in any cannabis company are currently high given the volatility of the market. The risks of investing in this company may be higher due to its reliance on tourism in Las Vegas and the covid-19 pandemic. If the pandemic lets up and tourism bounces back, this risk will decrease.

Planet 13 Holdings (OTC: PLNHF)

# fundamental analysis



## Recommendation: Strong

Planet 13 is focused on becoming a leading global brand known for its distribution, operations, and manufacturing of innovative cannabis products. The company is currently investing in strategic technologies for the growing demand of high quality and diverse cannabis oils and extracts for medical and retail use in the U.S.

Planet 13 signed strategic partnerships with suppliers of concentrates, cartridges, and tinctures to supply high quality cannabis products for its superstore in Las Vegas. Their new highly automated production facility in Las Vegas will use robotics to reduce costs and will be able to process 600 lbs plant biomass per day. They account for 9% of all cannabis sold in Nevada!

Revenue in Q1 2019 was \$13.8 million and was \$16.8 million in Q1 2020 (18% increase). They also have \$14 million cash on hand. While net income is still negative, they are close to being profitable.

Will its stock price improve in the long term? We think so.

They are targeting 7 more superstores in the next five years, all in other states in the USA. With revenue at \$63 million annually at one store, this could mean over \$500 million annually within 5 years.

Planet 13 is showing persistent increase in its earnings growth for the last two years so investors should keep an eye on its EPS growth rate if they intend to hold stock for the long term. Planet 13 management holds 61% of company outstanding shares listed which shows their confidence in the long-term outlook of the company.

Given the financial position of the company, we give the stock a Strong rating now. We think it provides great dividends to its shareholders and has a great chance to continue to grow.



MJardin (OTC: MJARF)

# fundamental analysis



## Location

**HQ:** Denver, CO, USA & Toronto, Ontario, Canada  
**Founded:** 2014

## Focus: Strong

MJardin is focused on leveraging its more than 10 years of experience in enhancing production and extraction of cannabis. MJardin develops cultivation and extraction sites while supplying some of the Canadian provinces with cannabis flower and cannabis products. MJardin have developed proprietary software with 10 years of cultivation metrics and ability to monitor plant growth, yield and inventory management.

## Size: Weak

**Market Cap:** US \$7.86 million  
**Enterprise Value:** US \$132.2 million  
**# of employees:** 115

## Markets: Neutral

**Primary:** CO, NV  
**Secondary:** Manitoba, Nova Scotia, Ontario  
**Majority Subsidiaries:** GrowForce Inc.; F&L  
**Investments:** Ringsby Services LLC.; 8586985 Canada Corp.

## Operations: Neutral

### Cultivation:

Current production: 125,000 kg produced to date (over 10 years)

**Production sites and sizes:** Will Cannabis in Brampton, Ontario is 32,800 sqft can produce 3,900 kg per year.

Grand River Inc in Dunnville, Ontario is 11,000 sqft can produce 1,596 kg per year. Warman in Winnipeg, Manitoba is also 136,000 sqft and is their R&D hub. AtlantiCann Medical (AMI) in Nova Scotia is 68,000 sqft and can produce 6,300 kg per year. Their Las Vegas facility is 30,000 sqft too.

### Distribution:

Direct sales: None

Supply Agreements: Supplies some of the provinces in Canada. Alberta is their largest supply agreement.

Management Experience: They've designed over 100 cultivation and extraction facilities since 2009.

### Integration/Diversification:

Vertically integrated: Yes

Horizontally diversified: No

## Financials: Weak

Revenue (ttm): \$10.55 million  
 Outstanding shares (diluted): 89.7 million

## Management: Neutral

CEO: Patrick Witcher  
 SVP Cultivation: Ben Franz  
 SVP Biz Dev: Eric Gattoni  
 CFO: Edward Jonasson

The management team has been consistent for the last few years. Patrick Witcher has 20 plus years of law enforcement experience including time with the DEA.

MJardin (OTC: MJARF)

# fundamental analysis



## Branding: Strong

MJardin wants to position themselves as a specialist brand in cannabis cultivation across multiple markets through their tested and consistent production methods and high production yields. They advertise 360 grams per sq ft of cultivation space which is above the industry average. Their Canadian brand Flint & Embers, and partner brand BLLRDR are doing well.

## Valuation: Weak

Current share price: US \$0.0726  
 52 week high/low: \$0.03-0.22  
 Price to Sales: 0.74  
 EV/Revenue: 9.50  
 Price/book: 0.04



## Financing: Weak

They had \$4.8 million of revenue in Q3 2020. Their losses from operations were \$4.2 million. They have \$117 million in total assets and \$187 million in total liabilities.

## Risks: High

The risks of investing in any cannabis company is currently high given the volatility of the market. The risks of investing in this company are more than some given their losses, low inventory and high total debt.

## Recommendation: Weak

MJardin is focused on leveraging its more than 10 years of experience in enhancing production and extraction of cannabis. MJardin have developed proprietary software with 10 years of cultivation metrics and the ability to monitor plant growth, yields, and inventory management.

During Q3 2020 Will generated \$739,564, GRO increased harvested flower by 138%, Warman finished phase 2 of their construction and build-out, and AMI generated \$3.1 million in revenue (up from \$2.5 million in Q3 2019). Their cultivation management generated \$4.8 million in Q3 2020. These are most of the bright spots for the company.

The companies Price to Sales is 0.66 and the Price to Book is 0.04. Normally these would be a screaming deal BUT the company has \$149 million in debt. The Bank of Nova Scotia has lent MJardin \$116 million at 9.55%. In 2020 MJardin did not meet their financial covenants pursuant to the loan. This is bad. Although the bank forgave them, the loan matures in April 2021. We aren't sure the financials are there to handle this loan.

Given the financial position of the company, we give the stock a Weak rating now.

# Bonus Recommendation: Village Farms International

**Village Farms International** (NASDAQ: VFF) operates three segments that include: Produce Business, Energy Business, and the Cannabis and Hemp business. It owns and operates a 7-megawatt power plant that generates and sells electricity to British Columbia Hydro and Power Authority.

The company also produces and supplies cannabis products that are marketed and distributed under the Village Farms brand name to retail supermarkets and fresh food distribution companies.

Through VFF's majority ownership in its joint venture – Pure Sunfarms, the company built one of the largest and vertically integrated greenhouse facilities in North America. VFF is also the only publicly traded greenhouse produce company in Canada and has joint venture operations in hemp and CBD products.

Canada's licensed marijuana producers were excited about the legalization of Cannabis 2.0 products that include derivatives such as gummies and beverages. These products are priced at a higher rate which can help companies increase the bottom-line and benefit loss-making entities in the cannabis space.

VFF aims to leverage its expertise as a vertically integrated greenhouse grower in the rapidly expanding cannabis space. Its focus is to become the leading low-cost, cannabis producer in Canada. It is also pursuing opportunities to gain traction in the U.S. hemp-derived CBD market and has established two joint ventures for multi-state outdoor hemp cultivation and CBD extraction.

Analysts tracking VFF stock have a 12-month average target price of \$14.2. This indicates an upside potential of over 20% given its current trading price of Village Farms International, in USD11.32 as of 4/16/21

Oragnigram (Nasdaq: OGI)

# fundamental analysis



## Location

HQ: Moncton, New Brunswick, Canada Founded: 2010  
 Facilities: Moncton  
 Symbol: OGI (Nasdaq), OGI (TSX)

## Focus: Neutral

Organigram is a high quality, award-winning, highly-efficient medical cannabis producer in New Brunswick, Canada. The company claims New Brunswick offers low-cost advantages in electric power (base rate of 5.2 kWh), real estate, and taxes (e.g. compared to Ontario). Organigram is one of only three certified organic cannabis producers in Canada.

## Size: Neutral

**Market Cap:** US \$938.5 mil  
**Enterprise Value:** US \$926.7 mil  
**Number of employees:** 816

## Markets: Strong

**Primary:** Canada, primarily

**Secondary:** Expanding international focus. Europe, South America, and Australia will be target markets. In July 2018, it shipped its first medical cannabis flower to Australia, and in September 2019, shipped its first oil. In October 2018, it bought 25% of Alpha Cannabis Germany to serve the growing medical market there. It currently has no investment in any entity in the USA.

## Subsidiaries, Interests:

Majority Subsidiaries: NA

Minority interests: Has interests in Germany (25% of Alpha Cannabis Pharma GMBH), Serbia (Eviana), and in Hyasynth, a company that has a way to produce cannabinoids from yeast, without growing cannabis. This could create a global supply of pure cannabinoids at a fraction of the cost of traditional cannabis cultivation.

## Operations: Strong

### Cultivation:

Current production: 89,000 kgs/year. Sales to all ten Canadian provinces

Future capacity: Slightly downgraded as of April 2020 when they let go of approximately 45% of their staff due to COVID-19.

Organigram has recently reported producing up to 400 grams per square foot, much higher than the industry average of 130. They have cut production costs dramatically and currently produce some of the lowest cost cannabis on the market.

Oragnigram (Nasdaq: OGI)

# fundamental analysis



## Distribution:

Direct sales: Yes, through their online store (and CanvasRx.com)

Store networks: No

Supply agreements: They have distribution agreements with 10 of 10 provinces. They claim to be #1 in the 4 maritime provinces, growing elsewhere.

**Supply deals:** Recent deal with Canndoc (Israel) to supply 6,000 kg of dried flower!

New Brunswick: 5000 kgs/year (11,000 lbs)

PEI: 1000 kgs/year

Manitoba: 1000kgs/yr

Other deals: Not disclosed

## Integration/Diversification:

Vertically integrated: somewhat (cultivation and online sales), but less than others that have retail deals.

Horizontally diversified: Within cannabis, yes: Adult use, medical, flower, concentrates, and edibles.

## Financials: **Weak**

Revenue (Q2 2020): \$23.2 million (14% decline over Q2 2019)

Shares Outstanding (diluted): 298.2 mil

Profit Margin: (-45%)

## Management: **Strong**

CEO: Greg Engel

CFO: Derrick West

CSO: Paolo DeLuca

CEO Greg Engel comes from the same role at Tilray. All executives are very seasoned and don't follow the same "spend, spend, spend" mantra of Canopy Growth or Aurora. Because of this, they are in a better financial position than these companies.

## Branding: **Strong**

Strong focus on branding. They have 5 brands with distinctive tangible benefits:

Trailblazer—value; Trailer Park Buds—mainstream brand; Ankr Organics—premium; Edison—premium; Edison reserve--ultra premium

They have deals with The Green Solution out of Colorado and Valens GroWorks to expand edibles sales and have been chosen to supply the vaporizer hardware companies Pax and Feather.



Organigram (Nasdaq: OGI)

# fundamental analysis



## Financing: Strong

Completed equity program issuing 21 million common shares for gross proceeds of CAD \$49 million. Has around CAD\$41 million in cash and short term investments on hand.

