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Zacks Small-Cap Research

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FSD Pharma Inc. (CN.HUGE - CSE)

FSD Pharma is conducting Phase 1 clinical trial of FSD-201 for inflammation and has FDA approval for a Phase 2a clinical trial design for the treatment of COVID-19 patients

Based on comparative analysis that utilizes the valuation metric of price-to-book (P/B), an average industry P/B ratio indicates a share price target of $16.45

Current Price (06/05/20)	$7.25
Valuation	**$16.45**

OUTLOOK

FSD Pharma (CSE: HUGE; NASDAQ: HUGE) is evolving into a specialty biotech pharmaceutical R&D company focused on developing a pipeline of FDA-approved synthetic compounds that target the human endocannabinoid system for a variety of clinical indications. FSD Pharma has initiated Phase 1 human safety and tolerability trials for FSD-201, **ultra-micronized** formulations of **PEA** and has received FDA approval to design a Phase 2a clinical trial to **treat patients** with a suspected or confirmed **COVID-19 diagnosis**. Management is selling non-core equity positions and is raising new capital to fund the company's pharmaceutical R&D programs.
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SUMMARY DATA

52-Week High	**$40.20**
52-Week Low	**$3.51**
One-Year Return (%)	**-81.97**
Beta	**0.77**
Average Daily Volume (shrs.)	**38,810**
Shares Outstanding (million)	**8.697**
Market Capitalization ($mil.)	**$63.06**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**0**
Insider Ownership (%)	**N/A**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/M**
P/E using 2019 Estimate	**N/M**
P/E using 2020 Estimate	**N/M**

Risk Level	**Above Average**
Type of Stock	**Small - Growth**
Industry	**Medical Products**

ZACKS ESTIMATES

Revenue
(in millions of $CDN)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2017	0.0 A	0.0 A	0.0 A	0.0 A	0.0 A
2018	0.0 A	0.0 A	0.0 A	0.0 A	0.1 A
2019	0.0 A	0.0 A	0.0 A	0.3 A	0.3 A
2020	0.0 A	0.0 E	0.0 E	0.0 E	0.0 E

Earnings per Share
(EPS is operating earnings before non-recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2017	-$0.01 A	-$0.01 A	-$2.06 A	-$0.14 A	-$1.61 A
2018	-$2.43 A	$0.76 A	$0.59 A	-$9.54 A	-$3.85 A
2019	-$0.17 A	-$2.17 A	-$2.20 A	-$2.49 A	-$7.37 A
2020	-$1.33 A	-$1.11 E	-$0.97 E	-$1.07 E	-$4.44 E

Quarterly EPS may not equal annual EPS total due to rounding

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RECENT NEWS

FSD Pharma continues to **evolve into a specialty, biotech pharmaceutical R&D company** as management advances its strategic objective of developing, over time, a pipeline of FDA-approved synthetic compounds that target the human endocannabinoid system. Through the **acquisition of Prismic Pharmaceuticals** in June 2019, FSD Pharma attained the exclusive, worldwide rights (except for Italy and Spain) of the micronized formulations of palmitoylethanolamide (**micro-PEA and ultra-micronized-PEA**), which targets the CB2 receptor of the endocannabinoid system.

Ultra-micronized-PEA Phase 1 Safety and Tolerability Trial for Inflammation

PP-101 ultra-micronized-PEA is the company's lead candidate, which is undergoing a **Phase 1 randomized, double-blind, placebo-controlled human safety and tolerability clinical trial at Alfred Hospital in Melbourne, Australia** utilizing single and multiple ascending doses of ultra-micronized-PEA (FSD-201, formerly PP-101) in normal healthy volunteers. Animal safety and pharmacology studies will also be performed. PEA is a naturally occurring anti-inflammatory agent that is be expected to be effective in many inflammatory ailments, including chronic pain, and arthritis (particularly early stage osteoarthritis), among others. Micronization of PEA improves its oral bio-availability, and this micronization technique is protected by patents until 2030. The Phase 1 study in Australia is progressing with three single ascending dose cohorts having been completed as of May 14th. Thus far, all three dose levels have been well tolerated without any serious adverse events having been reported. Management anticipates that the clinical portion of the study will be completed during the second quarter of 2020. The clinical study is being completed in accordance with FDA-approved guidelines.

FSD-201 Ultra-micronized-PEA Phase 2a Clinical Trial for COVID-19-related Inflammation

On June 3, 2020, FSD Pharma announced that the FDA has given permission to the company to design a proof-of-concept study for the use of **ultra-micronized PEA (FSD-201)** as a **treatment for COVID-19 patients**. The life-threating stage of COVID-19 is characterized by an acute, elevated inflammatory response in the lungs that too often leads to death. Management became aware that some Italian physicians/scientists supported the use of ultra-micronized PEA to treat the symptoms of COVID-19 due to the drug's mechanism of action and its anti-inflammatory profile. Therefore, FSD Pharma is pursuing the advancement of ultra-micronized PEA through the regulatory process as an anti-inflammatory agent. Management expects that a clinical trial will demonstrate ultra-micronized PEA's capability to down-modulate the immune response, particularly the cytokine storm that is associated with the inflammation and subsequent damage to lung tissue in hospitalized COVID-19 patients.

Historically (between 1969 and 1979), PEA used to treat patients with influenza and the common cold in Czechoslovakia. At the time, six randomized, double-blind, placebo-controlled clinical trials were conducted that demonstrated PEA was safe and effective for the treatment of respiratory infections.

