

Canbiola, Inc. (CANB – OTCQB)
January 29, 2020

Canbiola is rapidly becoming a vertically-integrated contender in the hyper-growing markets for legal hemp cultivation and CBD-based consumer products. We believe CANB's CAGR like to exceed 200% through CY 2022.

**Strong Speculative Buy
12-Month Price Target: \$0.04**
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Summary and Investment Opportunity
• Newly Vertically-Integrated Canbiola Poised to Extend Revenue Growth of 200% or more

Canbiola has been growing quarterly year-over-year revenues in excess of 200% for several quarters, clearly demonstrating its ability to outgrow the hyper-growing domestic hemp/CBD markets in which it operates, which we believe are collectively growing approximately 80% to 100% annually. Furthermore, the Company has recently completed several strategic acquisitions that now allow it to develop and grow its own strains of CBD-rich hemp, control the preparation, manufacture, and packaging of its own CBD products (ensuring it can meet its own rigorous quality standards), and consistently provide both professional (e.g. medical practitioners) and non-professional customers with high-quality, freshly manufactured CBD products.

• Acquisitiveness and M&A Competency Well Positions Canbiola for Industry Consolidation

In just the last five calendar quarters, the Company has acquired companies or their assets that have broadened both CANB's product portfolio and its distribution channels, which now include doctor's offices, health and wellness spas, and (via online and brick and mortar sales), the mass consumer market. Furthermore, as the hemp/CBD industry matures during the coming one to two years, we believe the Company will be able to leverage managements' core capital markets and M&A competencies to continue making (and funding) key strategic acquisitions. This could allow it and its shareholders to benefit from the valuation disparity that typically exists between private company valuations and the valuations of similar public companies – all while strengthening Canbiola's market position and geographic footprint.

• Duramed Subsidiary First to Combine CBD Gel Packs with Established Medical Devices

Beginning in 2018, the Company began to lease consumers its pain-relieving medical devices using CBD gel pads to augment the devices' pre-existing analgesic and healing effects. We view this subsidiary's business model quite favorably, as the Company is able to lease its devices on a monthly basis to pain sufferers, and be paid by their insurance companies. We expect the Company will continue developing and growing this business in lock-step with its CBD products business and new hemp cultivation business in 2020 and beyond.

• Canbiola Has Recently Achieved a Majority-Independent Board and Seeks NasdaqCM Uplisting

While such an uplisting may require several more quarters of solid execution by management, its aspirations and mid-2019 filing of a NasdaqCM listing application signify to us that Canbiola is rapidly growing up. It has a competent management team that is squarely focused on creating shareholder value via both acquisition and organic growth, and we believe it is likely it will continue its exceptional top-line growth rate through 2020 and into 2021. Because of these factors, and based on its relatively low valuation versus similar members of its peer group, **we rate the shares of Canbiola a Strong Speculative Buy, and set our 12-month price target at \$0.04 per share, or \$12.00 per share once its already-announced 300-for-1 reverse split goes into effect.**

Recent Price***:	\$0.0171*
Market Capitalization (000s)	11,299
Enterprise Value (000s)	11,110
Institutional Ownership	N/A
Insider Ownership	52.80%
Basic Shares Outstanding (000s)	660,770
As Adjusted**, Fully-Diluted Shrs. Outst. (000s)	1,088,650
Average Daily Trading Vol (000s)	2,630
Primary Trading Market	OTCQB

Balance Sheet Data

Shareholders' Equity (as of Sept 30, 2019, in 000s)	6,482
Price/Book Value	1.74
Cash (000s)	471
Net Working Capital* (000s)	2,676
Long-Term Debt	41,825
Debt to Equity Capital	0.044

Company Overview

Canbiola, Inc. is a vertically integrated conglomerate specializing in the manufacturing, formulation, and sale of THC-Free Cannabidiol (CBD) Isolate products such as oils, drops/tinctures, gels, creams, moisturizers, chews, and capsules. All Canbiola products are organic and Non-GMO, free of impurities and contaminants, and formulated with the finest ingredients to the highest manufacturing standards.

* Before 300-for-1 reverse split

** Includes full conversion of Series A Conv. Preferred

*** As of market close, Jan 28, 2020

* See Risks Section for Asset Quality Risk Discussion

Summary Profit and Loss Model

In (\$000s) except for share-related data	2017	2018	Q1 '19	Q2 '19	Q3 '19	Q4 '19	2019	Q1 '20	Q2 '20	Q3 '20	Q4 '20	2020	2021
Total Revenues	123	669	517	634	615	862	2,628	1,197	1,651	2,261	3,073	8,182	26,849
Gross costs	44	406	263	299	142	302	1,005	407	545	723	953	2,628	7,559
Gross profit	78	263	255	334	474	560	1,623	790	1,106	1,537	2,121	5,554	19,290
Gross margin	43.7%	37.8%	49.1%	52.6%	76.9%	65.0%	61.6%	66.0%	67.0%	68.0%	69.0%	67.8%	71.8%
Total operating expenses	791	3,679	1,427	1,770	1,409	1,759	6,364	1,989	2,565	2,978	3,326	10,858	23,211
Operating profit	(713)	(3,416)	(1,172)	(1,435)	(935)	(1,199)	(4,741)	(1,199)	(1,459)	(1,441)	(1,206)	(5,304)	(3,921)
Operating margin	-581%	-511%	-227%	-227%	-152%	-139%	-180%	-100%	-88%	-64%	-39%	-65%	-15%
Net income (loss)	(2,140)	(4,112)	(1,172)	(1,437)	(941)	(1,199)	(4,749)	(1,199)	(1,459)	(1,441)	(1,206)	(5,304)	(3,921)
Net margin	-1743%	-615%	-227%	-227%	-153%	-139%	-181%	-100%	-88%	-64%	-39%	-65%	-15%
Earnings per share (EPS), basic	(0.013)	(0.015)	(0.002)	(0.003)	(0.001)	(0.002)	(0.008)	(0.002)	(0.002)	(0.0013)	(0.0011)	(0.006)	(0.003)
Adjusted fully-diluted EPS	(0.006)	(0.008)	(0.001)	(0.002)	(0.001)	(0.001)	(0.006)	(0.001)	(0.001)	(0.0011)	(0.0009)	(0.005)	(0.003)
Total shares outstanding (000,000s), basic	165	276	502	564	661	676	601	761	766	1,101	1,106	933	1,265
Adjusted fully-diluted Shares Outstanding	336	539	903	915	1,089	1,104	1,003	1,189	1,194	1,529	1,534	1,361	1,692

Company Contact Information
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* By majority shareholder vote, SEC filing of 1/16/2020, to be changed to "Can B Corp."

Please see analyst certification and required disclosures on page 28 of this report.

Company Analysis

Introduction

Canbiola, Inc., including its several wholly-owned and majority-owned operating subsidiaries, is a vertically-integrated cannabidiol (CBD) products company. The Company's largest sales contributor through Q3 2019 was Duramed, which licensed and leases to patients an ultra-sound medical device that uses gel patches as an alternative to addictive opiate-based and opioid-based analgesic treatments, targeting auto accident victims covered under "No Fault" laws and insurance. The Company also sells various proprietary lines of consumer-focused Hemp/CBD oils, gels, salves, ointments, tinctures, and capsules. Additionally, the Company cultivates some of its own hemp (under its NY State license and via a recent acquisition) and owns its own product production and packaging facility in Lacey, WA, which produces the Company's own CBD products as well as that of other CBD companies under white label agreements. Canbiola, Inc. is organized as a Florida Subchapter C corporation with its headquarters in Hicksville, NY. Shares of Canbiola trade on the OTCQB market under the trading symbol CANB.

Industry Introduction

The Company operates in the hemp/CBD industry, which was made fully legal in the United States just over one year ago, with the December 20, 2018 passage of the Agriculture Improvement Act, which among other things removed hemp¹ from the 1970 Controlled Substances Act and placed hemp cultivation under the supervision of the U.S. Dept. of Agriculture (USDA). Under this new classification and USDA supervision, the cultivation, interstate transport, and sales of hemp became legal everywhere in the United States under U.S. federal law. However, it is worthy of note that the FDA does not consider CBD legal to sell in purified form for uses it classifies as pharmaceutical, creating a persistent gray area of legality for certain aspects of the industry, as discussed below.