## Risks: Neutral

The risks of investing in any cannabis company are currently high given the volatility of the market. The risks of investing in this company are definitely lower than most given their cost-cutting attention, lower margins than their peers, and high-quality product.

## Recommendation: Neutral (Short Term) & Strong (Long Term)

Organigram is a low cost, certified organic, cannabis producer in Canada. They supply all 10 provinces with products.

We believe they have strong management, based on experience in cannabis and related industries. The CEO comes from Tilray.

Their cultivation capacity is impressive, currently at 89,000 kgs/year. They sell online and have over 16,000 active medical patients. They have interests in Australia, Germany, Serbia, Israel, and plan to sell South America. They ship medical cannabis internationally.

Its production costs are extremely low, despite having all indoor cultivation, which produces very high-quality cannabis, usually at a higher cost. It generated net revenues of US\$80.4 million last year with a net income of CAD\$-9.5 million. Their losses are minuscule when compared to their competition.

Will its stock price improve from where it is today at US\$1.56? We think so, but not until the end of 2021.

Unlike Canopy and Aurora, they don't splash their cash around and purchase companies left and right. They typically try to keep costs low, establish strong brands, and produce high-quality material. Because of this, they've lined up strong distribution deals with TGS, Pax, and Feather.

They have plenty of cash on hand to continue executing their plans and if they keep cutting costs, producing and distributing their high-quality products, and achieving their disciplined capital allocation strategy they should get through 2021 just fine.

Scott's Miracle Gro (NYSE: SMG)

# fundamental analysis



## Location

HQ: Marysville, OH, USA  
 Founded: 1868  
 Facilities: OH, WA, CA, OR  
 Symbol: SMG (NYSE)

## Focus: Strong

Scotts Miracle-Gro is the world's largest maker and distributors of consumer lawn and garden products. They are the oldest company we will review in the cannabis and hemp spaces. They began in 1868 selling lawn seed in Ohio.

Their business now spans some of the most well known brands across any industry and covers almost the entire planet. It's business arm called Hawthorne covers all hydroponic and indoor garden business so this is where they are gaining among cannabis and hemp cultivators.

## Size: Strong

Market Cap: US \$13.87 bil  
 Enterprise Value: US \$16.02 bil  
 Number of employees: 5600

## Markets: Strong

**Primary:** USA in multiple states  
**Secondary:** Canada, Europe, Asia Pacific

### Subsidiaries, Interests:

Majority Subsidiaries: Scotts CO LLC, Scotts LawnService, HGCI, SLS Holdings, Hawthorne Gardening Company, Scotts Products Co, GenSource, SMG Growing Media, SMGM LLC, SMG Brands, OMS Investments, Swiss Farms Products, Gutwein & CO

## Operations: Strong

### Cultivation:

Current production: NA, they do not directly cultivate

### Distribution:

Direct sales: Yes, online  
 Store networks: They sell their products at all the largest retail chains and thousands of hardware stores across the planet  
 Supply agreements: They have an exclusive agreement with Monsanto for marketing and distribution of Roundup branded products

**Supply deals:** Recent deal with Canndoc (Israel) to supply 6,000 kg of dried flower!

New Brunswick: 5000 kgs/year (11,000 lbs)

PEI: 1000 kgs/year

Manitoba: 1000kgs/yr

Other deals: Not disclosed

Scott's Miracle Gro (NYSE: SMG)

# fundamental analysis



## Integration/Diversification:

Vertically integrated: No, they just support cannabis and hemp businesses  
Horizontally diversified: Yes

## Financials: Strong

Revenue (Q2 2020): \$1.8 billion (16% increase over Q2 2019)  
Shares Outstanding (diluted): 55.7 mil  
Profit Margin: 9.50%

## Management: Strong

CEO: James Hagedorn  
CFO: Thomas Randal Coleman  
COO: Michael Lukemire

They have an experienced team with a clear pathway to increasing revenue. Covid-19 hasn't slowed them down a bit. The CEO has been with them for 32 years, the COO for 23 and the CFO for 20. They know what goes on within company business.

## Branding: Strong

Strong focus on branding. They have some of the most recognizable brands in the world with Scotts, Miracle-Gro, Ortho, Roundup, Tomcat, General Hydroponics, Botanicare, AeroGarden, Can-Filters, Gavita and many more.

## Valuation: Strong

Current share price: US \$248.99  
Price to Sales: 3.16  
EV / Revenue: 3.55  
52 week low/high: US \$108.33-\$254.34  
Price/Book: 20.62

## Financing: Strong

At 2019's conclusion the company had \$420 million in working capital and \$184 million in free cash flow. They had this with over \$3 billion in net sales. They have plenty of capital to do whatever they want to do this year.

## Risks: Neutral

The risks of investing in any cannabis company are currently high given the volatility of the market. The risks of investing in this company are definitely lower than most given their indirect involvement in the cannabis industry, diversified business arms and huge net sales.

Scott's Miracle Gro (NYSE: SMG)

# fundamental analysis



## Recommendation: Strong

Scott's Miracle-Gro is the leading consumer products marketer for lawn and garden care. During the gold rush, the folks selling picks and shovels got rich, not the miners. SMG supplies the cannabis and hemp industry with all the tools they need to cultivate high quality products but takes on none of the risk associated with growing the product themselves.

Their commitment to cannabis and hemp is outlined by their corporate statement: "We support states' efforts to develop responsible and effective regulation governing legalized cannabis. This support includes engaging with state and federal lobbying consultants and providing consistent, sustaining support to a 501(c)4, The Good Growth Alliance, to advance policy and educational efforts related to a variety of issues that impact society, our business and our customers and consumers; including legalization efforts."

Company wide sales have not slowed a bit during covid-19 in 2020 (a rarity across the industry). They reported 16% increases in sales during Q2 2020 company wide. Their business arm Hawthorne (sells to cannabis cultivators) is expecting 30 to 35% growth for all of 2020.

Will its stock price improve from where it is today at US\$146? We think so!

Their branding is very strong, exclusive agreements with Monsanto and others have them locked in and strong sales in backyard gardens during quarantine periods in the USA have sales up for 2020. For the first six months of 2020 they've already reported sales of \$1.75 billion (up 18% of 2019) with Hawthorne's contribution up 51%! We think they are as strong of a buy as it gets and 2020 should yield nice returns.



Supreme Cannabis Company (OTC: SPRWF)

# fundamental analysis



HQ: Toronto, Cannabis  
 Founded: 1979 (Supreme Pharma)  
 Symbol: SPRWF (OTC), FIRE (TSX)

## Focus: Neutral

Supreme Cannabis Co focuses on the cultivation and wholesale distribution of premium cannabis grown in hybrid greenhouses combining indoor technology with sunlight.

They operate through their main subsidiary, 7ACRES. Premium cannabis, which is their focus, has better margins and less competition from the black market and from other low-cost producers with lower quality cannabis. Using sunlight, they reduce production costs somewhat versus 100% indoor producers. The big news with FIRE is their acquisition by whom else, Canopy Growth. Look out here for a Canadian giant.

## Size: Strong

**Market Cap:** US \$230 million  
**Enterprise Value:** US \$275 million  
**# of employees:** 750

## Markets: Strong

**Primary:** Canada  
**Secondary:** USA, Africa  
**Subsidiaries:** 7Acres, Truverra Inc, Bayfield Strategy Inc, 10695181 Canada Ltd, BlissCo Cannabis Corp

## Operations: Neutral

### Cultivation:

Current production: 450,000 sqft of licensed grow facilities. Kincardine has 440,000 sqft for cultivation, R&D/genetics programs, and packaging. Langley is a 18,000 sqft extraction facility. They have the capacity to fill 1 million tinctures and 1.5 million vapes per year.

### Distribution:

Supreme aspires to sell strictly wholesale, to producers and through retail partners, to avoid the costs of running retail operations. They are adding retail partners and considering global markets long term.

Supreme has supply agreements with all 10 Canadian provinces. They also export from Canada to Israel. They have 45 SKUs in retail locations.

**Direct sales:** None

**Store networks:** Yes, agreements with retail partners including Zenabis to carry their product

**Supply agreements:** Canadian provinces

### Integration/Diversification:

Vertically integrated: Yes

Horizontally diversified: No

Supreme Cannabis Company (OTC: SPRWF)

# fundamental analysis



## Financials: Strong

Revenue (ttm): \$49.4 million  
 Outstanding shares (diluted): 734.7 million

## Management: Strong

President, CEO: Ms. Beena Goldenberg  
 CFO: Nikhil Handa  
 COO: John Griese

Most executives are very experienced, although not in cannabis. There is a lot of consumer packaging goods experience. We love the rare female led company!

## Branding: Strong

7Acres was named Brand of the Year at the 2018 Canadian Cannabis Awards. Brands include blissco, truverra, sugarleaf, cambium, KKe, and MG Health. They have a marketing executive with strong branding experience from years at Philip Morris.

## Valuation: Neutral

Current share price: US \$0.319  
 52 week high/low: \$0.08-0.475  
 Price to Sales: 3.23  
 EV/Revenue: 5.58  
 Price/book: 1.60



## Financing: Neutral

In January 2021, the company raised \$23 million through 121 million units priced at \$0.19 per unit. There is also 3 year warrants priced at \$0.23. They also restructured \$100 million in debt last year making strides towards profitability.

## Risks: Neutral

The risks of investing in any cannabis company are currently high given the volatility of the market. The risks of investing in this company are similarly high given the Canadian cannabis market as a whole getting slammed in 2020, lack of profitability, and recent negative EBITDA.

Supreme Cannabis Company (OTC: SPRWF)

# fundamental analysis



## Recommendation: **Neutral**

Supreme is a small player compared to the 5-7 heavy weights in Canada. Traditionally they operated on the assumption that premium quality cannabis would pay off more than low production cost bulk cannabis. This bet did not pay off.

They've focusing on wholesale sales in the past few years but recently have tried more of a retail presence with 45 SKUs in stores now. Fortunately, they have established strong brands like their 7Acres brand, so they may be safe from being edged out in these retail storefronts.

For the last quarter (ended Sept. 2020) they reported \$283 million CAD in assets with \$95 million CAD in liabilities. Net revenue was almost \$12 million CAD which was only slightly better than in 2019. Total losses were \$30 million CAD. They are marching towards profitability and restructured debt in late 2020. These are good steps but they are still likely a year from profitability.

The price to sales is 1.61 and price to book is 0.47 which are fairly attractive. The revenue was only slightly up from the same quarter in 2019 but up over \$3 million CAD from the last quarter in 2020. This is a good trend. They are also getting some backing from Reddit posts and we all know what those did for Gamestop!

We think they are a Neutral stock now, but not for long. Watch for this company to turn to Strong by the end of 2021.



# Is Trulieve Cannabis Still a Strong Buy?

Cannabis companies have two options to expand their business across territories. They can either go wide or they can go deep. Trulieve Cannabis (OTC: TCNNF) has chosen to go deep. Trulieve is Florida's largest cannabis company with 79 locations in the state alone. The company continues to show plenty of promise but is Trulieve a good stock to buy?