Management expects that the clinical trial to be a randomized, controlled, double-blind, U.S. multicenter study. The study is expected to assess the efficacy and safety of FSD-201 at two dose levels (600mg and 1200mg twice-daily) plus SOC (Standard of Care) versus SOC alone in symptomatic patients over a treatment period of 14 days. The primary endpoint is to see if FSD-201 plus SOC improves the clinical outcome, particularly reducing the length of time to attain symptom relief.

FSD Pharma Sells Non-Core Equity Interests in Cannara Biotech, High Tide and Pharmadrug

On February 24, 2020, FSD Pharma announced the **sale of its 12% equity interest of Cannara Biotech** (85,003,750 Class B shares) to a consortium of buyers for **over $7.7 million in cash**. FSD Pharma received 75,000,000 Class B shares of Cannara Biotech when the company entered into a Partnership Agreement with Cannara Biotech on June 19, 2018. In addition, FSD Pharma acquired an additional 12,000,000 shares by Cannara participating in a private placement that closed on July 24,

2018. With a **cost of $1.0 million**, the $7.7 million in proceeds represents a 670% return on FSD Pharma's investment in Cannara Biotech.

The sale of FSD Pharma's equity interest in Cannara Biotech abrogates FV Pharma's Partnership Agreement with Cannara Biotech and FSD's management is no longer interested in leasing 105,523 square feet of Cannara's facility in Farnham Quebec.

In addition, on November 22, 2019, FSD Pharma **sold its 2.2% equity interest** (including warrants) **of High Tide** for total cash **proceeds of $614,520**.

In May 2020, FSD Pharma sold 5.0 million shares of its 13,562,387 share position of **Pharmadrug Inc**. **Cash proceeds were CDN$400,000**. The buyer has the option to purchase another 5.0 million shares at CDN$0.10 per share from FSD Pharma through June 26, 2020.

The sales strengthen FSD Pharma's cash position. Management's goal is to increase the company's cash position to roughly $50 million by monetizing non-cash assets and raising capital in order to fund the company's pharmaceutical R&D program.

FSD Pharma Uplisted to NASDAQ in January 2020

On January 9, 2020, the company's Class B shares were uplisted to and began trading on the **NASDAQ Capital Market** under the ticker symbol **HUGE**. The uplisting of the Class B shares to NASDAQ should benefit the company through enhanced investor awareness, **increased institutional investor participation** and improved share liquidity. Many institutional investors are prohibited by covenants from investing client funds into stocks on the OTC Pink Market, OTCQB Venture Market and OTCQX Best Market. The listing on NASDAQ elevates the company's corporate profile and investor awareness, particularly to institutional investors, as well as to retail investors. The NASDAQ listing is a strategic advantage relative to the many other alternatives available to investors in the pharmaceutical R&D space.

Collaborative Research Agreement Amended to Accelerate Progress of Solarvest's Algae Expression Research Project

On February 4, 2020, FSD Pharma and Solarvest BioEnergy (TSX-V: SVS) announced that the Collaborative Research and Development Agreement has been amended in order to accelerate the research project's progress. **FSD Pharma has issued an additional 225,371 FSD Class B shares to Solarvest** to help fund the research project, which involves utilizing Solarvest's algae expression platform to enable the production of pharmaceutical-grade cannabinoids. In addition, the President of FSD Pharma's BioSciences Division (**Dr. Edward J. Brennan**, Jr., M.D.) will more closely oversee the research project by being **appointed to Solarvest's Board of Directors**.

Health Canada has already issued a research license to Solarvest BioEnergy **for the Microalgae Cannabinoid Expression Program** under its CBD proof of concept research project in partnership with FSD Pharma. The license allows Solarvest "to transfer its computer modeling work into the laboratory and use its algal expression system to express pharmaceutical-grade cannabinoids." If the project is successful, algae could be used to produce pharmaceutical-grade cannabinoids in cGMP facilities with a growth cycle of days instead of months with cannabis plants.

KEY POINTS

- FSD Pharma **evolve into a specialty, biotech pharmaceutical R&D company** as management advances its strategic objective of developing, over time, a pipeline of FDA-approved synthetic compounds that target the human endocannabinoid system. has entered into several strategic alliances and R&D agreements
  - Acquired **Prismic Pharmaceuticals** on June 28, 2019
    - Prismic owns the worldwide license (except Italy & Spain) to conduct R&D and commercialize **ultra-micronized-PEA** as a prescription medication for the relief of inflammation and pain
      - has initiated Phase 1 human safety and tolerability trials for PP-101 in Australia
      - expected to initiate Phase 2a proof-of-concept study for PP-201 in U.S. for treatment of COVID-19
- **Divesting non-core assets**:
  - Sold 85,003,750 shares of **Cannara Biotech** for **$7,743,492**
  - Sold 2.2% equity interest (including warrants) of **High Tide** for **$614,520**
  - Sold 5.0 million shares of its 13,562,387 share position of **Pharmadrug Inc**. for **CDN$400,000**.
  - **Assets held for sale:** the Cobourg facility, related equipment, all biological assets and inventory on hand
    - the Cobourg facility is a 620,000 square foot building complex that was a former Kraft food production plant
    - Facility listed for sales for $19.9 million with leaseback on 40,000 square feet of grow area required.
    - 25,000 square feet of the facility are covered by the following licenses
      - ACMPR Cultivation License in the Province of Ontario
      - Standard Processing License in the Province of Ontario
      - Sale for Medical Purposes License from Health Canada
      - Full Sale for Medical Purposes License from Health Canada
- The company helps **build awareness** of the company and management's strategy by attending **Analyst Conferences** and **Industry Forums**:
  - 11th Annual Biotech Showcase in San Francisco (January 7, 2019)
  - Arcview Cannabis Investor Forum in Vancouver (April 25, 2019)
  - 2019 BIO International Convention in Philadelphia ((June 4, 2019)
  - MJ Link Micro Investor Conference in NYC (June 25, 2019)
  - 10th Global Family Office Investment Summit in Dubai (November 24, 2019)
  - Swiss Cannabis Institute Investment Conference in Zurich & Geneva (Nov. 26-27 2019)
  - 12th Annual LD Micro Investor Conference in Los Angeles (December 11, 2019)
  - Investor Summit in Philadelphia (December 17, 2019)
  - Biotech Showcase 2020 in San Francisco (January 13, 2020)
  - 22nd Annual BIO CEO & Investor Conference in NYC (February 10, 2020)
  - 32nd Annual ROTH Conference in Laguna Niguel, California (March 17, 2020)