Already enjoying strong consumer demand and growing retail availability, the hemp/CBD industry's growth has accelerated substantially during the last 13 months since the Farm Bill was signed into law. We are currently seeing a strong surge in all hemp-related subindustries, including but not limited to:

- **Hemp cultivators** (i.e. Farms), some of which are indoor-only "high-tech" growers
- **Biotech companies** producing "improved" strains of hemp through DNA modification
- **Hemp/CBD product manufacturers** of ingestible, topical, and pharmaceutical products
- **Hemp-related product packagers, distributors, and retailers**
- **CBD extraction and purification laboratories** and producers
- **Cannabis-related seed-to-sale security, accounting, compliance, and transaction processing systems providers**
- **Cannabis-specialized research, consulting, media, legal, and accounting firms**
- **Finance and commercial banking** service offerings for cannabis-related companies

¹ Hemp is defined as cannabis plants (typically the Cannabis Sativa species) that contain less than 0.3% tetrahydrocannabinol (THC) by dry weight. THC is the other commonly-known component of cannabis, which is psychoactive and in the case of marijuana can comprise as much as 25% of cannabis buds by dry weight. THC and cannabis plants containing more than 0.3% THC by dry weight remain illegal under U.S. federal law, and the mild hallucinogen THC is classified as a Schedule I controlled substance by the federal Drug Enforcement Agency (DEA), despite it now being legal for either recreational or medicinal use in 47 U.S. States, including all but Idaho, South Dakota, and Nebraska. Eleven states have fully legalized cannabis, including California, Colorado, and Illinois.

Furthermore, the hemp/CBD boom is unlikely to abate any time soon. In a 2019 report from Brightfield², domestic CBD sales are forecast to grow to \$23.7 billion in 2023 from 2018 reported sales of just \$620 million, representing a compound annual growth rate (CAGR) of 83.5% during this six-year period.

We believe that this industry's very likely exceptional growth over the next four calendar years will strongly benefit well-capitalized leading and contending players in hemp/CBD industry, and in all of the sub-industries that comprise it. However, we would caution investors that we are likely to begin seeing continued and more significant industry consolidation during 2020 and beyond, making it more and more difficult for new entrants to gain market share traction and ultimately become successful. This is the characteristic of the middle phases of industry maturation, and is a cycle we have historically seen play out in myriad industries, such as: rail transport, automotive, telecommunications, personal computing, pharmaceutical, consumer products, data storage, diversified retail, and mobile communication hardware.

The FDA Wrinkle

Every silver cloud has a dark lining, and as of this writing, the industry boom in hemp/CBD is no exception. Although hemp is now classified as a bona fide agricultural product that is fully legal in the United States, its most popular extract (CBD) is still considered a drug, and as such it falls under the jurisdiction of the Food and Drug Administration (FDA) rather than that of the USDA. In a position paper issued in late 2018, the FDA clarified its current position on CBD, stating that because it is the only ingredient in a recently FDA-approved medication Epidiolex for treatment of certain types of seizures³, it is not currently legal to market or sell CBD for pharmaceutical or over-the-counter use nor for ingestible use in the U.S. at this time. In conjunction with its release of this position paper, the FDA issued stern warning letters to several purveyors of CBD-based products, indicating to us that real enforcement action could begin in the not too distant future, although we view this potential eventuality as an unlikely one.

In our opinion, the FDA's recent communication about its position on CBD, and its admonishments to manufacturers and retailers thereof, mostly constitutes saber-rattling, as we believe the market momentum of CBD-based products – which are already legal in a majority of U.S. states under state law – to be insurmountable. We believe this situation will eventually resolve itself with the full legalization of CBD-based products for any use, although there is no guarantee that our opinion will prove to be correct, and even if we are ultimately proven correct, it is very difficult to foresee when such blanket FDA approval/legalization might occur. So while we do not see the FDA and its current position as constituting a major legal risk for the producers and sellers of CBD-based products, neither do we believe that it can be completely ignored in terms of a potential future risk to the non-prescription providers of products specifically marketed as CBD products – and this especially pertains to those that make medicinal and/or health benefit claims. We do not, however, feel this situation poses any real risk for products based on hemp or “full spectrum” hemp extracts, which include CBD as well as over 80 other cannabinoids, several terpenes, and other chemicals, some or all of which may ultimately be found to have medicinal or health & wellness benefits for consumers⁴.

² <https://www.fool.com/investing/2019/07/14/us-cbd-sales-to-grow-an-average-of-107-annually-th.aspx>

³ On June 25, 2018, the FDA approved Epidiolex (cannabidiol) oral solution for the treatment of seizures associated with two rare and severe forms of epilepsy, Lennox-Gastaut syndrome and Dravet syndrome, in patients two years of age and older.

⁴ See 2016 National Institute of Health article “Cannabis sativa: The Plant of the Thousand and One Molecules” for more information on Cannabis Sativa's molecular chemistry and potential health benefits derived therefrom: www.ncbi.nlm.nih.gov/pmc/articles/PMC4740396/

Company Overview

Canbiola is a rapidly growing, vertically integrated CBD-focused company that currently has operations in:

- **Health and Wellness – related medical devices** (Duramed subsidiary)
- **CBD consumer products production** and packaging, for Canbiola brand, other targeted Company-owned brands, and for white-label customers (Pure Health Products subsidiary)
- **Canbiola clinical product line** marketed through healthcare practitioners
- **CBD products sold via brick-and-mortar and online sales channels** (Seven Chakras subsidiary's Spa brand and Pure Leaf Oil consumer brand)
- **CBD gums and related products** (Radical Tactical subsidiary)
- **NY-licensed custom contract-cultivation** agreements with local farmers for production of specific and (in some cases) proprietary strains of hemp plants (via newly formed NY Hemp Depot subsidiary), and under its own NY State cultivation license
- **CBD-rich hemp cultivation** (Green Grow Farms, 51% owned subsidiary). Furthermore, Green Grow Farms, also a NY State licensed cultivator, intends to move into the CBD extraction and purification business in the future, thereby completing the seed-to-sale vertical integration level for which the Company has been striving

While still relatively early in its stage of development, Canbiola seems to be rapidly approaching bona fide status as a vertically integrated conglomerate.

All of the Company's products are from organically grown and non-genetically modified hemp, and are both formulated and produced with the highest quality standards in mind. To ensure that these standards are met, the Company contracts with a third-party laboratory to certify the purity level of its products, and posts the lab's certificates of analysis on its corporate website. Given that the CBD industry is currently unregulated in a way that we would characterize as "The Wild, Wild West," it is commonplace for CBD products to actually contain less CBD than indicated on the label, and we have heard solid anecdotal evidence that somewhere between 10% to as many as 50% of CBD products currently being sold contain no CBD whatsoever. Because of this, the Company believes that its third-party laboratory's quality certification will enable it to differentiate its products and brand on the basis of its quality; we believe this is a reasonable assertion at this time.

Also, Canbiola considers acquisitions to be a key element of its growth and product development strategy, and it has acquired several companies with complementary product or service offerings during the last 14 months. Management indicates that acquisitions will remain a key component of the Company's strategy going forward, and via acquisitions and organic growth plans to expand into a number of additional market segments in 2020 and beyond.

Products and Product Development

As of this writing, the Company currently has two primary product offerings. The first of these is wearable devices that use either ultrasound or electric nerve stimulators to offer individuals a non-opioid alternative for pain relief, including one device that employs disposable "CBD Pads" as part of the pain-relief solution. The second is a full family of CBD-based consumer products, both proprietary and licensed from other companies, that it markets and sells through a variety of retail and specialty retail locations and online sales platform. Some of these products are produced and branded specifically for use in certain industries, such as the spa industry.

Duramed Medical Devices

Duramed licensed and sells wearable bioelectronic devices for the delivery of sustained acoustic medicine (SAMs), and also sells CBD-based transcutaneous electrical nerve stimulators that relieve pain.

Duramed Healing and Pain Relief Devices⁵

Sustained Acoustic Medicine (SAMs)



Duramed provides wearable bioelectronic devices for the delivery of sustained acoustic medicine (SAMs). The proprietary miniaturized ultrasound platform is designed for the treatment of acute and chronic musculoskeletal conditions, and clinically proven to enhance tissue recovery, accelerate the natural healing processes, and relieve pain.

The SAM® family of products are the only FDA-cleared wearable devices for multi-hour continuous low intensity ultrasound therapy. SAM has a CE Mark, Canada Licensed, and is a Class II medical device in Malaysia and Singapore.

Transcutaneous Electrical Nerve Stimulation

Duramed also provide the Mobius Therapy Device, a revolutionary new system that combines powerful botanical extracts with modern science and technology to deliver Endless Relief from many types of pain.

Combining the pain-relief and anti-inflammatory benefits of CBD based medication with Transcutaneous Electrical Nerve Stimulation (TENS), a proven medical technology successfully used by doctors, hospitals and physiotherapists for over 50 years and is now available for over-the-counter use, is what makes Mobius Therapy so unique. Mobius Therapy Device is registered with the FDA as a Class II Medical Device⁶.

Duramed sales were the most significant driver of 2018 revenue, but in 2019 CBD-based product sales began to materialize, and going forward we would expect them to represent a larger percentage of total revenues than will Duramed sales, with a likely ratio of 3:4.

Duramed devices are currently rented to car accident victims (and others), primarily through “No Fault” insurance programs (typically state-sponsored) on a 30-day rental basis, for approximately \$65/day. The unit is a take-home wearable device that patients use daily, and then return to their doctor after the 30-day rental period. This rental fee is typically fully-paid to Canbiola via insurance reimbursements, which constitute low-risk receivables that

⁵ Source: <https://duramed.us/> Jan 29, 2020.