Ever since its inception, Trulieve has grown steadily and now holds a 52% share in Florida's cannabis market. While 79% of its customers are repeat buyers, the company caters to 1,500 new medical cannabis patients on a monthly basis. Trulieve Cannabis products help to alleviate seizures, muscle spasms, nausea, loss of appetite, pain as well as other such symptoms which may be associated with serious medical conditions such as cancer. In fact, many of Trulieve's products are low THC/CBD ones, making them suitable for patients requiring non-euphoric care.

***If you had taken Cannin.com's advice to buy TCNNF last year, you would have doubled your investment.***

In 2020, the company's YoY sales grew 106% to \$521.5 million, while net income was up 19% at \$63 million. Cash flow came in at \$99.6 million for 2020. Adjusted EBITDA of \$251 million for 2020, almost doubled year over year.

The last year was also Trulieve's third straight year of profitability, having achieved record fourth-quarter revenues of \$168.4 million – indicating a 24% sequential increase.

This is great news, but is Trulieve Cannabis stock still a strong buy?

“

...“Trulieve continues to bolster our national expansion efforts with acquisitions that both complement our current portfolio and strengthen our long-term strategy.”

”

Trulieve has expanded its national footprint through acquisitions of Solevo Wellness and PurePenn. The company is serious about expanding. On April 7, Trulieve announced that it raised \$198.1 million by selling shares at \$39.63 before deducting the underwriting discounts and commissions, and other offering expenses. The company said it will use the proceeds to fund its business development.

Trulieve expects all of these acquisitions and expansion strategies to start paying off as early as 2021. In its guidance for 2021, it accounted for a full year of operations from Pennsylvania, continued growth in Florida as well as its Massachusetts, Connecticut, and California locations.

Adult-use cannabis has already been legalized in over 16 states in the United States of America, including Washington D.C, and with full legalization in Canada, recreational marijuana is clearly here to stay.

With Trulieve stock closing at \$41 on April 12th, analysts have a 12-month average target price of \$69.04 for Trulieve Cannabis, an upside of over 60%. Cannin.com recommends you invest if you haven't yet done so as Trulieve is a good stock to buy.

MedMen Enterprises (OTC: MMNFF)

# fundamental analysis



## Location

HQ: Culver City, CA, USA

Founded: 2010

Symbol: MMEN (CN), MMNFF (OTC)

## Focus: Neutral

MedMen Enterprises Inc is a vertically integrated company with a premium branded retail presence that cultivates, produces, distributes, and retails recreational and medicinal cannabis. They struggled in 2020 with covid, canceled stock deals, and an overall identity struggle. They are currently down to 24 stores in six states.

## Size: Neutral

**Market Cap:** US \$187.8 million**Enterprise Value:** US \$681.7 million**# of employees:** 1,000+

## Markets: Strong

**Primary:** CA, NY, NV, IL, AZ, FL**Secondary:** None (canceling previous deals and improving finances)**Subsidiaries:** Seven Point, Kannaboost Technologies, Omaha Mgmt Services, CSI Solutions, MM CAN USA, Sugarleaf Trading, Manlin DHS Development, ICH CA Holdings, MattnJeremy, Inc.

## Operations: Weak

### Cultivation:

Current production: Cultivation facilities in five states with around 400,000 sq ft in use.

Future capacity: No future expansion plans announced at this time.

### Distribution:

Direct sales: Yes they have online sales, and both delivery and in-store pickup.

Store networks: 24 stores across six states

### Integration/Diversification:

Vertically integrated: Yes

Horizontally diversified: No

## Financials: Neutral

Revenue (ttm): \$142 million

Outstanding shares (diluted): 512.4 million

## Management: Neutral

CEO: Tom Lynch (Interim CEO, also branded as the Chief Restructuring Officer)

CFO: Reece Fulgham (Interim)

COO: Timothy Bossidy (Interim)

MedMen Enterprises (OTC: MMNFF)

# fundamental analysis



## Branding: **Strong**

MedMen is building a company brand reputation through hi-tech, high-end branded retail stores. In addition to its retail store branding, it also has a company marketing effort, a new campaign called "The New Normal", with a film directed by Spike Jonze that chronicled the history of cannabis in America. In addition to cannabis products, it also offers branded merchandise and apparel.

## Valuation: **Neutral**

Current share price: US \$0.37  
 52 week high/low: \$0.104-1.47  
 Price to Sales: 1.03  
 EV/Revenue: 4.77  
 Price/book: 1.14

## Financing: **Weak**

MedMen is undergoing financial repair from the nightmare 2019 and 2020 they had under Adam Bierman's control. They reported cash and cash equivalents of \$10.3 million in Q1 2020 with \$25.7 million in financing commitments. They still have negative \$192.3 million in shareholders equity however.

## Risks: **High**

The risks of investing in any cannabis company is currently high given the volatility of the market. The risks of investing in this company are much greater than

## Recommendation: **Neutral**

MedMen is a company with a very strong US market presence but also some issues behind the curtain, causing the stock to struggle. They were building a large network of premium retail stores on premium real estate in prime locations all while acquiring other businesses with all stock deals. This expensive strategy was prior to covid 19 and protests in 2020. They've now scaled back, changed their management team, and are attempting to right the financial boat.

A number of real problems with MedMen remains, mostly from ex-CEO Adam Bierman's tenure. They had allegations of fraud, sexism, racism, and general poor management during his time. Interim CEO Tom Lynch has rolled out a new commitment to diversity and inclusion with 15% of all shelf space dedicated to Black and Brown owned businesses in their retail stores, new diversity initiatives for all MedMen employees, and funding the MedMen Foundation to further volunteerism and social equity programs. This is great news but healing takes time.

MedMen's stock is \$0.13 now (it was \$0.26 during our last analysis where we rated it as WEAK). It's Price to Sales ratio is 0.28 and Price to Book is 0.34, which are somewhat attractive. Can they continue cost cutting measures towards profitability?

Recent financial results for Q1 2021 reveal the answer may be yes. They've increased revenue 31% and increased margins to 47%. Net losses are down to \$30.2 million, which sounds like a lot until you compare that to the \$83.4 million in Q1 2020. This is all great news but at the end of the day MedMen is not profitable and net liabilities are at \$762 million while assets are at \$534 million. Not a great final standing.

Given the continued challenges ahead for the company, we give the stock a Neutral rating now. There are some bright spots though and we expect the stock price to rise long term.

Greenlane Holdings (NASDAQ: GNLN)

# fundamental analysis


 The logo for Greenlane, featuring the word "greenlane" in a lowercase, green, sans-serif font. The letter "g" is stylized with a thick stroke and a circular loop that extends upwards and around the letter.

## Location

HQ: Boca Raton, FL, USA  
Founded: 2005

## Focus: Strong

Greenlane Holdings Inc. is a distributor of vape hardware and smoke equipment to the cannabis businesses, smoke shops, and retail locations. They supply some of the largest vape brands such as Juul and PAX. They own vapor.com and vaposhop.com.

Their own estimates are 11,000 customer retail locations. None of their business is considered federally illegal as they do not touch the cannabis plant.

## Size: Neutral

**Market Cap:** US \$88.6 mil  
**Enterprise Value:** US \$70.0 mil  
**Number of employees:** 256

## Markets: Neutral

**Primary:** USA  
**Secondary:** Canada, Spain

## Subsidiaries, Interests:

Majority: Pollen Gear LLC, Conscious B.V. Aerospaced LLC, Better Life Holdings, 1095 Broken Sound Pkwy LLC  
Minority interests: None

## Operations: Neutral

### Cultivation:

Present Productions: None  
Future production: None, only concerned with development and distribution of premium products and accessories for smoking and vaping.

### Distribution:

Direct sales: Yes, through 2 websites  
Store networks: 11,000 retail locations  
Supply agreements: None

### Integration/Diversification:

Vertically integrated: No  
Horizontally diversified: Yes

## Financials: Strong

Revenue (Through June 30, 2020): \$32 mil  
Shares Outstanding (diluted): 16.34 mil (recent Nasdaq reorg.)  
Return on Equity: -37.5%



Greenlane Holdings (NASDAQ: GNLN)

# fundamental analysis



## Management: Neutral

CEO: Aaron LoCascio  
 Director: Adam Schoenfeld  
 CFO: William E. Mote Jr.

The CFO William Mote has over 25 years of experience. Mr. LoCascio and Mr. Schoenfeld and relatively inexperienced.

## Branding: Strong

They own HS, Vibes, K. Haring, Marley Natural, Aerospaced, and Groove. They also own vapor.com and vaposhop.com. They distribute Storz & Bickel, PAX, Juul, Firefly, Bic, Futurola, Gresco Science, Levo, Blu, Openvape, vapium, and many more.

## Valuation: Neutral

Current share price: US \$6.04  
 Price to Sales: 0.47  
 EV/EBITDA: 0.51  
 52 week low/high: US \$1.67-\$8.73  
 Price/Book: 5.88

## Financing: Strong

They had \$42 mil in cash at the end of June 2020 and over \$100 million in total current assets. They should be fine moving forward!

## Risks: Neutral

The risks of investing in any cannabis company are currently high given the newness of the market. The risks of investing in this company are medium given that they do not touch the cannabis plant and are thus not federally illegal and their presence on the NASDAQ.

## Recommendation: Strong

Greenlane Holdings develops and distributes vape and smoke products and accessories across the USA. GNLN is a strong company for a number of reasons. They are the partner of choice for the largest vape companies in the nation, they distribute to over 11,000 retail locations, they have their own brand of child proof packaging (Pollen Gear), and they are starting to diversify their offerings with pre-rolled cones now offered.

More good news is their sales numbers for Q2: \$23.4 million. With gross profit of \$6.7 million they are doing well during a tough year. For comparison, Kush bottles, also a packaging distribution company, is not profitable yet. Their vapor.com website saw a 74% increase in sales, also during Q2 2020.

### Will its stock price improve in the long term? Yes.

They recently were listed on NASDAQ giving them a ton more liquidity, have over \$100 million in total assets, and a price to sales ratio of 0.18 (maybe the lowest of all companies we review) paint a very rosy financial picture.

For these reasons, we think Greenlane, at or near its current price of \$2.66 a share, can be a good investment opportunity.

KushCo Holdings (OTC: KSHB)

# fundamental analysis



## Location

HQ: Garden Grove, California, USA  
 Founded: 2010 as Kush Bottles  
 Facilities: Has 18 distribution hubs in the USA and Canada

## Focus: Strong

KushCo Holdings, Inc. is a wholesale distributor of packaging supplies, vaporizer parts, and gases in the US, Canada, Europe, and South America, primarily serving the cannabis industry. It has no direct contact with the plant or its THC and CBD ingredients.

It began as a packaging company but now derives only less than 20% from that channel. It earns over 60% of revenue from vaporizer parts, and 11% from gases.