RECENT FINANCINGS

To date, FSD Pharma has been successful in raising capital so that management has been able to continue advancing its strategy of creating a pharmaceutical R&D company.

During 2018, FSD Pharma received **net proceeds of $41,219,041** from the issuance of shares **and $3,657,128** from the exercise of options and warrants. **During the first nine months of 2019**, FSD Pharma received **net proceeds of $726,163** from the exercise of options and warrants.

During 2019, FSD Pharma received **net proceeds of $ 4,561,072** from the issuance of shares in a private placement that in two tranche **issued of a total of 228,671 Class B shares at CAD $20.10 per Class B share**. Founders, management and Directors accounted for approximately CND$1.165 million of the first tranche. Net proceeds are primarily targeted towards the advancement of the BioSciences Division, including R&D for PP-101. Also, the company received **$827,589** from the exercise of options and warrants.

Through the first quarter of 2020, the company has received **$7,743,492** in proceeds from sale of investments. On June 4, 2020, FSD Pharma announced that definitive agreements were signed for a CDN$10.125 Million Private Placement of 1,500,000 Class B shares (plus 1,500,000 5-year warrants exercisable at) at a price of C$6.75 per share; closing expected to occur on or about June 8th

On June 4, 2020, FSD Pharma announced that definitive agreements have been signed with institutional investors for a private placement of 1,500,000 Class B shares at a price of CDN$6.75 per share, along with 1,500,000 5-year warrants exercisable at CDN$9.65 per share). **Gross proceeds should be approximately CDN$10.125 million**. The closing is expected to occur on or about June 8th.

Shelf Prospectus Filed in Canada and the U.S.

On February 28, 2020, FSD Pharma simultaneously **filed Preliminary Short Form Prospectus** on SEDAR and a **Form F-10** registration statement with the SEC, allowing the company to issue on occasion up to CDN$100,000,000 (US$75,300,000) worth of Class B subordinate voting shares during the subsequent 25-month period. Form F-10 is used by Canadian issuers that are qualified to utilize the MJDS (Multi-Jurisdictional Disclosure System) registration process in order to facilitate cross-border public offerings in the United States. The F-10 filing avoids duplicative regulatory reviews (reducing the costs and other burdens) and allows a Canadian company to easily access the U.S. capital markets. **The F-10 registration statement allows management the flexibility to raise capital in the United States** in order to finance future growth opportunities. Subsequently, on May 28, 2020, the Prospectus was updated with amendments that reference the company's most recent financial statements through the first quarter of 2020.

OVERVIEW

FSD Pharma Inc. (CSE: HUGE; NASDAQ: HUGE) is a is a specialty biotech pharmaceutical R&D company focused on developing a pipeline of FDA-approved synthetic compounds that target the human endocannabinoid system to treat certain diseases of the CNS (central nervous system). In addition, autoimmune disorders of the skin and medical conditions of the GI tract and the musculoskeletal system are being targeted.

FSD Pharma is seeking to address the opioid crisis, by developing opioid-sparing prescription drugs utilizing ultra-micronized formulations of palmitoylethanolamide (PEA).The company obtained the worldwide license (except Italy & Spain) to conduct R&D and commercialize ultra-micronized-PEA as a prescription medication for the relief of inflammation and pain through the company's acquisition of Prismic Pharmaceuticals in June 2019. Phase 1 first-in-human safety and tolerability trials have been initiated for its lead candidate, FSD-201 ultra-micronized-PEA at Alfred Hospital in Melbourne, Australia.

In 2019, FSD Pharma acquired **Prismic Pharmaceuticals**, which is pursuing pharmaceutical applications for the micro-palmitoylethanolamide molecule and its effect within the endocannabinoid system. Currently, FSD Pharma is targeting several pharmaceutical applications, including chronic pain management (Prismic), down-regulating the exuberant immune response as well as the "cytokine storm" for the treatment of COVID-19. In addition, FSD Pharma is pursuing alternative production methods of

cannabinoids through a collaborative effort with **Solarvest**, which has been commissioned to investigate the development of cannabinoid production by employing algal technology.

Acquisition of Prismic Pharmaceuticals

On June 28, 2019, **FSD Pharma acquired Prismic Pharmaceuticals** for approximately US$17.5 million (CND$23.4 million) worth of Class B shares (roughly 102.7 million shares at a deemed price of CND$0.2275 per share). FSD Pharma also assumed approximately US$3.05 million (CND$4.07 million) of Prismic's liabilities.