⁶ We believe this applies only to the device itself, and not to the pads that are used in conjunction with it.

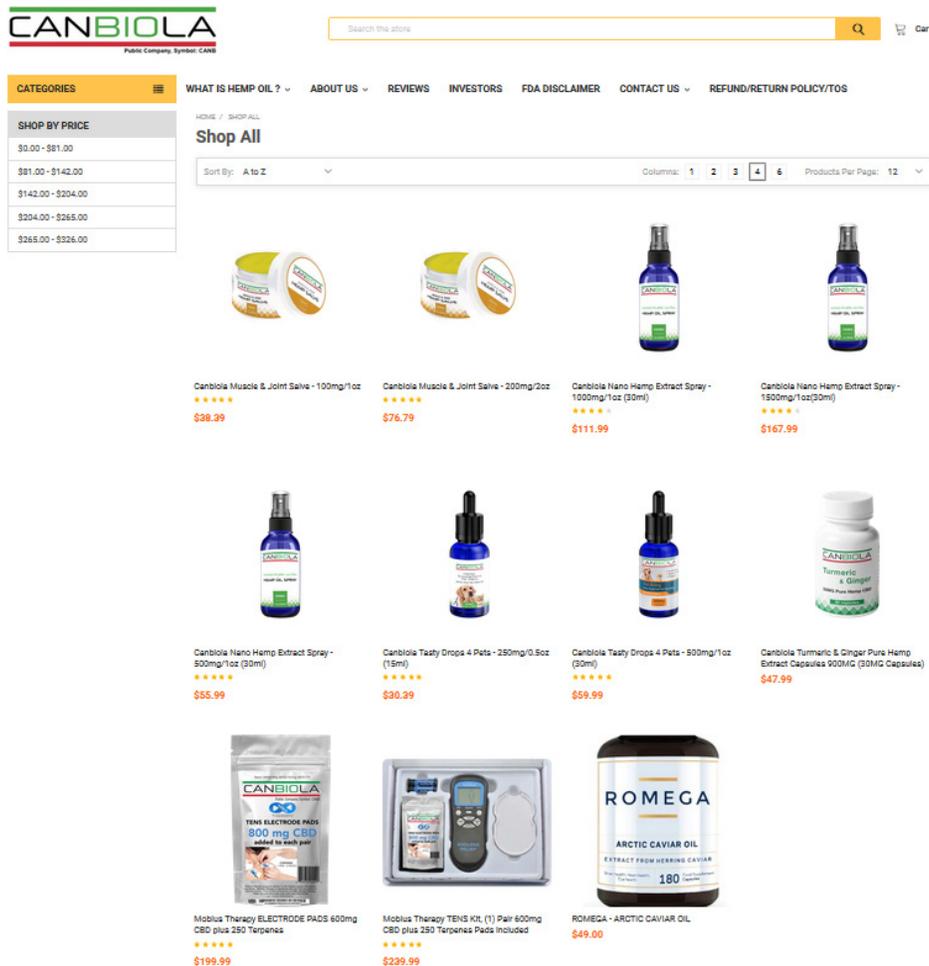
unfortunately stay outstanding for an average of six months. The Company estimates that on average it can rent each device for seven monthly cycles each year, generating annual revenues of \$13,650 and annual gross profits of approximately \$9,200 (including depreciation costs) over the three-year useful life of the device.

CBD-based Consumer Products

Canbiola has created several lines of CBD products, marketed and sold online and in brick-and-mortar locations, and via use-case specific channels, including:

- The Canbiola clinical line, which is marketed and promoted through healthcare practitioners in the medical setting
- The Pure Leaf Oil (consumer brand) and Seven Chakras (spa brand) product lines, which are sold through both online and brick & mortar retail outlets
- Canbiola’s Radical Tactical CBD-based gum products
- Various CBD-based and other Health & Wellness products via the Company’s corporate website, and in the near future, probably by the Company’s branded CBD product vending machines (currently in test phase)

Select Products Sold on Canbiola’s Website (total of 28 available)



In addition to third-party online sales channels such as amazon.com, the Company sells a variety of mostly CBD-related and mostly Company-branded products on its corporate website. As of this writing, there are 28 products available on this site.

- 4 gels
- 6 Canbiola Hemp Extract Drops; 5 30ml bottles with varying strength levels and a 15 mg sample size of the lowest available strength
- 3 products for pets: one Canbiola Hemp Serum and two sizes of Canbiola Tasty Drops
- 3 muscle and joint salves – small, medium, and large containers of the same salve
- 2 Mobius (Duramed) products – 1 device, 1 CBD pads pack
- 1 Canbiola Turmeric & Ginger Pure Hemp Extract capsules bottle (30 x 30mg capsules)
- 1 Herring egg extract oil (branded ROMEGA Arctic Caviar Oil)
- 1 package of HempPep (priced at just \$1.00)
- 3 Canbiola CryoGel bottles, including one regular and two “gold” varieties
- 4 Canbiola combo packs: two starter kits and two sample packs, containing a combination of Company-branded Hemp Oil Drops, Hemp Muscle & Joint Salve, and 1 container of CBD CryoGel

Canbiola-branded Starter Kits and Sample Packs (total of 4 available)

The screenshot shows the Canbiola website interface. At the top, there is a search bar and a navigation menu with links for 'WHAT IS HEMP OIL?', 'ABOUT US', 'REVIEWS', 'INVESTORS', 'FDA DISCLAIMER', 'CONTACT US', and 'REFUND/RETURN POLICY/TOS'. Below the navigation, there is a 'SHOP BY PRICE' sidebar with five price ranges: \$0.00 - \$965.00, \$965.00 - \$1,507.00, \$1,507.00 - \$2,048.00, \$2,048.00 - \$2,590.00, and \$2,590.00 - \$3,132.00. The main content area displays a search for 'Baskets' with a 'Sort By: Price: Ascending' dropdown and a 'Columns: 1 2 3 4 6' selector. Four product listings are shown, each with an image of the product and its price:

Product Name	Price
Canbiola Starter Kit	\$422.25
Canbiola Sample Pack	\$557.50
Canbiola Large Sample Pack	\$2,821.90
Canbiola Large Starter Kit	\$3,131.14

In our opinion, the site has fairly good product variety at this time, and also offers shoppers a search tool enabling them to search based on price or product type. However, the site appears to be either still in beta, or just freshly launched, as three of the five price categories return a null search set, and certain aspects of the interface (at least for us) did not perform properly (e.g. the Columns/page setting always resets to four columns when viewing “next page” regardless of the setting we select). *Note: as of an hour before our publishing deadline, the Company had already addressed these issues.*

These sort of early post-launch issues are not atypical in small high-growth companies, whose limited operating teams always seem to have 24 hours of work for each 12-hour workday. Over time, we expect this online sales system will begin to work properly in all respects, and will have products in all pricing categories rather than just in two out of five. Although the Company does not disclose the sales volume of its own e-commerce site, we would expect that it will be a solid revenue generator for the Company in the future as the Canbiola brand becomes more well-known, and its product offering becomes even more robust.

Hemp Cultivation and Processing

Although not yet a meaningful revenue contributor, the Company has recently taken steps to enter the hemp cultivation industry via multiple cultivation acquisitions, and believes that the cultivation and processing segments of its business could, in the aggregate, account for as much as 30% of revenues going forward.

Green Grow Farms (51% owned by Canbiola)

Green Grow Farms, Inc. is licensed by the State of New York to grow hemp under the Hemp Research Pilot Program. Green Grow Farms grows industrial hemp for grain, flower, and CBD. Green Grow Farms has successfully grown and harvested 6 Acres on two farms in Calverton, NY this year, yielding in excess of 12,000 pounds of dried biomass. The current New York inventory consists of Suver Haze and Sweetened varieties with CBD content ranging from 13% to 16%.

Green Grow Farms is expanding into extraction and processing in a strategic and calculated manner as it anticipates the extraordinary demand growth for CBD-related products to continue.

NY Hemp Depot

With the creation of its newest wholly-owned subsidiary, NY Hemp Depot LLC, the Company believes it has attained complete vertical integration, allowing it to fully control the supply chain from seed to sale, and thereby developing customized products and maximizing gross margins. Through its newly acquired NY State Hemp Cultivation License, the Company plans to contract with farmers throughout the state of NY to cultivate specific strains of hemp, which will in turn be processed into either CBD isolate or distillate before going to the Company's Pure Health Products production facility to be made into finished products.

Pure Health Products

In an acquisition completed on January 14, 2020, Canbiola acquired Pure Health Products, LLC, making it the Company's newest and perhaps most important acquisition to date. Operating Canbiola's state-of-the-art manufacturing facility in Lacey, WA, Pure Health Products produces all of the Company's CBD Isolate products, in addition to providing private label and white label solutions for companies looking to add high-quality CBD items to their offerings. Canbiola is passionate about improving people's lives and takes pride in providing pure CBD products infused with only organic and natural ingredients such as those manufactured by Pure Health.