Its divisions include Kush Supply Co., a distributor of packaging, supplies, and accessories; Kush Energy, which provides hydrocarbon gases and solvents to the cannabis sector; and Koleto Packaging Solutions, its R&D arm developing intellectual property and pursuing acquisitions.

The big news for KushCo is their announced merger with GreenLane (see above for their fundamental analysis). This will create an industry giant.

## Size: Neutral

Market Cap: US \$174.4 mil  
 Enterprise Value: US \$193.8 mil  
 Number of employees: 217



## Markets: Strong

Primary: 28 states and Canada  
 Secondary: South America, China, Europe

The company's products are used by urban farmers, greenhouse growers, and medical and recreational cannabis dispensaries. It regularly services more than 6,000 medical and adult-use dispensaries, growers, and producers across North America, South America, and Europe.

They maintain facilities in the five largest U.S. cannabis markets and have a local sales presence in most major cannabis markets across the US and Canada.

## Operations: Strong

KushCo sources products from China and distributes them throughout North America, South America, and Europe. Their revenue streams are packaging/supplies, vaporizer hardware, energy, retail services, hemp trading, and equipment financing.

It has a 66,000 sf Massachusetts distribution facility as its East Coast hub and a 40,000 Michigan distribution facility as its Midwest hub.

KushCo Holdings (OTC: KSHB)

# fundamental analysis



## Distribution:

Direct sales: Yes  
 Store networks: No, through partnerships though  
 Supply agreements: Yes

## Partnerships/Subsidiaries:

Kush Supply Co; CMP Wellness, LLC; Dank Bottles, LLC; KIM International Corporation; Zack Darling Creative Associates, LLC; Summit Innovations, LLC

## Integration/Diversification:

Vertically integrated: No  
 Horizontally diversified: Yes

## Financials: **Weak**

Revenue (Q2 2020): \$30.1 million  
 EBITDA (2019): (\$7.1 million)  
 Shares Outstanding (diluted): 132.1 mil  
 EPS (diluted): (0.91)

## Management: **Strong**

Founder/CEO: Nicholas Kovacevich  
 CFO: Stephen Christoffersen (replaced Christopher Tedford April 2020)  
 Director: Eric Baum  
 Director: Barbara Goodstein  
 Director: Donald Hunter  
 Director: Dallas Imbimbo

## Branding: **Strong**

Kushco main packaging products are bottles, bags, tubes, and containers. Specifically, it offers pop-top bottles; child resistant exit, paper exit, and foil barrier bags; tubes; and polystyrene, silicone-lined polystyrene or glass containers.

It also offers vaporizer cartridges, heating technologies, batteries, and disposable units; and hydrocarbon gases, including isobutene, n-butane, propane, ethanol, pre-mixes, custom blends, and other solvents.

It is now moving away from the business of helping small brands achieve nationwide distribution to focusing on their largest clients as they move towards righting expenses.

## Valuation: **Neutral**

Current share price: US \$1.29  
 Price to Sales: 1.51 (Biopharma industry average = 7.5)  
 EV / Revenue: 1.83  
 52 week low/high: US \$0.43 -\$2.10  
 Price/Book: 1.95

KushCo Holdings (OTC: KSHB)

# fundamental analysis



## Financings: **Neutral**

They currently have \$11.4 million cash in hand as of March 2020. Inventory was at \$26.4 million.

## Risks: **High**

The risks of investing in any cannabis company is currently high given the volatility of the market. The risks of investing in this company are no greater than investing in other cannabis companies. Recent moves may reduce this risk over the long term.

## Recommendation: **Neutral**

KushCo management did an excellent job early on of carving out a strong niche in the cannabis industry as a leader in packaging. Over the past 4 years, its revenue has shown incredible growth, from \$4 million in 2015, to \$8 million, \$19 million and \$52 million in the following three years through August 2018. Q2 2020 revenues hit \$30.1 million (down from \$35.2 in Q1 2019).

Now the recent bad news. Their EBITDA is negative at \$14.8 million. On top of that, their operating expenses continue to mount - driving operating losses higher. They need a lot of cash to run the business, and at the bottom line, they continue to lose millions each quarter.

The CEO believes the company will solve these issues and has taken measures to do so, including replacing the CFO, re-focusing the business on their larger/legacy clients (placing less emphasis on their smaller clients), downsizing their warehouse footprints, and downsizing their workforce to save costs. They have also brought in Pete Kadens (from Green Thumb Industries) to sit on their Board of Directors.

Will these moves work? Their Chief Revenue Officer recently said, "We are fortunate to have started this new strategic plan already having secured many of the most valued MSOs, LPs, and leading brands in our client roster. However, executing a broad reorganization and cost-cutting initiative-something that is largely in our control-remains the critical next step, and we're encouraged to have made significant inroads on that front, which should greatly reduce the revenue levels required to achieve positive adjusted EBITDA."

At Cannin, we applaud the management's efforts that have made Kushco a creative, agile, evolving player in the cannabis market, and so far, a revenue leader in the industry. But we want to see how they solve the cash and expense issues over the next year before we recommend investing.

Their stock, once around \$2.00 in early 2020, fell to a low of \$0.32 during the coronavirus pandemic, had rebounded to the low \$0.60 range prior to almost doubling to their current share price of \$1.18 in the last two weeks. Is this a sign their cost-cutting measures were well-received by the markets?

Given the continued challenges it was wise to merge with GreenLane. We'll be watching what they will do moving forward once the merger is completed.

# HempFusion's CBD Products Enter China

HempFusion Wellness, a leading health and wellness Company offering premium probiotic supplements and products containing CBD, is pleased to announce following its launch of Probulin Probiotics on Alibaba Group Holding's Tmall Global ("Tmall"), it has now received conditional approval to launch HempFusion's CBD products on Tmall, the world's largest cross border online marketplace reaching more than **750 million new potential new consumers** across mainland China, Hong Kong, Macau and Taiwan.



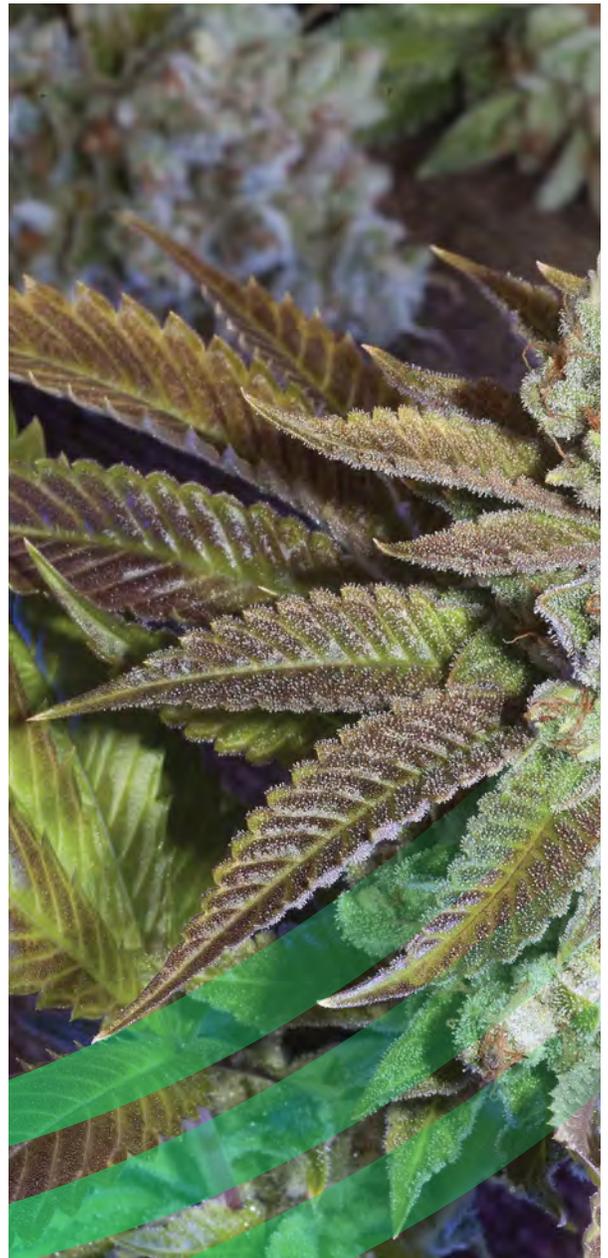
...Our goal is to achieve the same brand awareness and reach that top spot.  
- HempFusion CEO Paul Mitchell



HempFusion's topicals with CBD are expected to launch on Tmall soon and will include its OTC drug listed Acne Relief, Eczema Relief, and Sports Relief Creams, Pain Relief and Sports Pain Relief Balms, Pain Relief Gel and Wound Ointment, with more products expected to follow.

These unique formulations include a proprietary skin nourishing and moisturizing base with Aloe vera, Sheabutter, Jojoba Oil, Hemp derived omega fatty acids and CBD as well as many other botanicals.

HempFusion is ranked #2 in brand awareness according to a recent survey conducted by Brightfield Group. "Our goal is to achieve the same brand awareness and reach that top spot in Greater China," added Dr. Mitchell.



InMed Pharmaceuticals (NASDAQ: INM)

# fundamental analysis



## Location

HQ: Vancouver, BC, Canada

Founded: 1981

## Focus: Neutral

InMed, a clinical stage biopharmaceutical company, is focused on the therapeutic application of rare cannabinoids which are helpful in the treatment of diseases with unmet medical needs. InMed is in the process of developing biosynthetic manufacturing that targets the production of rare cannabinoids that are very much identical to those produced biologically by the plant.

The company's lead product is INM-755, a topical cannabinoid product candidate to treat epidermolysis bullosa. This is phase 1 clinical trials. The company is also involved in developing INM-088, a cannabinoid-based topical therapy for glaucoma; and INM-405 for the treatment of orofacial pain. In addition, it engages in the development of drugs for the treatment of various diseases, including dermatology, ocular, pain, inflammation, cancer, and other disease areas.

## Size: Weak

**Market Cap:** US \$28.3 mil**Enterprise Value:** US \$18.4 mil**Number of employees:** 14

## Markets: Neutral

**Primary:** Canada**Secondary:** USA

## Subsidiaries, Interests:

Majority: SDM Enterprises, Savicon, Time Search, Biogen Sciences, Sweetnam Consulting, Thinapse Systems, AssistGlobal, The Praxium Group.

Minority interests: None

## Operations: Neutral

### Cultivation:

Present Productions: None

Future production: Developing biosynthetic manufacturing approaches in E-coli.

### Distribution:

Direct sales: None

Store networks: None

Supply agreements: None yet, attempting clinical trial route.

### Integration/Diversification:

Vertically integrated: No

Horizontally diversified: No

InMed Pharmaceuticals (NASDAQ: INM)

# fundamental analysis



## Financials: **Weak**

Revenue (Q3 2020): None  
 Shares Outstanding (diluted): 172.3 million (now 5.22 million)  
 Return on Equity: -88%

## Management: **Neutral**

CEO: Eric Adams  
 Co-Founder: Sazzad Hossain  
 CFO: Bruce Colwill

Eric A. Adams, has more than 25 years of experience in the biopharmaceutical industry, and has reconstituted the Executive management team of InMed while raising more than \$35M in capital to fund operations. Bruce S. Colwill, CFO of InMed, also has greater than 25 years of experience at pharmaceutical companies in financial leadership capacities.