Common Stock Chronicle

FSD Pharma's Class B shares began trading on the CSE on May 29, 2018 under the trading symbol HUGE, following a three-cornered amalgamation with Century Financial Capital Group on March 24, 2018. On June 8, 2018, the company was listed on the OTCQX with the trading symbol FSDDF; then on September 19, 2018, FSD Pharma was upgraded to the OTCQB Venture Market. Subsequently, on January 9, 2020, the company's Class B shares were uplisted to the NASDAQ Capital Market. FSD Pharma's stock is also listed on the Frankfurt Stock Exchange under the ticker 0K9 (WKN: A2JM6M).

On June 15, 2018, FSD Pharma was added to the CSE 25 Composite Index, and on September 27, 2018, the company's stock was included in Horizons Marijuana Life Sciences Index ETF (TSE: HMMJ).

On October 16, 2019, FSD Pharma's class A and class B shares underwent a reverse split on a 1 to 201 basis. Fractional shares were not issued. Management anticipates that the share consolidation will help advance management's strategic plan of increasing the company's visibility among U.S. investors by helping achieve an uplisting to NASDAQ, a major U.S. stock exchange.

On January 9, 2020, the company's Class B shares were uplisted to and began trading on the **NASDAQ Capital Market** under the ticker symbol **HUGE**. The uplisting of the Class B shares to NASDAQ should benefit the company through enhanced investor awareness, **increased institutional investor participation** and improved share liquidity. Many institutional investors are prohibited by covenants from investing client funds into OTC stocks, particularly on the OTC Pink Market, but also on the OTCQB Venture Market and OTCQX Best Market.

The company's shares have been listed and subsequently twice uplisted on the U.S financial markets since FSD Pharma's Class B shares began trading on the CSE on May 29, 2018. The company's Class B shares were listed initially on the OTCQX with the trading symbol FSDDF on June 8th 2018; and then on September 19, 2018, FSD Pharma was upgraded to the OTCQB Venture Market.

PRISMIC PHARMACEUTICALS (Wholly-owned Specialty Pharmaceutical Company)

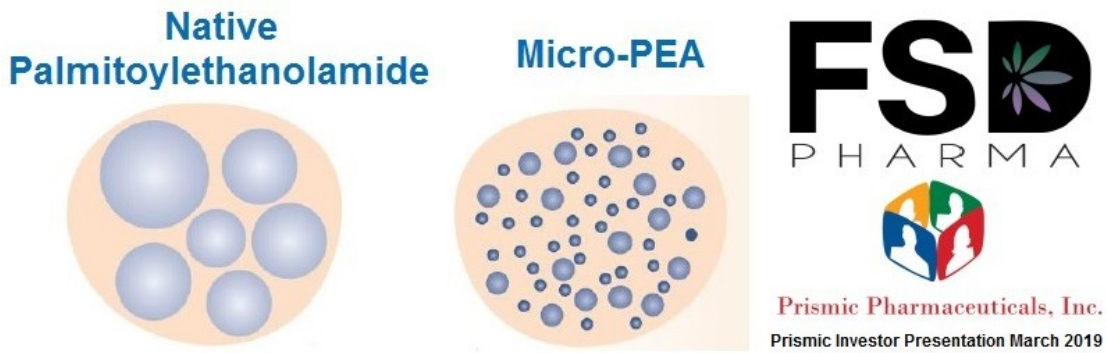
On July 2, 2019, FSD Pharma **acquired privately-held Prismic Pharmaceuticals** Inc., an emerging **specialty pharmaceutical company** focused on developing novel, non-addictive prescription drugs based on its patented **ultra-micronized and micro-PEA development platform**. The acquisition of Prismic represents the **tangible transition of FSD Pharma's corporate emphasis** towards capturing the value of drug discoveries. Prismic Pharmaceuticals is now part of **FSD BioSciences Division**, which is envisioned to be a collection of promising, incubator companies, each conducting research and development (R&D) on prescription drug candidates and navigating the molecules through the clinical trial process towards FDA approval. Management was especially attracted to Prismic's micro-palmitoylethanolamide molecule due to its enhanced effect within the endocannabinoid system, specifically the inhibition of the enzyme (fatty acid amide hydrolase or FAAH) that breaks down cannabinoids, thereby indirectly increasing the activation of CB2 and CB1 receptors, the same receptors

activated by CBD and THC. Prismic Pharmaceuticals will serve as a platform to develop and advance ultra-micronized PEA in combination with cannabinoids to address multiple therapeutic categories.

On June 28, 2019, FSD Pharma **acquired Prismic Pharmaceuticals for approximately CDN$27.5 million** (approximately US$20.6 million) paid through the **issuance of 102.7 million Class B subordinate voting shares** valued at CAD$23.4 million (approximately US$17.5 million) and the assumption of Prismic's long- and short-term liabilities valued at CAD$4.07 million (approximately US$3.05 million). Prismic's stock options and warrants were converted into FSD Pharma options and warrants.

PRISMIC PHARMACEUTICALS INC.

Founded in 2011, Prismic Pharmaceuticals secured the exclusive licensing rights to PEA (palmitoylethanolamide), including the micronized form, for Chronic Kidney Disease from the Epitech Group SRL in June 2013. A few months later, in August 2013, Prismic secured **the rights to PEA for all conditions in all regulatory categories** through a strategic partnership agreement with Epitech. As a result, Prismic holds the exclusive worldwide licensing rights (with the exception of Italy and Spain) to ultra-micronized and micro-PEA, a form of palmitoylethanolamide with particle sizes between 0.6 and 10 microns. The particle sizes of native PEA range from 100-to-700 microns.