Competition

Like most rapidly developing industries, the hemp/CBD industry is characterized by myriad smaller and startup enterprises and a few emerging industry leaders. Therefore, in both the Company's CBD products business and in its hemp cultivation and processing business, a plethora of large and small competitors exist, both domestically and internationally (particularly in Canada). An analysis of these various and numerous competitors is beyond the scope of this report.

Medical Devices

The Company believes that it has no direct competition in the use of its CBD gel patches for its medical devices (Duramed) business under its current business model. While this, strictly speaking, may be true, there are certainly competing paid-relieving technologies and medications on the market, most importantly traditional analgesic medications such as opiates and opioids. Since these medications carry a significant concomitant addiction risk, whereas the Company's products do not, we believe that the widespread prescription and use of these medicines constitutes a large marketing opportunity for the Company's products, rather than a competitive threat.

Hemp Cultivators

This industry has multiple very large producers in both the U.S. and Canada, and too many small and medium sized producers to count. By all accounts, the growth in demand for both hemp and marijuana is straining producers' ability (in the aggregate) to keep supply to matching levels, and we believe this trend will continue for at least the next two to three years. This is good news for currently-producing operations, since the current supply/demand scenario will keep market prices well above production costs – at least for the time being. Ultimately, however, we believe that at least to a meaningful degree, all cannabis products and CBD extract will become commoditized, which will tend to push prices downwards towards costs, thinning sales margins for producers to near normalized margins in the general agricultural industry.

So, CANB clearly faces intense and increasingly sophisticated competition in the cultivation space. However, given its small size and current niche markets, it may well carve out a stable and reasonably profitable niche in high CBD content hemp production.

Also worthy of note is the fact that most larger cultivators produce both hemp and marijuana crops, and often in multiple sovereign jurisdictions, including not only the U.S. and Canada, but also various Central American, South American, and Southeast Asian countries. This makes it very difficult to identify producers that make good valuation comparables for Canbiola in this segment of its business.

CBD Extraction, Purification, Product Production, and Product Sales

This industry is rife with smaller up-and-coming players, many of which are either in the process of vertically integrating, or in the case of more mature companies, have already solidified their market position as fully vertically-integrated enterprises. All of them pose some competitive threat to the Company, but given the great numbers of small companies currently operating in this space, we believe the time still remains for a smaller company such as Canbiola to establish itself as a very successful medium-size, vertically-integrated enterprise. Hence, we are not too concerned with competitive pressures at this time, but rather about the future onset of increasing commoditization of the products that the Company produces and sells. Only time will tell how quickly such commoditization will take hold, and to what degree; in any event, we do not see it as likely at least over the next one to two years.

Publicly traded companies that operate in one or several of these businesses have a very wide range of valuations, trading from less than 1x trailing sales to over 50x trailing sales. Most have yet to reach profitability, and in most cases no analyst estimates of future sales or earnings exist, making the most relevant valuation measures such as forward P/E, forward PEG, and forward P/S nearly impossible to calculate. This makes the process of establishing a valuation of Canbiola based on the comparable valuations of other similar public companies very difficult indeed.

However, from this group, we were able to identify two comparably-sized and similarly traded companies that specialize in the production of either CBD or products based on it, plus a larger company that is squarely focused on the production and sales of consumer-focused CBD products, namely Charlotte's Web (CWBHF – OTCQX). We discuss relative valuations below.

Strategic Business Plan / Key Milestones for the Future – CEO Press Release⁷

On January 16th, Canbiola's largest shareholder, Chairman and CEO Marco Alfonsi, issued a press release reviewing the Company recent successes and establishing a roadmap of milestones he and his team planned to achieve during 2020 and beyond. Last year's accomplishments included:

- Achieving strong revenue growth in Q1 – Q3 of 2019 vs. that of the same periods in 2018 (741%, 311%, and 277%, respectively)
- Closing a \$3,936,700 Reg. D financing
- Launching its new Pure Leaf Oil proprietary consumer brand it acquired as part of the December 2018 acquisition of Pure Health Products, LLC
- Attaining registration in the GSA's System for Award Management and Department of Defense
- Finalizing an asset purchase agreement with Seven Chakras, Inc., the products of which it now markets as the Company's Spa product line
- Completing a 300% increased investment in its Duramed subsidiary, which offers a CBD-based analgesic treatment via a medical device that provides an alternative to addictive opioid medications
- Opened a new wholly-owned subsidiary call NY Hemp Depot, LLC to develop cultivation operations under a new operating license
- Launched in test-mode a dedicated Canbiola-branded CBD product dispensing machine
- Launched the Company's first capsule-based hemp extract product, Canbiola Turmeric & Ginger Pure Hemp Extract in 30 mg capsules
- Presented at both the H.C. Wainwright 21st Annual Global Investment Conference and the very popular 12th Annual LD Micro Conference
- Adding several new, high-profile members to its Board of Directors, including Senator Ron Silver, James Murhpy, and Alger Boyer, Jr., thereby satisfying the Nasdaq listing requirement pertaining to independent Directors being a majority of the Board of Directors
- Adding NFL Great Leonard Marshall to the Company's Sports Advisory Board
- Adding Steven Medina, Esq., Jason Winn, Dr. Mehran P. Ghazvini, David Woycik, Jr., and John Bach to the Company's Advisory Board
- Having products become available for purchase on Amazon.com
- And reporting operating losses for Q1-Q3 2019 of \$1.2 million (\$800 thousand non-cash expenses), \$1,435,295 (including \$959,948 in non-cash equity-based compensation), and \$935,264 (including \$602,823 in non-cash equity-based compensation), respectively

⁷ For the full text of the CEO's important press release, visit: <https://www.nasdaq.com/press-release/canbiola-inc.-announces-2019-highlights-and-2020-plans-for-expansion-2020-01-16>

Mr. Alfonsi went on to explain the that looking ahead the Company intends to:

- Develop additional opportunities in new market segments for the deployment of [Duramed's] ultrasound device
- Develop additional cultivation opportunities with farms and growers for expansion of the Company's harvesting initiative
- Expand its Canbiola-branded products into new market segments
- Continue the selective search for potentially accretive acquisitions or ventures within the Company's market space and segment
- Review and outreach for the newest hemp extraction and processing technology
- Diversify into non-CBD wellness products that offer real-world benefits to consumers
- Complete NasdaqCM uplisting [for which it submitted an application to be listed on June 4, 2019]

We viewed this press release as being quite positive, as it not only highlighted the Company's recent successes but also laid out a clear roadmap for current initiatives and future milestones. In our opinion, the Company's year-over-year reported quarterly sales growth has been nothing short of phenomenal, as has its demonstrated ability to recruit top-tier Directors such as Senator Ron Silver, and its success at completing several acquisitions that have helped the Company reach its stated goal of "becoming a vertically-integrated conglomerate specializing in the manufacturing, formulation, and sale of THC-free Cannabidiol isolate products such as oils, drops/tinctures, gels, creams, moisturizers, chews, and capsules." Given the Company's successes during 2019 and the strategic clarity expressed in Mr. Alfonsi's press release, we feel optimistic that the Company is likely to report continued strong revenue growth in 2020 and beyond as well as other successes and progress.

Leadership Teams, Directors, and Advisors

In our opinion, the Company has done a tremendous job in moving towards a NasdaqCM listing and in solidifying its credibility with customers and investors by recruiting the Independent Directors it brought on over the last several months.

In addition to the Company's great success in growing the top line so much over the last several quarters, we find ourselves impressed with management's finance and capital markets experience, demonstrated ability to successfully execute multiple M&A transactions, and ability to so rapidly assemble a group of companies that has for all intents and purposes achieved vertical integration for Canbiola – and all of the cost savings, and operational and relationship synergies that go with it.

Marco Alfonsi, *Chairman and Chief Executive Officer*

Marco Alfonsi has been a financial service professional for over 20 years. Throughout his career, Mr. Alfonsi was directly and indirectly involved in raising over \$100 million dollars for small and medium sized business. Prior to his involvement in the financial services industry, Mr. Alfonsi has owned, operated, financed and sold several businesses. Mr. Alfonsi successfully started and managed two companies (ExecuteDirect.com, and Bakers Express of New York, Inc.), and held senior management positions with a number of financial institutions including Global American Investments, Clark Street Capital, and Basic Investors.

Stanley L. Teeple, *Director and Chief Financial Officer*

Mr. Teeple was engaged from 2017-2018 with Solis Tek, Inc. (OTCQB: SLTK) a California based publicly traded corporation as Senior Vice President, Corporate Secretary, and Chief Compliance Officer. Solis Tek, Inc. a NV Corporation, is a developer of lighting and nutrient products, and most recently in cultivation and processing for the cannabis industry. Previously, from 2015-2016 Mr. Teeple was Chief Financial Officer and Secretary for Zonzia Media, Inc. (OTC: ZONX), a provider of streaming video and content to cable subscribers and hotel networks throughout the eastern US. From 2008 to 2014 Mr. Teeple was Chief Financial Officer and Secretary of Indigo Energy, Inc. (OTC: IDGG) a publicly traded company in the oil and gas exploration business. Over the prior three plus decades Mr. Teeple through his turnaround consulting business, Stan Teeple, Inc., has held numerous senior management positions in several public and private companies across a broad spectrum of industries. Additionally, he has operated and worked for various court appointed trustees and principals as CEO, COO, and CFO in the entertainment, pharmaceuticals, food, travel, and tech industries. He operated his consulting business on a project-to-project basis and holds various other directorships. His businesses operational strengths include knowing how to manage and maximize the resources and preserve the integrity of a company from start-up through to maturity and corporate compliance in a regulatory environment.