## Branding: **Neutral**

InMed Pharmaceuticals is positioning itself as a company with a focus on research and development of cannabinoid based treatments for rare diseases. InMed is in the process of launching three pipeline products for the treatment of glaucoma, orofacial pain, and epidermolysis bullosa with a total market potential of of \$10 billion.

## Valuation: **Neutral**

Current share price: US \$3.63  
 Price to Sales: NA (no sales yet)  
 EV / EBITDA: NA  
 52 week low/high: US \$2.95-\$10.42  
 Price/Book: 3.66

## Financing: **Neutral**

They had \$9.89 million in cash and cash equivalents on hand at the end of Q3 2020. This is more than enough to finance their new fiscal year. R&D expenditures are at around \$6 million per year.

## Risks: **High**

The risks of investing in any cannabis company are currently high given the newness of the market. The risks of investing in this company are medium given the hit or miss nature of biopharmaceutical companies and their play to get on the NASDAQ.

InMed Pharmaceuticals (NASDAQ: INM)

# fundamental analysis



## Recommendation: **Neutral** (now); **Strong** (Long Term)

InMed, a clinical stage biopharmaceutical company, is focused on the therapeutic application of rare cannabinoids which are helpful in the treatment of rare diseases. InMed is in the process of developing biosynthetic manufacturing approaches that target the production of rare cannabinoids that are very much identical to those produced biologically by the plant.

InMed is launching three pipeline products for the treatment of glaucoma, orofacial pain and epidermolysis bullosa with a total market potential of of \$10 billion.

InMed's drug candidates are all based on CBN, a cannabinoid they make from E-coli (everyone else gets it from the cannabis plant). They have CBN in multiple formats for clinical trials. INM-755 is in it's second phase 1 clinical trial and has shown excellent safety profiles previously. INM-088 is it's second drug candidate, a little farther behind in development.

### Will its stock price improve in the long term? Likely.

By March 31, 2020, InMed's cash, cash equivalents and short-term investments were \$9.89 million which is enough to finance operations in 2021 as they are currently spending around \$6 million in drug development each year.

They also are attempting a share consolidation at 33 to 1 to become listed on the NASDAQ. This would be great for liquidity. Since all their drug candidates are just that, candidates, they have nothing to sell and have no revenue. This is obviously tough. If INM-755 moves through successfully to phase 3 clinical trials watch for this stock to skyrocket.

For these reasons, we think InMed, at or near its current price of \$4.59 a share, can be good investment opportunity. When we analyzed this stock last year, we gave it a strong rating (it was at \$0.20)!



Kalytera Therapeutics, Inc. (OTC: KALTF)

# fundamental analysis



## Location

HQ: Novato, CA, USA  
 Founded: 2014

## Focus: Strong

Kalytera Therapeutics, Inc. is a small clinical-stage pharmaceutical company that develops cannabinoid medicines. Its current focus is on CBD formulations to treat GVHD (acute graft versus host disease—when donor cells attack patient organs) which commonly occurs after bone marrow transplants.

Phase 2 results were promising and Phase 3 clinical registration has occurred. They have recently tried to purchase a company with a Covid-19 potential treatment (Salzman Group).

## Size: Weak

**Market Cap:** US \$17.4 mil

**Enterprise Value:** US \$17.8 mil

## Markets: Neutral

The company does not yet market any product. If its GVHD products are approved, the market across the US, western Europe and Japan is estimated to be \$408 million and growing (1.3 billion by 2027). It is all or none for them on this drug.

**Primary:** USA

**Secondary:** Europe, Japan

### Subsidiaries, Interests:

Majority: Talent Biotechs Ltd., Salzman Group

Minority interests: None

## Operations: Neutral

**Cultivation:**

Present Productions: None

Future production: None

All CBD used in their drug candidate formulations was produced in a cGMP facility.

**Distribution:**

Direct sales: No

Store networks: None

Supply agreements: Ongoing discussions to set up if drug passes Phase 3 Clinical trial (ongoing)

**Integration/Diversification:**

Vertically integrated: No

Horizontally diversified: Yes, if other drugs are added to their pipeline

Kalytera Therapeutics, Inc. (OTC: KALTF)

# fundamental analysis



## Financials: **Weak**

Revenue (TTM): \$0  
 Shares Outstanding (diluted): 571 million  
 Return on Equity: -192%

## Management: **Neutral**

CEO: Robert Farrell JD  
 CSO: Dr. Sari Prutchi-Sagiv  
 CFO: Victoria Diana Rudman (Interim)

The Co-Founder, Seth Yakatan, is also part of the management team. Robert Farrell makes \$353k per year while the interim CFO is reportedly making \$53k. The team is better at business deals than drug development.

## Branding: **Weak**

They have no branding ready for any drug, if approved. They would likely license drug rights to other companies if it does pass through Phase 3 trials.

## Valuation: **Neutral**

Current share price: \$0.0338  
 Price to Sales: NA (no sales yet)  
 52 week low/high: \$0.00-\$0.254  
 Price/Book: 7.45  
 EV/Revenue: NA

## Financing: **Weak**

In July 2020 they closed a private placement of common shares and warrants which raised CDN \$309,430 from the issuance of 20,628,700 shares and 10,3314,350 warrants. Eeek. That is a ton of dilution for a tiny amount of cash.

## Risks: **High**

The risks of investing in any cannabis company are currently high given the newness of the market. The risks of investing in this company are very high, since it does not yet have a product or any revenue or income.

Kalytera Therapeutics, Inc. (OTC: KALTF)

# fundamental analysis



## Recommendation: **Weak**

Kalytera has an interesting and potentially profitable goal to treat GVHD (acute graft versus host disease). There are currently no therapies for GVHD, and they have two patents on a proprietary CBD formulation. This is currently in Phase 3 trials. If this drug is approved by the FDA, they would likely license rights out to different companies to market and distribute it. The timeline for the Phase 3 trials are 12 months.

They've recently entered into an agreement to acquire Salzman Group and develop and commercialize a covid-19 drug (R-107; nitric oxide). They are using 49.9% of Kalytera's outstanding shares to do so and asking shareholders to approve a 20:1 reverse stock split. The Salzman Group has federal funding from the United States government (\$20 million USD now and potential \$70 million later) to develop the nitric oxide drug to help fight covid-19. R-107, will also be used in other medical indications.

This is all good news but risky as they all need federal approval to generate any revenue and needs long timelines for FDA approval. KLY was burning \$11 CAD million a year on R&D with just their CBD drug and now will burn much more. The gamble is that the US government will foot most of the bill moving forward.

Will its stock price improve in the long term? Not likely.

KLY doesn't have a huge amount of debt (\$3 million) but they also have very little cash on hand. Return on equity is around -200% and potential pathways to revenue are all far off (2021 at least). Their drug pipeline is a bit exciting but too far off and too risky for us. We recommend staying away for all of 2020.

For these reasons, we think KLY, at or near its current price of \$0.025 a share, is a poor long investment opportunity. Check out [cannin.com](http://cannin.com) for many more winners in the cannabis and hemp industry.



GRN Holdings (OTC: GRNF)

# fundamental analysis



## Location

HQ: Seattle, WA, USA  
 Founded: 2010

## Focus: **Weak**

GRN Holdings is a shell company historically involved in wireless phones, then exploratory gold mining in Africa, finally is entering the hemp and CBD space in WA and FL. These changes came in 2019 with new management.

## Size: **Weak**

**Market Cap:** \$8.5 mil  
**Enterprise Value:** \$8.7 mil  
**Number of Employees:** 1

## Markets: **Weak**

**Primary:** WA, FL  
**Secondary:** USA

## Subsidiaries, Interests:

Discovery Gold Ghana Limited

## Operations: **Weak**

**Cultivation:** Has acquired rights to Magic Beans Hemp, LLC in WA and Sunshine Hemp, Inc. in FL. These companies may give GRN the capabilities to sell and grow hemp seeds in multiple markets.  
 Current production: None

## Distribution:

Direct sales: None. Recent agreements with Soulshine CBD, Inc. may give them products to get into retail storefronts in the future.

**Store networks:** None

## Integration/Diversification:

Vertically integrated: No  
 Horizontally diversified: In progress

## Financials: **Weak**

Revenue (TTM): \$0  
 Shares Outstanding (diluted): 249.8 million  
 Return on Equity: NA

## Management: **Weak**

CEO: Justin Costello (and President, CFO, Secretary, Treasurer and Director)

GRN Holdings (OTC: GRNF)

# fundamental analysis



## Branding: **Weak**

GRN has no products and no branding.

## Valuation: **Weak**

Current share price: \$0.098  
 Price to Sales: NA (no sales)  
 52 week low/high: \$0.026-\$0.61  
 EV/EBITDA: -18.5  
 Price/Book: 203

## Financing: **Weak**

They have zero revenue but also little debt, \$236k. They finance all their acquisitions with small cash or all stock deals.

## Risks: **High**

The risks of investing in this company are extremely high. Proceed with caution.

## Recommendation: **Weak**

GRNF trades on the pink OTC ticker. Historically they were in the wireless phone business. That failed. Then they entered the gold industry, buying an exploratory company in Ghana. That failed. Enter GRN Funds and Justin Costello in summer 2019. He took control of the company by purchasing 139 million shares for \$300k.

Since then various non-binding letter of intent have been published on the website. These companies include: Pacific Banking Corp, Pacific Merchant Processing, Inc, Microcap Advisors, SMLY, Inc, Soulshine Development Group, Soulshine CBD, One Source CBD, Mystic Ranch Development Co, Magic Beans Hemp, Sunshine Hemp, and Squad Drone. As you can see they are laser focused on hemp and CBD. And payment processing. And drones. Maybe not so laser focused.

The company has zero revenue. Their Annual Report Form 10-K filed with the SEC actually says "At this time, we have not identified specific planned revenue streams. During the years ended April 30, 2020 and 2019, we did not recognize any revenue." The company hasn't made a dollar in over 2 years. They've signed only non-binding letters of intent and have followed through with no transactions. All this "activity" is good for press releases which may drive stock prices up. Once the stock price goes up, mgmt (read Justin Costello) likely sells shares. This is called pump and dump. Stay away.

The company also has two lawsuits against it. One for \$2.8 million with claims of breach of contract, negligence, and fraud! This is one of the weakest companies we've ever reviewed. If you really need somewhere to invest, check out cannin.com for many other winners in the cannabis and hemp industry.