By 2015, through clinical work, Prismic confirmed that certain formulations of PEA had demonstrated a **synergistic effect** when administered concurrently with certain prescription drugs for severe and/or chronic pain, including oxycodone, morphine and other opioid analgesics. The ability to achieve the desired therapeutic pain relief effect with lower doses of these addictive drugs is a significant clinical benefit.

FSD's management was drawn to Prismic Pharmaceuticals because of micro-PEA's **well-documented safety profile**, its **patent protection** for all conditions in all regulatory categories, its **increased oral bio-availability** and its **synergistic or entourage effect** on certain drugs, especially those impacting the endocannabinoid system.

PEA (Palmitoylethanolamide)

PEA is a fatty acid amide that is naturally produced by the body. This anti-inflammatory agent acts on the **CR2 cannabinoid receptor**, which affects the inflammatory process in the nervous system. Also, PEA acts on the **CR1 cannabinoid receptor**, which mediates most of the psychotropic effects of THC, a psychoactive component of cannabis that modulates the efficacy of synaptic transmission.

Ultra-micronized -PEA

The large particle size of native PEA limits its solubility when administered orally. By increasing the drug's surface area through micronization, the rate and the amount of dissolution is dramatically increased, thereby increasing the bioavailability of PEA. Consequently, when administered via an ultra-micronized -PEA formulation, the amount of PEA absorbed increases significantly, which, in turn, enhances the efficacy and potency of PEA's anti-inflammatory and analgesic therapeutic properties.

Safety Profile of Ultra-micronized-PEA

PEA has been **evaluated in at least 22 clinical studies**, all conducted in Europe.[i] Having been tested on more than 4,000 patients in various states of pain,[ii] the studies have demonstrated PEA has an excellent safety profile. Despite this **robust amount of clinical safety data**, some suggest that too few patients have been treated for more than 60 days for PEA to be classified definitively as safe. However, **over one million doses** of Epitech's Normast (600 mg ultra-micronized PEA) and Pelvilen (200 mg ultra-micronized PEA) have been administered to patients in Italy and Spain without adverse side effects. The average particle size of ultra-micronized PEA is 2.6 microns.[iii]

Therapeutic Indications

The PEA fatty acid amide has been studied for its anti-inflammatory and analgesic actions **for the relief of inflammation and pain**, respectively. There appears to be a substantial amount of efficacy data that establishes its anti-inflammatory and anti-nociceptive properties when administered orally in a micro formulation as a pharmaceutical product. In addition, there are indications that **the concomitant use of micro-PEA with certain addictive drugs** can achieve the same therapeutic effects while delaying the development of dependence in patients through the ability to reduce the dosing of the addictive drugs. In addition, the management of FSD Pharma/Prismic Pharmaceuticals desires to pursue the development of **non-addictive therapeutic treatments** for pain through **the concomitant use of micro-PEA with synthetic cannabinoids**.

Having shown to have a therapeutic effect against pain and inflammation syndromes, management has identified **multiple therapeutic categories** for micro-PEA's potential to address numerous expansion opportunities:

- **Analgesics**
  - treatment of acute pain conditions, e.g. post-operative pain
  - therapeutic relief of chronic pain conditions
  - in combination with cannabinoids as a non-addictive replacement for opioids
- **Anti-inflammatory Agents**
  - conditions where inflammation is an underlying or significant cause of the disorder
- **Gastrointestinal Agents**
  - irritable bowel syndrome
  - irritable bowel disease
- **Central Nervous System Agents**
  - Alzheimer's disease
- **Opioid-Sparing** / **Opioid-Replacement Drug**

Through the development and completion of clinical programs, management plans to navigate the FDA process for ultra-micronized -PEA to be approved for the management of pain and treatment of inflammation, particularly for the treatment of chronic pain associated with acute pain situations where opioids are being currently prescribed.

VALUATION

Valuation analysis of pharmaceutical R&D companies is a very challenging exercise, since many are pre-revenue entities in the development stage. In addition, almost all these companies are reporting negative EBITDA and net income. However, the pursuit of FDA-approval for therapeutic compounds creates unique opportunities to invest in pharmaceutical R&D companies with immense potential.

Empirically, there appears to be **subsets of pharmaceutical R&D companies**, one of which can be defined by several quantitative and qualitative factors, particularly those with a market capitalization

below $1.0 billion and trading on a major exchange (NYSE, NASDAQ and/or the CSE) with a reasonable, single-digit P/B valuation. This subset usually captures a range of well-funded pharmaceutical R&D companies that have met the financial hurdles becoming listed on a major stock exchange.

In the life cycle of nascent pharmaceutical R&D companies, the appropriate valuation methodology migrates from one metric to another. Initially, as a company's strategy gains acceptance, investors willingly fund operations during the emerging stage through **private placements** to qualified investors. Through these financings, the company's book value increases and the company receives much needed capital to fund growth initiatives. If management successfully executes its strategy, the company's book value will increase through **operational activities**. Furthermore, in the embryonic pharmaceutical R&D company space where strategic alliances are commonplace, strategic partnerships and alliances have spurred **cross-ownership investments**, which reinforce business relationships. The values of these investments are reflected on the balance sheet, impacting the company's book value. As a result, we believe that, at this time**, the appropriate valuation methodology for FSD Pharma should be based on the metric of price-to-book value (P/B)**.