Philip P. Scala, *Chief Operating Officer*

Mr. Scala has acted as founder and CEO of Pathfinder Consultants International, Inc. ("Pathfinder") since 2008. Pathfinder offers unique expertise and delivers the information you need to make informed decisions, whether in times of crisis or in the course of simply running your business. Prior to forming Pathfinder, Mr. Scala served the United States both as a Commissioned Officer in the US Army for five years followed by his 29 years of service with the FBI. Mr. Scala received his bachelor's degree and Master of Business Administration in accounting from St. John's University, he also earned a Master of Arts degree in Psychology from New York University.

Senator Ronald A. Silver, *Director (independent)*

Ronald A. Silver was first elected to the Florida House of Representatives In 1978 and continued his tenure in that body until 1992. While in the Florida House Silver served in major positions including Majority Whip (1984-1986) and Majority Leader (1986-1988). He also chaired various committees including the Select Committee on Juvenile Justice, Criminal Justice, Ethics and Elections and the subcommittee of Appropriations on General Government. He was then elected to the Florida Senate in 1992 and subsequently re-elected, serving as the Majority (Democratic) leader for the 1994 session. During his last term in the Senate he was designated by both the House and Senate as the Dean of the Legislature recognizing his standing as the longest serving member. His career as a lawmaker has yielded a vast and extensive knowledge of public policy issues and the legislative process, allowing him to be an advocate and servant for his diverse community. Throughout his tenure in the House and Senate, Mr. Silver has been known to tackle tough issues, transcend partisanship and build strong coalitions and in addition served on the Judiciary committee, which heard all condominium issues. As Senator, he served on a variety of committees, and was chairman of both the Appropriations Subcommittee on Health and Human Services and Criminal Justice. His career in the Senate has earned praise from his colleagues, in both the legislature and other branches of government throughout the nation. In 1993 Mr. Silver was elected Chairman of the Southern Legislative Conference (17 Southern States) of the Council of State Governments. Most recently, a new prescription drug plan of Medicare-eligible senior citizens in the State of Florida has been named "Silver Saver" in his honor. Since his retirement from the Senate in 2002, Mr. Silver also functions as President of his own consulting firm (Ron Silver & Associates) and maintains his law practice in Miami Beach, Florida. Mr. Silver is married with two children and three grandchildren.

Frederick Alger Boyer, Jr., *Director (independent)*

Mr. Boyer has over 25 years of Wall Street experience having worked on both the investment side as well as the banking side of the business. Most recently he served as Head of Equities for the New York based investment bank H.C. Wainwright & Co. where he had overseen efforts in capital markets, sales, and trading. Prior to that he worked and or supervised teams at Rodman & Renshaw, Oppenheimer, Piper Jaffray, and Credit Suisse in New York, San Francisco, and Minneapolis. In his various roles he has advised hundreds of companies in their financing efforts both publicly and privately. Mr. Boyer has numerous securities licenses and is a graduate of the University of California at Berkeley.

James F. Murphy, *Director (independent)*

James F. Murphy brings more than 40 years of investigative and consulting experience as the Founder and President of Sutton Associates. From 1980 to 1984, Mr. Murphy was an Assistant Special Agent in Charge with the Federal Bureau of Investigation, responsible for a territory encompassing more than seven million people. His investigative specialties included organized crime, white-collar crime, labor racketeering and political corruption. From 1976 to 1980, Mr. Murphy was assigned to the Office of Planning and Evaluation at FBI headquarters, Washington, D.C. In this capacity, he evaluated and recommended changes in the FBI's administrative and investigative programs. Since entering the private sector in 1984, Mr. Murphy has advanced the industry by developing systematic and professional protocols for performing due diligence, as well as other investigative services.

Future Financing Activity

As is evident to us based on the recently-announced First Fire Global Opportunity Fund financing⁸, Canbiola is in expansion mode and will likely be in need of additional investor capital for some time to come. Companies in CANB's current stage of growth and maturity typically raise capital under a Safe Harbor under Section 4(a)(2) of the Securities Act of 1933, often under Reg D. The aforementioned FirstFire transaction was done this way, under Reg D, Rule 506(b), which allows up to 35 non-accredited investors as well as accredited investors or Qualified Institutional Buyers (QIBs).

However, given the management team's deep knowledge of financial markets and the various types of financing structures available to them, we would expect that at some point in the future they would do either a Reg D, Rule 506(c) offering, which notably allows for general solicitation of accredited investors only, or a Reg A+ offering, which while more costly and time consuming to execute than a Reg D offering, allows for general solicitation without the accredited investor requirements, with a maximum offering amount of \$50,000,000 (for Tier 2), and issues fully-tradable shares to investors, unlike Reg D offerings that issue restricted shares usually only tradable after a minimum holding period stipulated in Rule 144 or if and when they are included in an issuer's S-1 Registration statement filed with the SEC.

In any event, regardless of the structure of likely future financings the Company might undertake, prospective investors should expect significant dilution of their equity during subsequent financing rounds.

⁸ See Appendix B, Past Financing Transaction Details for an in-depth look at this transaction and links/sublinks to the legal documents that consummated it - all publicly available on www.sec.gov.

Risks

Like any early-stage growth enterprise, Canbiola faces various operational risks, legal risks, competitive risks, and financial/undercapitalization risks, and those facing the Company are very typical for companies at this stage in their development. Investors in early-stage companies also face dilution risk and other forms of risk (e.g. a bear market) that can potentially negatively affect the price of CANB shares while not really affecting the Company as a whole. Investing in the shares of early stage growth companies is inherently risky and should be considered only by risk-tolerant investors who can accept the possibility of losing their entire investment.

Balance Sheet Risk – Asset Quality

While not a major issue for us, we must first mention what we consider to be a fairly weak balance sheet.

Current Assets

Approximately 53.8% of the Company's current assets consist of cash and cash equivalents (16.2% of current assets), accounts receivable (34.1% of CA), and inventory (3.5% of CA). We believe that these assets are of a high quality and should be fully valued as reported; this includes the large accounts receivable number, which implies an average Days Sales Outstanding (DSO) number of approximately five months. This initially gave us pause, but upon questioning the CFO about it, we came to understand why we shouldn't be alarmed by it: most of the receivables are due from insurance companies, which both pose a very low risk of non-payment, and a near-guarantee of slow payment.

However, the remaining 46.2% of the Company's current assets are listed as prepaid expenses, which in this case do not represent cash paid by the Company for traditional expenses such as prepaid leases, etc. In this case the item represents restricted equity the Company issued to consultants for services not yet provided. We do not often see such a large percentage of current assets represented by such an item, and although we believe that item was properly accounted for under U.S. GAAP rules, it should be eliminated from Current Assets from an investor-focused balance sheet analysis.

Long-Term Assets

Rather strangely in our mind, the Company hasn't included PP&E (Property, Plant, and Equipment) in the total other assets category, and lists no other asset summation other than total assets, which we found to be somewhat confusing. To make our analysis easier, we have added PP&E to other assets and called the new category "long term assets." We have no problem with the actual valuation of several of these long-term assets, such as PP&E (20.6% of long-term assets) and non-current receivables and deposits (1.8% of LTA).

The remaining assets on the balance sheet are either intangibles valued relatively arbitrarily (32.2% of LTA) or goodwill (1.9% of LTA), plus another large prepaid expense account (26.9% of LTA), in this case non-current, meaning that the Company does not expect to receive the services for which it has already paid for a minimum of one year. This account value is also derived from the exchange of restricted equity security for future consulting services. We feel that for an investor-focused analysis, both the prepaid asset account and all of the intangible accounts should be eliminated from long-term assets, reducing its value by 70.4% of the reported total.

Conclusion, Balance Sheet Risk

Taken in the aggregate, all of our balance sheet adjustments for investment analysis purposes result in a reduction of reported total assets from \$6,764,997 to \$2,727,434, representing a total downward adjustment of total assets of 59.7%.

Lastly, we must question why a Company would need to prepay consultants of the Company for services that in some cases are not to be provided for a minimum of at least one year. We cannot answer this question, other than to suggest that it creates a two prepaid expense asset accounts that in the aggregate comprise 41.25% of the Company's total assets, with the net result being a very significant increase in reported shareholders' equity and a large improvement of standard financial ratios such as debt-to-equity and current assets-to-total liabilities - in a non-standard (but not necessarily incorrect) way.