# medical research

## medical research news & trends

# increasing acceptance of cannabis is driving medical research and innovation

Cannabis has been used for medicinal purposes around the world for several millenia, but it is far from just an old folk remedy. Modern medical research cannabis has shown it to be an effective treatment for a wide range of conditions from the pain, nausea and loss of appetite commonly experienced by cancer and HIV/AIDS patients to anxiety, depression, epilepsy, psoriasis, gastrointestinal disorders, and hepatic encephalopathy.

It is now widely accepted that cannabis could play an important role in the fight to end the opioid addiction crisis that is plaguing the United States. Both THC and CBD, the two most commonly studied compounds found in cannabis, have powerful analgesic properties, and CBD has the additional advantage of being non-psychoactive. Cannabis is impossible to overdose on, and has few of the serious side effects that are common with opiates, such as organ damage.

Cannabis is safer, cheaper, and more easily manageable than methadone, naltrexone and buprenorphine, which are currently used to treat opioid addiction. For many users, cannabis and low-THC/high-CBD products can therefore serve as excellent substitutes for opioid painkillers, and have the potential to save many lives as well as reducing healthcare costs. As an added benefit, various forms of cannabis can also lessen the symptoms of withdrawal from dependency on opiates, as well as benzodiazepines and alcohol.

While there are lingering misconceptions about the safety of cannabis in some quarters, general attitudes towards it have shifted considerably. Rapid growth in the cannabis sector is now driving innovation in a number of associated areas, including the medical field. Research into applications for cannabis compounds is increasing, and both traditional pharmaceutical groups and specialist biotech companies are developing cannabis-based therapies as well as synthetic analogs.

A handful of medications based on cannabis, or on its specific properties, are already available in various markets, and several others are in the pipeline for launch over the next few years. These prescription drugs contain standardized dosages of the active compounds, have undergone clinical trials, and are approved by the FDA – factors that make them attractive to many physicians and patients who might be hesitant about recommending or using cannabis itself.

In the United States, cannabis is still classified as a Schedule I drug, which is (incorrectly) defined by the Drug Enforcement Agency as having "no currently accepted medical use and a high potential for abuse". As research and medical cannabis product availability gather pace, it will become increasingly harder for the DEA to keep cannabis on the Schedule I list of controlled substances. Even if cannabis-based pharmaceuticals do not prove to be the deciding factor in legalizing cannabis throughout the country, their widespread use is sure to contribute to the lifting of the federal prohibition.

As the cannabis-based pharmaceutical sector develops and its products become widely prescribed, demand for high-quality medical-grade cannabis and industrial hemp will rise. The growth of this sector is therefore likely to be beneficial to producers of top-quality raw materials that can negotiate supply agreements with cannabis-based pharmaceuticals, as well as for the manufacturers of these medical products themselves.

## medical research news & trends

# increasing acceptance of cannabis is driving medical research and innovation, may soon help combat opioid epidemic



**D**rug overdose deaths are now all too common in the United States and the current opioid epidemic is the worst drug crisis US History. Two-thirds of all drug overdose deaths involve an opioid. This crisis recently made national headlines after The White House officially declared the opioid epidemic a public health emergency in late 2017.

In light of this declaration, Public Health Officials plan to roll out initiatives to combat this crisis such as: greater access to opioid treatment for patients in isolated areas, expedited hiring process for the Department of Health and Human Services and allocation of federal grant funds to target those with opioid addictions among other measures. While these measures may help aid in the effort, experts say Congress will need to allocate billions of dollars to properly address the crisis.

Despite increasing awareness of the dangers of opioid abuse, mortality continues to increase, with no signs of slowing, taking over 100 lives each day in the United States. Experts attribute much of this epidemic to an increase in prescriptions of opioids

to combat chronic pain in patients. In an attempt to identify solutions to combat this epidemic some experts have suggested utilizing medical cannabis in lieu of addictive and potential harmful opioid medications.

Early clinical research indicates certain cannabinoids react with pain receptors, indicating that doctors can use cannabis in addition to, or instead of, opioids. Because chronic pain is a major indication for medical cannabis, legislation which establishes access to medical cannabis may impact overdose mortality related to opioid analgesics in states which have legalized cannabis for medical use.

While there is currently no definitive correlation between cannabis legalization and opioid abuse reduction, increasing evidence suggests a link may in fact exist.

# medical research news & trends



**Cannabis is safer, cheaper, and easier to manage  
... to treat opioid addiction.**



In fact, a growing number of members of the medical community now believe that cannabis could play an essential role in the fight to end the opioid addiction crisis that is plaguing the United States. THC and CBD, the two most commonly studied compounds found in cannabis, have powerful analgesic properties. CBD has the additional advantage of being non-psychoactive. Cannabis is impossible to overdose on (for adult humans) and has few of the severe side effects that are common with opiates, such as organ damage.

Cannabis is safer, cheaper, and easier to manage than methadone, naltrexone, and buprenorphine, which are currently used to treat opioid addiction. For many users, cannabis and low-THC/high-CBD products can, therefore, serve as excellent substitutes for opioid painkillers, and have the potential to save many lives as well as reducing healthcare costs. As an added benefit, various forms of cannabis can also lessen the symptoms of withdrawal from dependence on opiates, as well as benzodiazepines and alcohol.

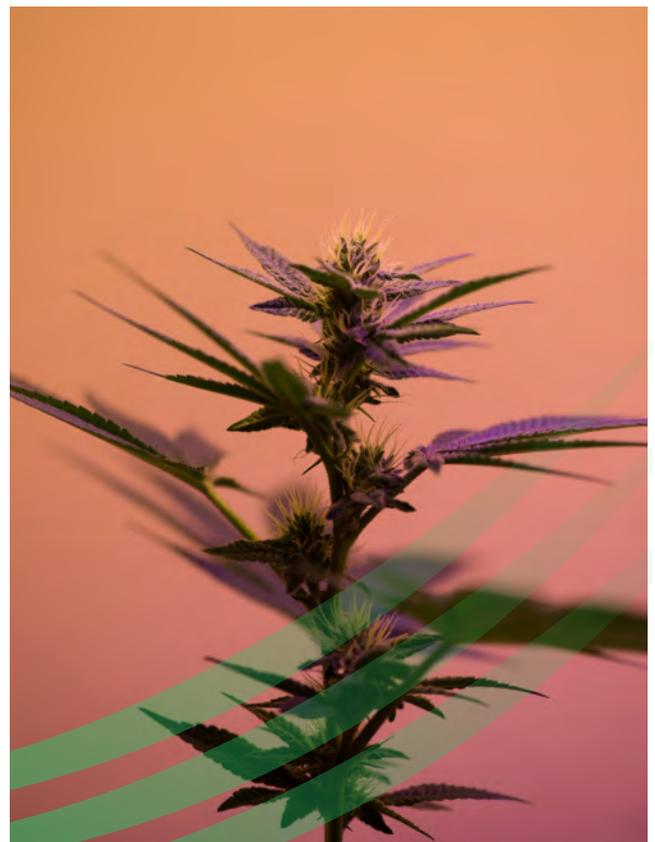
While there are lingering misconceptions about the safety of cannabis in some quarters, general attitudes towards it have shifted considerably. Rapid growth in the cannabis sector is now driving innovation in a number of associated areas, including the medical field. Research into applications for cannabis compounds is increasing, and both traditional pharmaceutical groups and specialist biotech companies are developing cannabis-based therapies as well as synthetic analogs.

A handful of medications based on cannabis, or on its specific properties, are already available in various markets, and several others are in the pipeline for launch over the next few years. These prescription drugs contain standardized dosages of the active compounds, have undergone clinical trials, and are approved by the FDA – factors that make them attractive to many physicians and patients who might be hesitant about recommending or using cannabis itself.

In the United States, cannabis is still classified as a Schedule I drug, which is (incorrectly) defined by the Drug Enforcement Agency as having "no currently accepted medical use and a high potential for abuse".

As research and medical cannabis product availability gather pace, it will become increasingly harder for the DEA to keep cannabis on the Schedule I list of controlled substances. Even if cannabis-based pharmaceuticals do not prove to be the deciding factor in legalizing cannabis throughout the country, their widespread use is sure to contribute to the lifting of the federal prohibition.

As the cannabis-based pharmaceutical sector develops and its products become widely prescribed, demand for high-quality medical-grade cannabis and industrial hemp will continue to increase. The growth of this industry is therefore likely to be beneficial to producers of top-quality raw materials that can negotiate supply agreements with cannabis-based pharmaceuticals, as well as for the manufacturers of these medical products themselves.



# medical research news & trends

## cannin has selected a shortlist of some of the most exciting players in the field of cannabis-based therapies at the moment:

### Arena Pharmaceuticals (NASDAQ:ARNA)

Arena is a biopharmaceutical company that develops small molecule drugs for a variety of conditions. The company is currently conducting clinical trials on APD371, a powerful, selective cannabinoid-2 (CB2) agonist that is intended to treat visceral pain experienced by Crohn's Disease patients. This novel compound acts on the body's cannabinoid-2 receptors to suppress intestinal inflammation that causes chronic pain. The highly selective nature of this compound means it is non-psychoactive and non-dependence forming.

### GW Pharmaceuticals (NASDAQ:GWPH)

UK-based GW Pharmaceuticals is the global leader in plant-based cannabinoid therapeutics and has several innovative new drugs in its pipeline. Its Sativex® (nabiximols) mouth spray was the first-ever prescription drug formulated from plant-based cannabinoids and is now used in 30 countries (but not in the US) to treat spasticity, neuropathic pain and other symptoms of multiple sclerosis. GW is currently conducting clinical trials on Epidiolex®, a new type of drug based on purified cannabidiol (CBD) that is intended to treat Lennox-Gastaut syndrome, Dravet syndrome, and other intractable childhood epilepsy disorders. Data from phase 3 of the study have been published in *The Lancet*, and show the drug to be effective and well tolerated.

### Insys Therapeutics (NASDAQ:INSY)

Insys' activities include the development of pharmaceutical cannabinoids and novel drug delivery systems. Syndros® is a synthetic THC drug that treats loss of appetite, nausea, and vomiting in cancer and HIV/AIDS patients. The company's product pipeline holds several therapeutics, including a liquid cannabinoid solution for pediatric epilepsy and an inhalable dronabinol (THC) system. Insys has recently announced that another oral cannabinoid for Prader-Willi syndrome, a genetic disorder that can cause childhood obesity and type 2 diabetes.



### Zynerba Pharmaceuticals (NASDAQ:ZYNE)

Zynerba specializes in developing transdermal cannabinoid therapeutics and has now announced that its products will be focused on the treatment of rare psychiatric and neurological disorders. One drug is ZYN001, a patch that delivers an inactive form of synthetic THC into the bloodstream, where it becomes active. ZYN001 is intended for the treatment of neuropsychiatric conditions such as Tourette syndrome. ZYN002 is a synthetic CBD gel that has been awarded an Orphan Drug Designation for fragile X syndrome by the FDA.