Industry Comparables	**% Chg YTD**	**Ticker**	**Exch.**	**Mkt Cap ($ mil.)**	**Price/ Book**
FSD PHARMA INC	2.0%	HUGE	CSE	63.1	1.27
	2.0%	HUGE	NYSE	63.1	1.27
S&P/TSX Composite Index	-7.1%	^TSX	TSX	N/M	1.62
S&P 500 Index	-1.1%	^SPX:US	NYSE	N/M	3.37
Industry Mean	**94.0%**			**194.1**	**2.88**
Pharmaceutical R&D Companies					
BioXcel Therapeutics, Inc.	338.2%	BTAI	NASDAQ	154.9	3.98
ESSA Pharma Inc.	126.7%	RPIX	NASDAQ	22.0	3.17
Opiant Pharmaceuticals, Inc.	-3.9%	OPNT	NASDAQ	51.5	3.05
Oragenics, Inc.	17.2%	OGEN	NYSE	27.0	1.82
Viking Therapeutics, Inc.	-8.0%	VKTX	NASDAQ	715.0	2.40

Currently, the P/B valuation range for well-funded pharmaceutical R&D companies is between 1.27 and 3.98.

The book value of FSD Pharma has been modified in order to update two important factors:

- The value of the Cobourg facility (as a held for sale asset) appears to be understated on the balance sheet. Originally purchased for $5.5 million, FSD has subsequently made property improvements of over $10.0 million, yet the property and equipment is only valued at $12.3 million on the balance sheet. In addition, there is no value being attributed to the licenses from Health Canada that allow for the production and sale of cannabis that are attached to the footprint of this property. Using the property estimated value provided in a company press release dated November 18, 2018, we estimate that the value of the Cobourg facility is $18.25 million and adjust the company's book value accordingly. Currently, the property is listed for sale on realtor.ca with an asking price of $19.9 million.
- FSD Pharma owns minority equity investments in four cannabis-related companies (Huge Shops, Pharmadrug, SciCann Therapeutics and Solarvest BioEnergy). These investments are marketed-to-market every quarter in FSD's balance sheet. We calculate the changes in value of these investments since the end of the last quarter and adjust book value accordingly.

With the expectation that FSD Pharma's stock will attain an industry average P/B ratio of 2.88, our **comparable analysis valuation price target is $16.45**.

It should be noted that other methods, such as discounted cash flow (DCF) analysis, can be employed on emerging companies; however, this technique is not only complex, but also fraught with assumptions and estimates, which often can result in misleading targets. In the future, as the sales profile grows, but with the company having not yet attained profitability, the valuation metric of price-to-sales (P/S) will come into play. In due course, an expanding revenue stream ordinarily manifests into positive earnings, and P/E becomes the suitable valuation metric.

RISKS

- As with almost all evolving specialty, pharmaceutical R&D companies, FSD Pharma is an early-stage enterprise that has yet to generate sufficient cash flow from operations to adequately fund its activities. However, the company has been able to effectively fund its operations and initiatives to date.
- The outstanding Class B shares increased 80.3% in 2018 as a result of the three-cornered amalgamation with Century Financial Capital Group and several subsequent private placements, along with the exercise of options and warrants. In 2019, shares outstanding increased 15.5%, primarily due to the acquisition of Prismic Pharmaceuticals for 510,940 Class B shares.
- During the process of the three-cornered amalgamation with Century Financial Capital Group, 15,000 Class A voting shares were created, issued and ultimately conveyed to the holders of the 15,000 Class A voting shares of FV Pharma (namely the three founders: Thomas Fairfull, Zeeshan Saeed and Anthony Durkacz). As a result of the reverse share split on October 16, 2019, today there are only 72 super-voting Class A shares outstanding, which are entitled to 276,660 votes per share while holders of Class B shares have only one vote per share. Subsequently, on March 19, 2020, CEO Dr. Raza Bokhari acquired 24 Class A shares, half from Zeeshan Saeed and the other half from Anthony Durkacz. Shareholders of Class A shares hold significant voting power and are able to exert immense influence over management and the company.
- Not all of FSD Pharma's strategic relationships have realized management's initial anticipated outcomes. As a result, several have been terminated.
    - A collaboration with Auxly Cannabis Group (TSX.V – XLY), formerly Cannabis Wheaton Income Corp., to develop grow operations at the Cobourg facility was terminated in February 2019 due to Auxly failing to achieve its construction commitments. Consequently, FSD Pharma wrote-down $7,499,977, which was being held in trust by Auxly to cover construction and development costs.
    - The company's investment in Clover Cannastrip Thin Film Technologies required a $1,500,000 write-down in the first quarter of 2019 due to alleged misappropriation of funds by the President and Manager of Clover Cannastrip.
    - The proposed acquisition of Therapix Biosciences was terminated on December 21, 2018
    - FSD Pharma investment in High Tide was sold in November 2019 as management increased its focus on biotech pharmaceutical R&D and downplayed the retail cannabis market.
    - FSD Pharma terminated the Partnership Agreement with Cannara Biotech in June 19 February 2020, when FSD sold its investment in Cannara. FSD's management was no longer interested in leasing 105,523 square feet of Cannara's facility in Farnham Quebec, and the sale of its equity interest in Cannara netted the company $6.7 million, representing a 670% return on FSD Pharma's $1.0 million investment in Cannara Biotech over roughly 21 months.
    - In May 2020, FSD Pharma began the process of selling its investment in Pharmadrug Inc.

BALANCE SHEET

FSD Pharma Inc.