Overall, we are not extremely happy with the Company's balance sheet and feel that as a result its total book value may be quite overstated vs. what we feel it should be. However, although this constitutes a clear asset-quality risk, we are not overly concerned about it, largely because our investment thesis is not heavily based on the Company's total asset value, but rather its future sales and earnings potential.

Financial Statement Risk – Auditor Quality, and Reported Results Accuracy

We found a troubling PCAOB report pertaining to one audit conducted by the firm's auditor for one of its clients (the name of which was not disclosed in the report) and were initially somewhat alarmed by its contents and potential significance. However, after many hours of digging – including one conversation directly with the auditing firm itself – we became convinced that the PCAOB report represented nothing other than a tempest in a teacup, and posed no real concern to us nor, in our opinion, to investors. It pertained only to 2016 numbers, and only to one undisclosed public-issuer client of the firm, of which there were four at the time of the PCAOB site visit. For the purposes of full and fair disclosure, and compliance with the CFA Institute's Standards of Professional Conduct, we felt it necessary to mention the existence of the PCAOB report pertaining to an audit the Company's auditor performed some years ago. This report is publicly available on the PCAOB website, and, that said, we believe it to be neither relevant nor material to our assessment of the Company, its future prospects, or likely future value.

Financial Risk - Undercapitalization

The Company had a reasonably comforting amount of cash on hand as of the end of Q3 2019, and we must presume that with the recent financing cash flow of \$500,000 it just received from FirstFire it is still in a decent cash position. We are also comforted by the capital markets experience of the Company's CEO and CFO, but still must acknowledge the very real financial risk that exists in Canbiola and every other company like it at this time.

The Company generated negative Operating Cash Flows of approximately \$2.06 million in the first nine months of 2019, and both has been and plans to continue being reliant on the capital markets and new investment to replenish its cash reserves while it continues to generate negative operating cash flows, which we believe it will for at least the next 2-3 calendar quarters. If the current market conditions were to change for the worse, depending on the length and severity of the worsened financing environment, the Company could find it difficult or even impossible to find adequate investment capital. Under such a scenario, a potential change in the market environment could have negative effects on the Company's ability to continue operations at their current levels, or in the case of a severe and protracted negative market environment, the Company might not continue as a going concern, and be forced into a Chapter 11 reorganization or even a Chapter 7 dissolution.

While we do not see such a negative change in the current debt and equity market environment as being likely during the next few calendar quarters, we must acknowledge that it is, as always, a possibility, and if it were to occur it could have a potentially negative effect on the Company's operations and the value of its common stock. Note that this is a risk that plagues almost all smaller growth companies, which routinely have negative Operating Cash Flows during their pre-profitability growth phase.

Management Risk

While we have no reason to believe that management will cease to be as effective as it has been over the recent quarters and years past, there is no guarantee that management will be able to continue to run the business effectively, and if they cannot, it would likely result in a negative effect on the Company's financial results and, potentially, on the value of its common stock. This type of risk is also present in almost all smaller companies, but in our view, the odds of the "Risk Event" (i.e. mismanagement of the enterprise) occurring are very near zero.

Regulatory Risk

At this time we do see some regulatory risk in the Company's business, mainly because of the FDA's current position on sales of CBD-based products and the fact that production and sales of such products comprise a large portion of the Company's current and likely future operations. As mentioned above, we do not believe that this risk will translate into an FDA-led CBD industry shutdown, and in fact believe that the future will likely lead to the opposite result. But were the FDA to crackdown and begin aggressively enforcing a "No CBD products outside of FDA drug approval" policy, it would likely have negative effects on both the Company's financial results and, possibly, on the market value of its common stock.

Competitive Risk

At this time we do not see much risk from competition over the next 1-2 years, given the still early stage of the industries in which the Company operates, and are only moderately concerned about the longer-term risk of product commoditization and a resulting systemic reduction in pricing power and in the magnitude of maximum viable gross profit margins in CBD product production and sales.

Other Risks

There are myriad, low-probability risks that always exist, such as geopolitical risks (e.g. a war between superpowers), natural risks (e.g. a once-in-10,000 year mega earthquake striking New York City) that are largely inescapable and inherently unpredictable. Our overall view is that these risks are not really worthy of consideration by investors, and are in fact included here only in the name of completeness.

Valuation and Market Comparables Analysis

Simple Valuation Primer – Multiple Analysis

In valuing early-stage, high-growth companies, the Street tends to focus on:

- The total historical sales of the company over the last twelve months, known as *trailing Sales* or *ttm Sales*
- The total forecasted sales of the company for the next twelve months, known as *forward Sales*

Based on sales history and sales forecasts, analysts evaluate two different valuation measures, the *Price to trailing Sales* (ttm P/S) ratio, and the *Price to forward Sales* (forward P/S) ratio. Note that while valuation measures based on Earnings (e.g. P/E ratio) rather than on sales are often considered superior, they are typically inapplicable to early-stage, high-growth companies because these companies almost always have negative net earnings numbers.

Analysts also pay special attention to the historical and likely future growth rate of a company's sales, because a company with rapidly growing sales is obviously worth more today (i.e. has a higher present value, or PV) than the same company would be worth if it had low or no sales growth, all other things being equal. The sales growth measure most frequently used is *Year-over-year Quarterly Sales growth*, sometimes written as just "*YoY Quarterly Sales Growth*."

Canbiola Comparables Analysis

In trying to establish a fair value for a company, perhaps the most important thing to do is to consider is the value of other similar companies in terms of their *ttm P/S ratio*, *forward P/S ratio*, and their *YoY Quarterly Sales Growth Rate*.

For our comparables analysis of Canbiola, we selected two companies that were similar to Canbiola in most respects, including *YoY Quarterly Sales growth* and market cap, and one better-known larger company that trades on the larger OTCQX market, and is similar to Canbiola in terms of its *ttm P/S ratio*.

CANB Valuation Comparables Analysis	Stock Symbol	Trading Market	Recent Price	Mkt Cap (000s)	Trailing 12-month (ttm) Total Sales	Price/ttm Sales	2020 (Forward) Sales	Price/2020 (Forward) Sales	Quarterly YoY Sales Growth
Kona Gold	KGKG	OTC Pink	0.063	12,203	833,400	14.64			306.0%
Cannabis Sativa, Inc.	CBDS	OTCQB	1.210	26,716	802,000	33.31			321.5%
Charlotte's Web	CWBHF	OTCQX	7.960	823,813	93,220,000	8.84	148,100,000	5.56	41.0%
Canbiola, Inc.	CANB	OTCQB	0.0171	12,203	2,041,186	5.98	8,169,870	1.49	301.8%

Source: Yahoo! Finance

As is readily apparent, all three of these comparable companies seem to be overvalued relative to CANB's valuation. The first two smaller companies each have a ttm P/S ratio of less than half that of Canbiola's, and have similar YoY quarterly sales growth rates, but much higher (i.e. more expensive) ttm P/S ratios. The larger Charlotte's Web has a much lower YoY quarterly sales growth rate, yet still has a higher ttm P/S ratio.

Based on this comparables analysis, and based on the fundamentals and high rate of recent progress CANB has shown, we believe that CANB shares are undervalued relative to their peer group, and believe price appreciation of 100% to 150% over the next twelve months is possible, perhaps even probable, as CANB's multiples adjust to be more in line with those of their peer group.

Financial Model and Forecasts

Canbiola has been making great strides in rapidly growing sales, first in the medical device side of its business, and now also in CBD-related product production and sales. Although the Company does not yet break out segment revenues in its financial statements, in our conversations with management we have suggested that it begin doing so, and hope to see this beginning in this year, in Q1 of 2020. However, until the Company adopts this practice, we are left to guess what percentage of 2019 revenues it derived from its two primary business segments. Management has given us "longer term" guidance that they expect the Company to generate approximately 30% of sales in medical devices, 40% in CBD-related product manufacture and sales, and perhaps a full 30% in cultivation activities. We nor management are in possession of a fully-functioning crystal ball, however, so this guidance should be considered an educated guess at best, at least for the time being.

In making our top-line forecasts, we began with the historical year-over-year quarterly revenue growth rate, and slowly reduced the sequential quarterly growth rate for the next eight calendar quarters. Although a priori these growth rates seem to be exceptionally high – even to the point of being too high – we feel that they are appropriate given the overall growth in the underlying industry in which the Company operates.