**PreveCeutical Medical (OTC:PRVCF)** PreveCeutical is a Canada-based life science company that develops innovative therapies for a range of conditions using organic and Nature Identical™ compounds. Its Sol-gel delivery system is currently in development and was approved in 2019 for licensing to medical cannabis producers. Sol-gels are controlled-release CBD gels that are administered nasally and remain active in the nasal passages for up to seven days. This delivery method ensures easy application, exceptionally high bioavailability, and rapid delivery to the brain.

# medical research news & trends

## where marijuana is legal, opioid prescriptions

As more states legalize medical and recreational marijuana, may be replacing opioid prescriptions with suggestions to visit a local marijuana dispensary. Two papers published Monday in *JAMA Internal Medicine* analyzing more than five years of Medicare Part D and Medicaid prescription data found that after states legalized weed, the number of opioid prescriptions and the daily dose of opioids went way down. That indicates that some people may be shifting away from prescription drugs to cannabis, though the studies can't say whether this substitution is actually happening or if patients or doctors are the driving force.

"In this time when we are so concerned—rightly so—about opiate misuse and abuse and the mortality that's occurring, we need to be clear-eyed and use evidence to drive our policies," said W. David Bradford, an economist at the University of Georgia and an author of one of the studies. "If you're interested in giving people options for pain management that don't bring the particular risks that opiates do, states should contemplate turning on dispensary-based cannabis policies."

Previous research has pointed to a similar correlation. A 2014 paper found that states with medical marijuana laws had nearly 25 percent fewer deaths from opioid overdoses. But the new research is the first to connect marijuana legalization to prescription painkillers with such large data sets.

One of the two new studies found that people on Medicare filled 14 percent fewer prescriptions for opioids after medical marijuana laws were passed in their states. The second study found that Medicaid enrollees filled nearly 40 fewer opioid prescriptions per 1,000 people each year after their state passed any law making cannabis accessible—with greater drops seen in states that legalized both medical and recreational marijuana.

Those findings are somewhat positive from a public health angle. Opioids, in addition to an addictive potential much greater than that of marijuana, have other unappealing side effects. "The effect of opioids chronically—they wreak havoc on your GI tract," said Marie Hayes, a psychologist at the University of Maine.

Of course, medical cannabis is a drug with side effects, too. Obviously people can get high, though that does depend on the concentration of the psychoactive compound, tetrahydrocannabinol, in the strain or formulation that someone is using.

Marijuana's safety profile isn't really at issue. "People are convinced of its safety," Hayes said. But there's just not a lot of evidence supporting marijuana as a chronic pain treatment in its own right. "I would say the evidence has been very modest up until about 10 years ago, because nobody would fund the research," she said. Still, opioids as a chronic pain treatment have a checkered reputation as well: One recent study found opioids didn't provide any more relief for chronic arthritis pain than over-the-counter painkillers.

Americans seem more willing than ever to accept marijuana. A recent Pew survey found that 61 percent of Americans favor legalizing pot. Nine states and the District of Columbia allow adults to use it for whatever reason they want, while more than 20 other U.S. states permit residents to use marijuana for medicinal purposes. But not all states with medical marijuana laws are created equal, the studies found. States with dispensaries that are open for business saw the greatest decrease in opioid prescriptions, while states without active dispensaries saw a far less dramatic decline—about 7 percent instead of about 14. That makes sense, Bradford noted. There's a big difference between telling someone they can pick up a prescription at a local pharmacy and telling someone they should go pick up some plants and grow them at home for a few months, often with little help or support.

Neither Medicaid nor Medicare will reimburse people for money they spend on marijuana. While the amount of money spent on opioids in states with a medical marijuana law fell by about 8 percent, the costs of both treatments might be comparable. "I did a back-of-the-envelope calculation that suggested that a daily pain management dose of hydrocodone would be about \$10 out of pocket in the U.S.," Bradford said, though Medicare Part D plans cover much of that.

# industrial hemp – the world’s most useful plant

## stalk

### construction materials (from pulp)

- Hempcrete
- Panels
- Insulation
- Fiberglass substitute
- Caulking & mortar

### paper (from pulp)

- Newsprint
- Cardboard
- Packaging
- Fine paper

### industrial textiles (from fibers/pulp)

- Rope and cordage
- Carpets
- Tarpaulins
- Sails
- Netting

### textiles (from fibers)

- Fabrics
- Clothing
- Bedsheets
- Diapers
- Upholstery

### petroleum substitutes (from fibers)

- Biomass fuels (ethanol, biodiesel, heavy oils, gas & solid fuels)
- Chemical feedstocks
- Plastics
- Paints

Hemp is the strongest natural fiber in the world, and has thousands of different uses

## leaves

- Mulch and compost
- Excellent for livestock bedding, as they are highly absorbent, deodorizing and pest-repelling
- Cover and weed suppression when planted amongst other crops

## flowers

- CBD oil
- CBD oil lotions & balms
- CBD oil capsules, tinctures & sprays
- Essential oil

## seeds

### foods

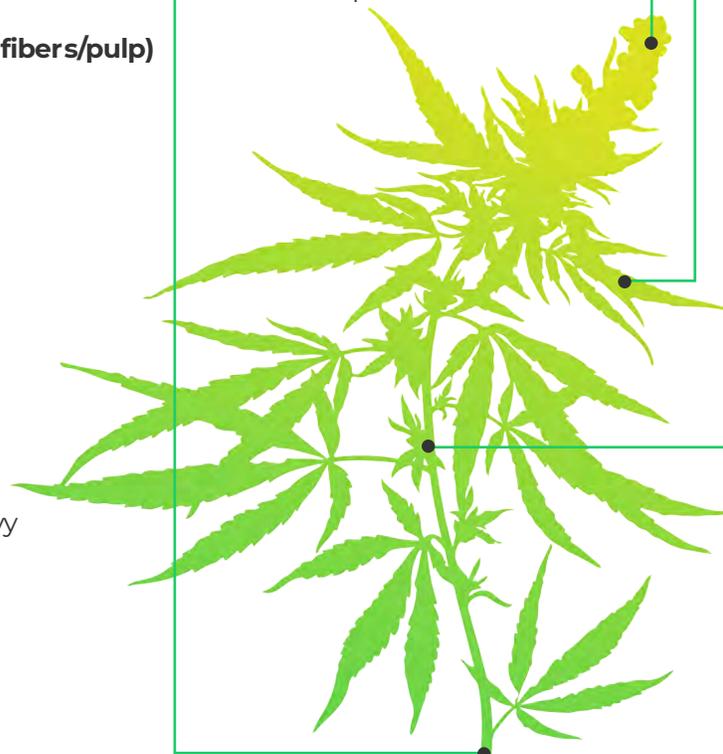
- Hemp seed oil
- Hemp milk
- Hemp seed hearts
- Protein powder
- Essential fatty acid oil supplements
- Animal feed

### industrial products

- Oil paint
- Varnish
- Printing ink
- Various biofuels
- Solvents
- Coatings

### personal care

- Soap
- Shampoo
- Lotions, creams & balms
- Cosmetics



## roots

- Traditionally used to treat joint pain, broken bones, inflammation, burns, infections and parasites.
- Rehabilitate the soil by drawing toxins from it, which prepares it for other crops.
- Facilitate soil aeration and drainage, and help prevent land erosion.

### benefits of growing industrial hemp:

Hemp grows fast, uses little water, needs no pesticides and yields more per acre than any other crop. It can also prepare the soil for other crops by drawing out toxins and adding back nitrates.

# glossary

... (z nich) w technice produkcji podziału klasowego i wy-  
... lub odprowadzające... k. 2. «wspólnota mienia»  
... II; br D. komży... część maszyny elektrycznej, po kt  
... krótka biała szata... szczotki do

# general cannabis glossary

**11-hydroxy-THC:** The main active metabolite of tetrahydrocannabinol (THC), which is formed in the body following the consumption of cannabis. Cannabis contains tetrahydrocannabinolic acid (THCA) which, once heated, is converted into THC and then metabolized by the body into 11-hydroxy-THC. This molecule is psychoactive as well.

**Aeroponics:** A method of cannabis cultivation in air without the use of soil or other traditional medium.

**Alcohol Extraction:** Process of separating essential oils from cannabis plant material using hydrophobic liquids such as alcohol.

**Aquaponics:** A method of cannabis cultivation using a combination of aquaculture and hydroponics.

**Borosilicate Glass:** Refers to a type of glass, resistant to thermal shock, used to make many glass pipes and dab rigs.

**Bud:** Slang term for female cannabis flower.

**Bud Rot:** A type of fungus which develops within the core of a cannabis bud. This typically occurs in unfavorable growing or drying/curing conditions.

**Budder:** Typically a BHO or CO2 cannabis extract with a “creamy consistency”.

**Budtender:** A medical or recreational cannabis dispensary worker who sells cannabis products.

**Butane Hash Oil (BHO):** Cannabis oil concentrate produced from cannabis flowers using butane as a solvent.

**C1D1 Processing Environment:** Class 1 Division 1 is the classification for a hazardous area where explosion and fire hazards exist because of the presence of flammable gases, vapors or liquids. BHO, ethanol and other solvent extractions are typically required to be performed within a C1D1 environment, however, regulations do vary from municipality to municipality.

**Cannabinoids:** Active molecules produced by cannabis plants. They are involved in psychoactivity as well as the medicinal effects of the plant. Around 100 cannabinoids are known today.

**Cannabinoid Hyperemesis Syndrome:** A condition associated with Cannabis use, typically characterized by symptoms of recurrent nausea, vomiting and abdominal pain found in a percentage of chronic, heavy users of cannabis.

**Cannabinoid Receptor:** Receptors which are activated by THC and CBD (among other compounds) and part of the endocannabinoid system; located throughout the human body.

**Cannabis:** Term short for Cannabis Sativa or Cannabis Indica, the plant.

# general cannabis glossary

**Cannabis Cup:** The world's foremost cannabis festival where judges from around the world sample and vote on their favorite marijuana varieties.

**CBD:** Cannabidiol. This molecule is present in Cannabis and hemp. Known to have many medicinal effects.

**CBN:** Cannabinol. This molecule is present in Cannabis and hemp and is the oxidative product of THC degradation. Known to have many medicinal benefits.

**Closed Loop Extraction:** Typically referring to BHO or Propane extractions, and widely accepted as safer than “open blasting”, this process recycles hydrocarbon solvents within a closed system instead of releasing these gases into the air.

**CMH Light:** Ceramic Metal Halide (CMH) is a broad spectrum lamp typically used for indoor cultivation.

**CO2 Oil:** Cannabis oil concentrate produced using carbon dioxide as a solvent. Often produced at elevated temperatures and pressures.

**Concentrates:** Cannabis products with elevated concentrations of THC or CBD.

**Dab:** A smokable marijuana concentrate which is typically the product of a BHO or CO2 extraction.

**Decarboxylate:** The process of heating cannabis at lower temperatures to activate inactive cannabinoids like THCA and CBDA into their active forms THC and CBD, respectively. Decarboxylation also happens naturally with exposure to light, air and heat.