(in $CDN)	2017	2018	2019	1Q 2020
Period ending	12/31/2017	12/31/2018	12/31/2019	3/31/2020
ASSETS				
Cash and cash equivalents	4,739,988	21,134,930	7,932,737	8,358,899
Sales taxes recoverable	294,508	982,663	0	0
Trade and other receivables	-	8,325	2,070,055	1,941,517
Prepaid and other assets	353,160	444,099	430,381	2,728,562
Inventory	-	-	942,939	0
Biological assets	-	-	-	-
Total Current Assets	**5,387,656**	**22,570,017**	**11,376,112**	**13,028,978**
Assets held for sale	-	-	-	12,314,080
Other investments	-	18,064,541	11,780,864	1,312,311
Right-of-use asset	-	-	127,410	0
Property, plant and equipment	8,292,038	12,141,676	11,804,145	0
Intangible assets	-	-	22,358,932	23,069,420
TOTAL ASSETS	**13,679,694**	**52,776,234**	**57,447,463**	**49,724,789**
Trade payables and accrued liabilities	1,265,995	1,743,806	4,467,826	4,844,344
Lease obligations	-	-	56,207	56,831
Derivative liability	-	-	2,646,269	0
Short term notes	-	-	1,908,412	2,084,590
Total Current Liabilities	**1,265,995**	**1,743,806**	**9,078,714**	**6,985,765**
Lease obligations	-	-	146,662	135,710
Non-Current Liabilities	**-**	**-**	**146,662**	**135,710**
TOTAL LIABILITIES	**1,265,995**	**1,743,806**	**9,225,376**	**7,121,475**
SHAREHOLDERS' EQUITY				
Class A share capital	201,500	201,500	201,500	201,500
Class B share capital	12,794,963	67,916,302	97,815,149	101,887,365
Warrants	621,900	4,442,145	5,745,03	5,626,16
Contributed surplus	2,990,600	4,977,300	23,091,099	24,344,21
Foreign exchange translation reserve	-		(112,690)	1,506,284
Accumulated deficit	(4,195,264)	(26,504,819)	(78,518,005	(90,962,205
Stockholders' equity (deficit)	**12,413,699**	**51,032,428**	**48,222,08**	**42,603,314**
TOTAL LIABILITIES & STOCKHOLDERS' EQUITY	**13,679,694**	**52,776,234**	**57,447,46**	**49,724,789**
Class A Shares outstanding	15,000	15,00	15,00	15,00
Class B Shares outstanding	3,794,846	6,843,780	7,905,727	8,633,673

ANNUAL INCOME STATEMENT

FSD Pharma Inc.