Conclusion and Investment Thesis

Overall, we feel very good about the Company's recent progress, plan, and ability to execute. We are also encouraged by the Company's NasdaqCM application, but do not expect an approval any time soon, as based on OTC Market's data reflecting a current CANB float of 333,654,897 shares, the Company as of this writing had a float value of just \$5.7 million vs. the required \$15 million. That said, the Company is becoming well-established in a hyper-growing industry, and overall, we like its acquisitiveness and current product positioning, as well as its strategic plan for the future. In terms of a fair rating and valuation for its shares, we have tried to balance our positive assessment of the business and its leadership and growth prospects with the fact that despite comparing favorably with the valuation of certain members of its peer group, it is currently trading at 6.0x trailing sales, which is historically speaking not inexpensive. If the Company succeeds at achieving all key objectives over the next 12 months, we believe that the shares should trade at a 100%+ premium to current levels within that same timeframe, assuming the current stock market environment persists. However, if we experience a market downturn during the next 12 months, or if management does not meet our revenue growth and net loss reduction targets during that timeframe, we would expect the shares to perform less well. **Therefore, on a risk-adjusted basis, we rate the shares of CANB a Strong Speculative Buy and set our 12-month price target at \$0.04 per share** (before the announced 300-for-1 reverse stock split takes effect).

Note that we would consider upgrading CANB shares to an even higher rating at some point in the future, if the Company's excellent historical top-line performance continues into 2020, and future financings are not overly dilutive to existing shareholders.

Financial Models – Profit and Loss, Historical (as reported) and Prospective

Canbiola (CANB - OTCQB) Profit and Loss Model

In (\$000s) except for per-share and percentage data	FY/CY 2017	FY/CY 2018	Q1 '19	Q2 '19	Q3 '19	Q4 '19	FY/CY 2019	Q1 '20	Q2 '20	Q3 '20	Q4 '20	FY/CY 2020	FY/CY 2021
Revenues													
Product sales	79	652	515	632	614	859	2,620	1,194	1,648	2,258	3,070	8,170	26,837
<i>Sequential Growth, annual quarter-over-quarter</i>		725.0%	83.8%	22.6%	-2.9%	40.0%	301.8%	39.0%	38.0%	37.0%	36.0%	211.8%	228.5%
Service revenue	44	17	2	2	2	3	8	3	3	3	3	12	12
Total Revenues	123	669	517	634	615	862	2,628	1,197	1,651	2,261	3,073	8,182	26,849
Gross costs													
Cost of product sales	44	406	263	299	142	302	1,005	407	545	723	953	2,628	7,559
Gross profit	78	263	255	334	474	560	1,623	790	1,106	1,537	2,121	5,554	19,290
Gross margin	43.7%	37.8%	49.1%	52.6%	76.9%	65.0%	61.6%	66.0%	67.0%	68.0%	69.0%	67.8%	71.8%
Operating expenses													
Sales and marketing	28	84	26	127	67	136	356	189	260	357	485	1,291	4,242
General and administrative	763	3,595	1,400	1,642	1,342	1,623	6,008	1,800	2,304	2,621	2,841	9,566	18,969
Research and Development													
Total operating expenses	791	3,679	1,427	1,770	1,409	1,759	6,364	1,989	2,565	2,978	3,326	10,858	23,211
Operating profit	(713)	(3,416)	(1,172)	(1,435)	(935)	(1,199)	(4,741)	(1,199)	(1,459)	(1,441)	(1,206)	(5,304)	(3,921)
<i>Operating margin</i>	-580.7%	-510.9%	-226.6%	-226.5%	-152.0%	-139.0%	-180.4%	-100.1%	-88.4%	-63.7%	-39.2%	-64.8%	-14.6%
Other income (expense)													
Other income (expense), total	(1,148)	(433)	0	0	0								
Interest expense	(279)	(264)	0	2	6								
Other income (expense), net	(1,427)	(697)	0	2	6	0	9	0	0	0	0	0	0
Pre-tax income	(2,140)	(4,112)	(1,172)	(1,433)	(929)	(1,199)	(4,732)	(1,199)	(1,459)	(1,441)	(1,206)	(5,304)	(3,921)
Provision for income taxes	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Implied effective income tax rate</i>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Net income (loss) and comprehensive income (loss)	(2,140)	(4,112)	(1,172)	(1,433)	(929)	(1,199)	(4,732)	(1,199)	(1,459)	(1,441)	(1,206)	(5,304)	(3,921)
<i>Net margin</i>	-1743.2%	-615.1%	-226.5%	-226.1%	-151.0%	-139.0%	-180.0%	-100.1%	-88.4%	-63.7%	-39.2%	-64.8%	-14.6%
Earnings per share (EPS), basic	(0.013)	(0.015)	(0.002)	(0.003)	(0.001)	(0.002)	(0.008)	(0.002)	(0.002)	(0.0013)	(0.0011)	(0.006)	(0.003)
Diluted EPS, as reported	(0.008)	(0.010)	(0.002)	(0.002)	(0.001)	(0.001)	(0.006)	(0.001)	(0.001)	(0.0011)	(0.0009)	(0.005)	(0.003)
Diluted EPS, further adjusted to for full conversion of Series A Preferred*	(0.006)	(0.008)	(0.001)	(0.002)	(0.001)	(0.001)	(0.006)	(0.001)	(0.001)	(0.0011)	(0.0009)	(0.005)	(0.003)
Total shares outstanding (000s), basic	165,231	276,027	501,586	564,041	660,770	675,770	600,542	760,770	765,770	1,100,770	1,105,770	933,270	1,264,520
Total shares outstanding (000s), diluted	256,260	423,882	732,709	715,287	888,650	903,650	810,074	988,650	993,650	1,328,650	1,333,650	1,161,150	1,492,400
Total shares outstanding (000s), including conversion of Series A Preferred*	336,260	539,289	902,709	915,287	1,088,650	1,103,650	1,002,574	1,188,650	1,193,650	1,528,650	1,533,650	1,361,150	1,692,400

Financial Models – Selected Comparison Items, Unadjusted vs. Adjusted Profit and Loss

Canbiola (CANB - OTCQB) Unadjusted vs. Adjusted* Comparison of Select Items

In (\$000s) except for per-share and percentage data	FY/CY 2017	FY/CY 2018	Q1 '19	Q2 '19	Q3 '19	Q4 '19	FY/CY 2019	Q1 '20	Q2 '20	Q3 '20	Q4 '20	FY/CY 2020	FY/CY 2021
Operating expenses (as reported)													
Officers and Director's compensation (including stock-based compensation of \$1,018,786, \$185,400, \$184,556, and \$0, respectively)	154	1,479	446	829	443	573	2,290	601	631	663	696	2,591	3,149
Consulting fees (including stock-based compensation of \$1,372,181, \$1,091,093, \$418,267 and \$518,317 respectively)	285	1,669	664	427	449	513	2,054	539	566	594	624	2,324	2,825
Operating expenses (as adjusted)													
Officers and Director's compensation (including stock-based compensation of \$1,018,786, \$185,400, \$184,556, and \$0, respectively)	154	1,479	446	829	443	573	2,290	601	631	663	696	2,591	3,149
Adjustment for non-cash, equity-related expenses	(64)	(1,255)	(497)	(337)	(185)	(340)	(1,358)	(301)	(316)	(331)	(348)	(1,296)	(1,335)
As a percentage of reported quantity	41.4%	84.9%	111.6%	40.6%	41.7%	59.3%	59.3%	50.0%	50.0%	50.0%	50.0%	50.0%	42.4%
Adjusted reported Officer's and Directors's compensation	91	224	(52)	492	258	233	932	301	316	331	348	1,296	1,815
Consulting fees (including stock-based compensation of \$1,372,181, \$1,091,093, \$418,267 and \$518,317 respectively)	285	1,669	664	427	449	513	2,054	539	566	594	624	2,324	2,825
Adjustment for non-cash, equity-related expenses	(168)	(1,524)	(566)	(388)	(418)	(457)	(1,830)	(480)	(504)	(529)	(556)	(2,070)	(2,516)
As a percentage of reported quantity	59.0%	91.3%	85.2%	90.8%	93.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%
Adjusted reported Consulting Fees	117	145	98	39	31	56	224	59	62	65	68	254	309
Total operating expenses (as reported)	791	3,679	1,427	1,770	1,409	1,759	6,364	1,989	2,565	2,978	3,326	10,858	23,211
Operating profit (as reported)	(713)	(3,416)	(1,172)	(1,435)	(935)	(1,199)	(4,741)	(1,199)	(1,459)	(1,441)	(1,206)	(5,304)	(3,921)
Operating margin	-581%	-511%	-227%	-227%	-152%	-139%	-180%	-100%	-88%	-64%	-39%	-65%	-15%
Total operating expenses (as adjusted)	559	1,141	364	1,045	806	962	3,176	1,208	1,745	2,117	2,422	7,492	19,361
Operating profit (as adjusted)	(481)	(878)	(109)	(710)	(332)	(402)	(1,553)	(418)	(639)	(580)	(302)	(1,938)	(70)
Operating margin	-391.9%	-131.2%	-21.1%	-112.1%	-54.0%	-46.6%	-59.1%	-34.9%	-38.7%	-25.6%	-9.8%	-23.7%	-0.3%
Net income (loss) and comprehensive income (loss) (as reported)	(2,140)	(4,112)	(1,172)	(1,433)	(929)	(1,199)	(4,732)	(1,199)	(1,459)	(1,441)	(1,206)	(5,304)	(3,921)
Net margin	-1743.2%	-615.1%	-226.5%	-226.1%	-151.0%	-139.0%	-180.0%	-100.1%	-88.4%	-63.7%	-39.2%	-64.8%	-14.6%
Earnings per share (EPS), basic (as reported)	(0.013)	(0.015)	(0.002)	(0.003)	(0.001)	(0.002)	(0.008)	(0.002)	(0.002)	(0.0013)	(0.0011)	(0.006)	(0.003)
Diluted EPS, (as reported)	(0.008)	(0.010)	(0.002)	(0.002)	(0.001)	(0.001)	(0.006)	(0.001)	(0.001)	(0.0011)	(0.0009)	(0.005)	(0.003)
Diluted EPS, further adjusted to for full conversion of Series A Preferred*	(0.006)	(0.008)	(0.001)	(0.002)	(0.001)	(0.001)	(0.006)	(0.001)	(0.001)	(0.0011)	(0.0009)	(0.005)	(0.003)
Net income (loss) and comprehensive income (loss) (as adjusted)	(768)	(1,217)	(108)	(708)	(326)	(402)	(1,544)	(418)	(639)	(580)	(302)	(1,938)	(70)
Net margin	-625.9%	-182.0%	-21.0%	-111.7%	-53.0%	-46.6%	-58.8%	-34.9%	-38.7%	-25.6%	-9.8%	-23.7%	-0.3%
Earnings per share (EPS), basic (as adjusted)	(0.005)	(0.004)	(0.000)	(0.001)	(0.000)	(0.001)	(0.003)	(0.001)	(0.001)	(0.001)	(0.000)	(0.003)	(0.000)
Diluted EPS, (as adjusted)	(0.003)	(0.003)	(0.000)	(0.001)	(0.000)	(0.000)	(0.002)	(0.000)	(0.001)	(0.0007)	(0.0003)	(0.002)	(0.000)
Diluted EPS, further adjusted to for full conversion of Series A Preferred*	(0.002)	(0.002)	(0.000)	(0.001)	(0.000)	(0.000)	(0.002)	(0.000)	(0.001)	(0.001)	(0.000)	(0.002)	(0.000)