**Dimethylheptylpyran:** Synthetic analogue of THC, invented in 1949.

**Dispensary:** A storefront which is licensed to sell medical and or recreational cannabis products.

**Distillate:** A “solvent-free”, process of concentrating to high-potency cannabis concentrates which is typically the product of either a “short path” or “fractional” distillation.

**Edibles:** Consumable final products produced by cannabis companies. Typical products include cookies, chocolates, gummies and mints/lozenges.

**Eighth:** Refers to a typical measurement of  $\frac{1}{8}$  of an ounce of cannabis, or 3.5 grams.

**Entourage Effect:** The concept of interactive synergy between various cannabis compounds.

**Extraction:** The process of removing cannabis compounds from plant materials typically by using solvents and heat.

**Feminization:** A process of conditioning female plants to obtain male pollen needed for seed production.

# general cannabis glossary

**Fertigation:** Refers to the injection of fertilizers and water-soluble nutrient products into an irrigation system.

**Flavonoid:** Phytonutrients in cannabis, and other plants, which are known for providing non-green color pigments and produce a range of effects.

**Flowering Stage:** Refers to the final stage of cannabis cultivation, post vegetation stage, whereby cannabis flowers develop typically using a light cycle of 12 hours “under light” and 12 hours of “light deprivation” during a 24 hour cycle.

**Flush:** Prior to harvest and lasting anywhere from a few days to a few weeks, whereby mature, flowering cannabis plants are only given water and no other nutrients in an attempt to improve quality and “smoothness” of cannabis buds.

**Fractional Distillation:** A method of extraction whereby a liquid mixture is separated into fractions based on differences in boiling points of various compounds after heat is applied.

**Half:** Refers to a typical measurement of cannabis equal to 14 grams.

**Hash:** Traditionally the resin collected from the flowers of the cannabis plant but may be used to refer to one or more of the various concentrated cannabis products available on the market today.

**Hermaphroditic Cannabis:** Cannabis demonstrating both male and female reproductive organs, having origins which are either genetic or environmental, often caused by “light leak” during flowering stages and/or significant variations in PH levels among other factors.

**Hemp:** A type of cannabis grown for its fibrous content as well as CBD content.

**High-cannabinoid full spectrum extract (HCFSE):** Hydrocarbon method of extraction which aims to preserve cannabinoids.

**High-terpene full spectrum extract (HTFSE):** Hydrocarbon method of extraction which aims to preserve terpenes.

**HPS Light:** High Pressure Sodium (HPS) is a broad spectrum lamp typically used for indoor cultivation.

**Hybrid:** Strains containing a mix of sativa and indica genetics, can be found to have varying THC:CBD cannabinoid concentrations

**Hydrocarbon Extractions:** Currently one of the most prevalent forms of extraction using Butane, Propane or other hydrocarbon solvents.

**Hydroponics:** A growing system for plants using water as a growth medium to deliver nutrients.

**Indica:** Cannabis Indica is one of the two main species of Cannabis with a short, densely branched, wide-leaf appearance.

# general cannabis glossary

**Kief:** Substance referring to the resinous trichomes of cannabis.

**Landrace:** A domesticated, traditional species of cannabis which has developed over a period of time through adaptation to its natural environment and isolation from other populations or species.

**LED Light:** Light Emitting Diode (LED) is a broad spectrum lamp typically used for indoor cultivation.

**Live Resin:** A type of cannabis concentrate manufactured using a technique which takes freshly harvested cannabis and freezes it to subcritical temperatures both before and during the extraction process.

**Man-Trap:** Also known as an “air lock”, “sally port” which comprises a small space with interlocking doors. Used to maintain cleanliness and mitigate contamination and potential crop-loss within a cultivation facility.

**MIP:** Marijuana Infused Products facility where various products are sourced and/or manufactured and infused with cannabis extracts.

**Mother Plants:** Stock plants specifically raised to provide cuttings (clones) for new plants.

**Nabilone:** A synthetic cannabinoid with antiemetic and analgesic medicinal benefits.

**Open Blasting:** Process of performing a solvent-based extraction without the use of a closed-loop system. Typically very dangerous and banned in many cities and states.

**Ounce:** Refers to a typical measurement of cannabis equal to 28.35 grams.

**Percolator:** Common accoutrement to many water pipes, this device serving as an extra water chamber provides greater diffusion/filtration for better inhalation.

**Phenotype:** The combination of a plant’s observable traits including appearance and biochemical properties.

**Plant Cloning:** A simple process which allows you to replicate a plant by taking a clipping and adding plant hormones to encourage the development of new roots.

**Pre-roll:** A cannabis flower joint (rolled in paper).

**Purging:** Process of removing residual solvents from extract concentrates.

**Residual Solvent:** Remaining solvent within a concentrate post processing.

**Rick Simpson Oil:** A highly-concentrated cannabis oil containing at least 20% THC.

**Rosin:** A cannabis concentrate produced via heat and pressure techniques, free of solvent purification.

# general cannabis glossary

**Rotary Evaporator:** Also known as a “rotovap” this device is used to aid in the removal of solvents during the extraction process.

**Sativa:** Cannabis Sativa is one of the two main species of Cannabis with a tall, loosely branched, long, narrow leaf appearance. Known to reach heights of up to 20 feet.

**Schwag:** Slang term for poor quality cannabis.

**Sea of Green:** The idea of growing many smaller cannabis plants instead of fewer, larger ones.

**Seed to Sale Concentrates:** Cannabis concentrates created and sold by a single source

**Shatter:** A cannabis concentrate produced from cannabis flowers that hardens after processing with hydrocarbons. Typically after hardening, slabs can be broken apart and “shatter” hence the name.

**Short Path Distillation:** A distillation technique whereby a molecule travels a short distance at a reduced pressure.

**Spider Mites:** Any number of species of arachnid which both feed on and kill cannabis plants.

**Strain:** A slang name for different cultivars, or phenotypes, of cannabis sativa plants.

**Supercritical CO2 Extraction:** An extraction technique which creates phase changes in carbon dioxide using both temperature and pressure.

**Terpenes:** Pungent essential oils within cannabis which have distinct flavor profiles.

**Testing Laboratory:** Labs which provide analytical data pertaining to both potency and safety of all cannabinoid infused products and medicines.

**THC:** Tetrahydrocannabinol, the active molecule in cannabis sativa. Responsible for the psychoactivity of cannabis.

**THC-A:** Tetrahydrocannabinolic acid. The acidic precursor of THC, made by the cannabis sativa plant.

**Tincture:** A liquid edible made from cannabis. Often also includes ethanol, non-cannabis oils, or glycerin as carrier agents for cannabinoids. Orally delivered.

**Tissue Culture:** A technique used to maintain or grow plant cells under sterile conditions in an artificial medium.

**Topical:** A cannabis infused product manufactured to apply to the skin. Often produced with permeation enhancers to increase effects.

**Trichome:** A cannabis sativa plant structure responsible for manufacturing cannabinoids and terpenoids in the plant.

# general cannabis glossary

**Vacuum Oven:** A device used in the post-extraction process which is commonly used to remove residual solvents through evaporation.

**Vape Pen:** A compact medical delivery device, typically with a heating element, than upon achieving high temperatures can volatilize cannabinoids for ingestion.

**Vaporizer:** A medical delivery device, typically with a heating element, than upon achieving high temperatures can volatilize cannabinoids for ingestion.

**Vegetative Stage:** Refers to the growth stage of a cannabis plant prior to the flowering stage.

**Wax:** Also known as “Ear Wax”, this term refers to cannabis concentrate produced from cannabis flowers typically using hydrocarbons. Waxes are softer in than shatters.

# industry glossary

**52 Week High** - A stock's high point over the last 52-week period.

**52 Week Low** - A stock's low point over the last 52-week period.

**Alpha** - The expected return from an investment from its inherent value.

**Annual report** - The yearly audited record of a corporation or a mutual fund's performance that is distributed to shareholders.

**Annualized rate of return** - The average annual return over a period of years, taking into account the effect of compounding. Also known as compound growth rate.

**Appreciation** - The increase in value of a financial asset.

**Bear market** - A bear market is a prolonged period of falling stock prices. The opposite of a bull market.

**Beta** - A measurement of volatility where 1 is neutral; above 1 is more volatile; and less than 1 is less volatile.

**Bull market** - Any market in which prices are advancing in an upward trend. The opposite of a bear market.

**Capital loss** - The amount by which the proceeds of a sale of a stock are less than its purchase price.

**Capitalization** - The market value of a company, calculated by multiplying the number of outstanding shares by the price.

**Dividend** - A dividend is an optional portion of a company's profit paid to shareholders.

**Dow Jones Industrial Average (DOW)** - The most commonly used indicator of stock market performance, based on prices of 30 actively traded blue chip stocks, primarily major industrial companies.

**Equity fund** - A mutual fund or collective fund in which the money is invested primarily in common and/or preferred stock. Stock funds may vary, depending on the fund's investment objective.

**Federal Reserve Board (The Fed)** - The governing board of the Federal Reserve System, they regulate the nation's money supply by setting the discount rate, tightening or easing the availability of credit in the economy.

**Index** - An investment index tracks the performance of many investments as a way of measuring the overall performance of a particular investment category. The S&P 500, for example, is a benchmark for large-stock investors. It tracks the performance of 500 large U.S. company stocks.

# industry glossary

**Inflation** - A rise in the prices of goods and services.

**Large-cap** - The market capitalization of companies with market values greater than \$10 billion.

**Market price** - The current price of an stock.

**Market risk** - A certain possibility that an investment will not achieve its target price.

**Mid-cap** - The market capitalization of companies with market values between \$3 to \$10 billion.

**NASDAQ** - National Association of Securities Dealers Automated Quotations system, which is owned and operated by the National Association of Securities Dealers. NASDAQ is a computerized system that provides brokers and dealers with price quotations for securities traded over-the-counter as well as for many New York Stock Exchange listed securities.

**Portfolio** - A collection of investments managed as a collective whole with specific investment goals in mind.

**Price-to-earnings (P/E) Ratio** - A stock's price divided by its earnings per share, which indicates how much investors are paying for a company's earning power.

**Recession** - A downturn in economic activity, defined by many economists as at least two consecutive quarters of decline in a country's gross domestic product.

**Risk tolerance** - The degree to which one can tolerate volatility in their investments.

**Securities** - Another name for investments such as stocks or bonds.

**Securities and Exchange Commission (SEC)** - The federal agency created by the Securities and Exchange Act of 1934 that administers the laws governing the securities industry, including the registration and distribution of mutual fund shares.

**Share** - A unit of ownership in an investment, such as a share of a stock or a mutual fund.

**Standard & Poor's Index** - Broad-based measurement of changes in stock market conditions based on the average performance of 500 widely held common stocks commonly known as the Standard & Poor's 500 or S&P 500.

**Valuation** - An estimate of the value or worth of a company or the price investors assign to an individual stock.

**Volatility** - The amount and frequency with which a stock can fluctuate in value.