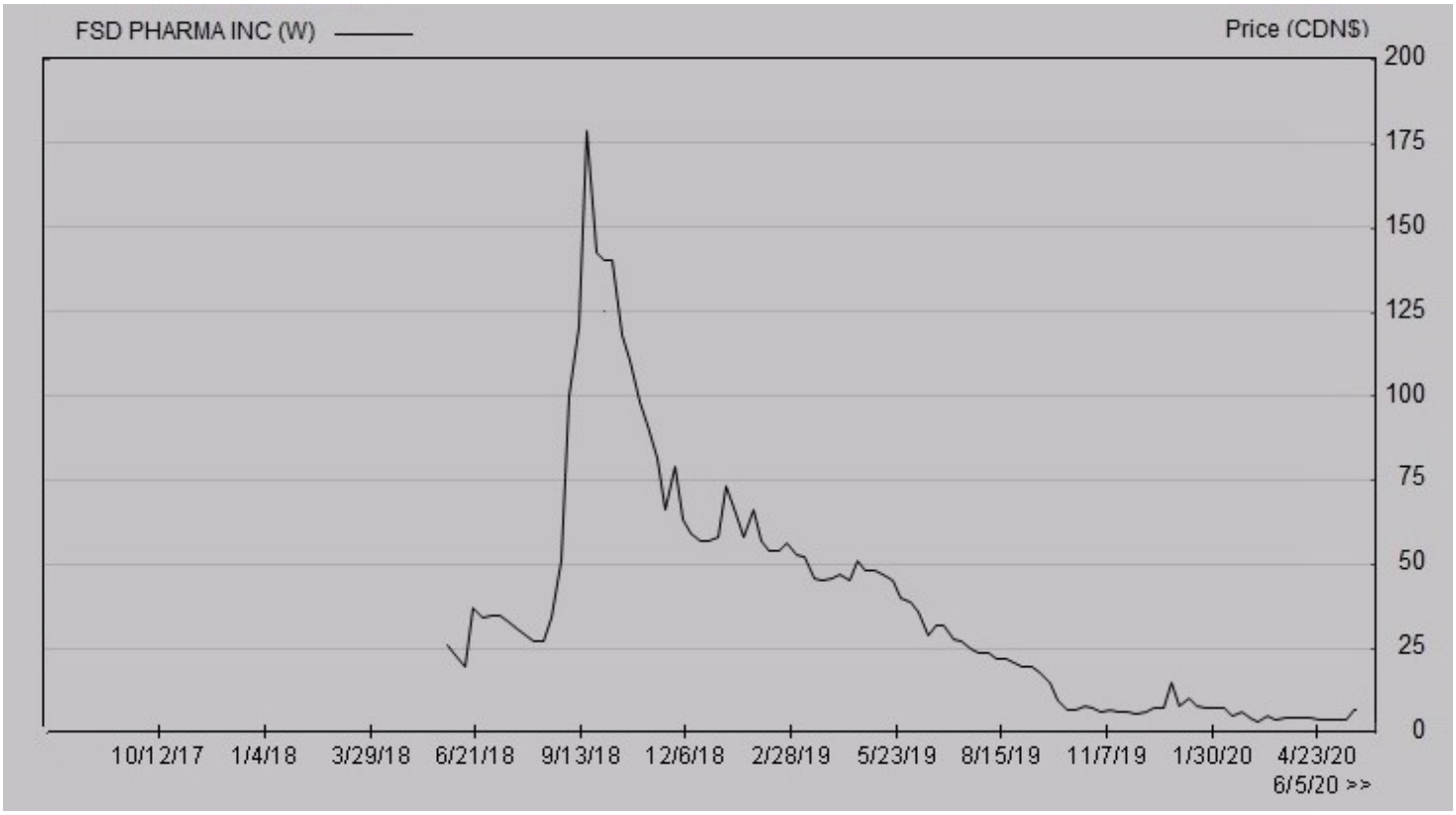
Income Statement (in $CDN, except share and per share data)	2017 12/31/2017	2018 12/31/2018	2019 12/31/2019	2020 E 12/31/2020
Cannabis revenues	0	2,107	256,611	0
Other income	0	0	488	0
Total Revenues	**0**	**2,107**	**257,099**	**0**
Cost of sales	-		1,959,111	0
Gross (loss) profit before FV adjustments	-		(1,702,012)	0
Loss (gain) chg. in value of bio. assets	-		682,739	0
Gross (loss) profit	-		**(2,407,000)**	-
Expenses				
General and administrative	189,826	168,574	14,811,529	17,278,72
Research and development	-		-	3,024,653
Depreciation and amortization	-	183,194	3,146,680	5,321,606
Advertising and promotion	-	2,803,588	-	-
Allowance for impairment of Auxly funds	-	7,499,977	-	-
Consulting fees	-	2,037,049	-	-
Loss on change in fair value of biological assets	-		-	-
Insurance	-	156,038	-	-
Listing expense	-	7,991,791	-	-
Facility related expenditures	167,477	1,360,477	-	-
Production and growing expenses	-	401,897	-	-
Professional fees	202,555	1,955,253	-	-
Salaries, wages and benefits	-	1,740,720	-	-
Shareholder and public company costs	-	124,973	-	-
Share-based payments	2,990,600	6,440,406	16,061,319	13,201,61
Total Expenses	**3,550,458**	**32,863,937**	**34,019,52**	**38,826,59**
Loss Before Other Income (Expenses)	**(3,550,458)**	**(32,861,830)**	**(36,426,528**	**(38,826,596**
Other income incl. rental income	25,943	86,65	125,536	72,324
Finance expense	-	-	(206,454)	(392,331
Impairments	-	-	(243,468)	(119,447
(Loss) on settlement of financial liability	-	-	(24,810)	0
Gain (loss) on chg. in deriv. liability	-		(3,568,305)	843,301
Changes in fair value of investments	0	10,064,550	(11,669,157)	(2,725,061)
Net Loss	**(3,524,515)**	**(22,710,624)**	**(52,013,186**	**(41,147,810**
Basic and diluted loss per share	**(1.61)**	**(3.85**	**(7.37)**	**(4.44)**
Wgted avg. of Class B Shares - basic & diluted	2,190,117	5,905,177	7,056,245	9,274,759

QUARTERLY INCOME STATEMENTS

FSD Pharma Inc.

Income Statement (in $CDN, except share and per share data)	2019 12/31/2019	1Q 2020 3/31/2020	2Q E 2020 6/30/2020	3Q E 2020 9/30/20120	4Q E 2020 12/31/2020	Estimate 2020 12/31/2020
Expenses						
General and administrative	14,811,529	4,008,869	4,209,31	4,419,77	4,640,76	17,278,726
Research and development	N/A	403,287	806,574	604,93	1,209,861	3,024,65
Depreciation and amortization	3,146,680	1,291,14	1,316,97	1,343,31	1,370,17	5,321,60
Share-based payments	16,061,319	3,062,930	3,216,07	3,376,88	3,545,72	13,201,611
Total Expenses	**34,019,528**	**8,766,234**	**9,548,93**	**9,744,89**	**10,766,529**	**38,826,596**
Loss Before Other Income (Expenses)	**(34,019,528)**	**(8,766,234)**	**(9,548,934**	**(9,744,899**	**(10,766,529)**	**(38,826,596)**
Other income (loss)	125,536	18,081	18,08	18,081	18,08	72,32
Finance expense	(206,454)	(97,253)	(97,804)	(98,358	(98,916	(392,331)
Impairments	(243,468)	(119,447	0	0	0	(119,447)
(Loss) on settlement of financial liability	(24,810)	0	0	0	0	0
Gain (loss) on chg. in deriv. liability	(3,568,305)	843,301	0	0	0	843,301
Changes in fair value of investments	(11,669,157)	(2,725,061)	0	0	0	(2,725,061)
Net gain (loss) continuing operations	(49,606,186)	(10,846,61	(9,628,657)	(9,825,177	(10,847,364)	(41,147,810)
Net gain (loss) discontinued operations	(2,407,000)	(1,597,587	(1,837,225	(2,020,948	(2,121,995	(2,121,995)
Net Loss	**(52,013,186)**	**(12,444,200**	**(21,094,539**	**(21,671,301**	**(23,816,722**	**(84,417,615)**
Diluted loss per share - cont. operations	(7.03)	(1.33)	(1.11)	(0.97)	(1.07)	(4.44)
Wgted avg. Class B Shares diluted	7,056,245	8,149,759	8,649,759	10,149,759	10,149,759	9,274,759

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