Appendix A, NasdaqCM Uplisting Analysis

NasdaqCM Listing Requirements and CANB's Current Status on Each					
Requirements	Equity Standard	Market Value of Listed Securities Standard*	Net Income Standard	Canbiola (CANB) Sept. 30, 2019	Qualifies Under Equity Std.
Stockholders' Equity	\$5 million	\$4 million	\$4 million	\$6,482,479	Yes
Mkt Val. of Unrestricted Publicly Held Shares**	\$15 million	\$15 million	\$5 million	\$5,705,499	No (as of Jan 28, '20)
Operating History	2 years	—	—	8 years (source: SEC Filings)	Yes
Mkt Value of Listed Securities****	—	\$50 million	—	\$13,215,401	Yes
Net Income from Continuing Operations, <u>latest</u> FY or 2 of 3 FYs	—	—	\$750,000	(\$4,112,227)	Yes
Unrestricted Publicly Held Shares	1 million	1 million	1 million	333,654,987*****	Yes
Unrestricted Round Lot Shareholders**	300	300	300	Over 300	Yes
Market Makers	3	3	3	9 (as of 1/20/2020)	Yes
Bid Price, OR	\$4.00	\$4.00	\$4.00	\$0.0154 (\$4.62 Split-adjusted, as of 1/1/20)	Yes
Closing Price***	\$3.00	\$2.00	\$3.00	N/A (see footnote***)	N/A
Independent Board of Directors					Yes

++ Based on NasdaqCM listing requirements and our conversations with management regarding their conversations with Nasdaq pertaining to capital structure, we believe the only hurdle yet facing the Company in terms of a successful NasdaqCM listing becoming effective is Nasdaq's requirement that the total market value of all publicly-held, free-trading stock equal \$15,000,000 or more; based on the shares' closing price of \$0.0171 as of the close of market on Tuesday, January 29, and based on the float data (provided by OTC Markets at 333,654,897 shares) was just \$5,705,449. This number is derived by multiplying (total publicly-held, free-trading shares) x (price per share). So to uplist to the NasdaqCM market, if the free-trading share count were to remain equity, the Company's total market cap would have to increase by 162.9%, to a share price of \$0.044957. Note that this "appreciation requirement" would be mitigated by new availability of free-trading shares in the market, as long as such new free-trading shares in the market are not accompanied by a share price decline. In summary, this level of appreciation, while possible, is far from certain, and would require both stellar operational execution by Company management as well as a continuation or improvement in the current market environment for shares of companies such as Canbiola. **Based on these factors, we do not anticipate that the Company will uplist to Nasdaq in the near future - although anything is possible.**

* Currently traded companies qualifying solely under the Market Value Standard must meet the \$50 million Market Value of Listed Securities and the applicable bid price requirement for 90 consecutive trading days before applying.

** Effective August 2019 Nasdaq's initial listing criteria were revised to exclude securities subject to resale restrictions for any reason from the calculation of publicly held shares, market value of publicly held shares and round lot shareholders. In addition, the round lot shareholder requirements were revised to also require that at least half of the minimum required number of round lot holders must each hold unrestricted securities with a minimum value of \$2,500.

*** To qualify under the closing price alternative, a company must have: (i) average annual revenues of \$6 million for three years, or (ii) net tangible assets of \$5 million, or (iii) net tangible assets of \$2 million and a 3 year operating history, in addition to satisfying the other financial and liquidity requirements listed above.

In addition to the above requirements, if the security is trading in the U.S. over-the-counter market as of the date of application, the security must have a minimum average daily trading volume of 2,000 shares (including trading volume of the underlying security on the primary market with respect to an ADR), over the 30 trading day period prior to listing, with trading occurring on more than half of those 30 days, unless such

**** Sources: OTC Markets, Float of 333,654,897 shares, as of 11/14/2019, and Yahoo! Finance, closing price of \$0.02 as of 9/30/2019

***** Note that the Company's Board of Directors approved a 1-for-300 reverse stock split on 11/26/2019

Appendix B, Previous Financing Transaction Details⁹

H.C. Wainwright Financial Advisory Services Agreement

In an agreement dated January 15, 2020 with a beginning date of December 31, 2019 and ending March 31, 2020, H.C. Wainwright agreed to provide the Company with certain financial advisory services pertaining to a debt financing the Company is contemplating.

Under the terms of this agreement, H.C. Wainwright will warrants to purchase the Company's common stock on each debt financing closed during the term of this agreement. The number and strike price of these 5-year warrants will be calculated by multiplying the aggregate gross proceeds committed by an investor by 0.07 (constituting seven percent) and then dividing this product by the market price of CANB shares on the closing date of the debt financing.

In addition, the Company has agreed to reimburse H.C. Wainwright for the out of pocket expenses it incurs in the provision of its advisory services.

For the full filings and attached transaction documents pertaining to the FirstFire Financing, visit:

8-K Disclosure filing: <https://www.sec.gov/Archives/edgar/data/1509957/000149315220000686/form8-k.htm>

FirstFire Global Opportunities Fund, LLC, Secured Convertible OID Note

Under a registration exemption available under the 1933 Act, Section 4(a)(2), Reg D, Rule 506(b) the Company sold a \$550,000 Original Issue Discount (OID) Convertible Note for **\$500,000 in cash** to FirstFire Global Opportunities Fund, LLC, a Delaware LLC with offices in Manhattan, NY.

Terms are as follows:

- 12% interest rate
- Note matures six months from 1/3/20 on July 3, 2020
- Prepayment is allowed, at 110% of face value
- Most Favored Nation status – terms will immediately adjust to that of any subsequent financing done by the Company that has more favorable terms than those of this financing, as long as any portion of the FirstFire Notes remains due and payable.
- Company issued 6M shares of Common as a “commitment fee”
- The initial Reserved Amount as of the Issue Date shall be 225,000,000
- **Convertible into Common Stock at the lower of:**
 - o \$0.02 per share, or
 - o 80% of the closing price on the date of conversion

If the note goes into default (as defined in the note), then:

- Immediate acceleration – making the full amount of principal and accrued interest immediately due and payable, with all interest to be recalculated at the max interest rate allowable by law, and payoff at 105% outstanding principal balance

⁹ Information Presented in this Section consists at least in part of excerpts from the Company's past financing-specific 8-K and Reg D disclosures filed with the Securities and Exchange Commission. To read the full text of all CANB Reg D (“D”) filings, please see: <https://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0001509957&type=D&dateb=&owner=exclude&count=40>

- **Convertible into common stock at the lower of:**
 - o \$0.005 per share, or
 - o 75% of the lowest close during the trailing 20 trading days.

The note is guaranteed by substantially all assets and securities of the Company, and all hard assets are now covered under a UCC filing held by FirstFire, and this Note is senior to all other indebtedness of the Company except any indebtedness that is owed to Arena Investors, L.P. incurred prior to or within sixty days of the issuance of the FirstFire Note. We believe that Arena Investors, L.P. may be considering an investment via the H.C. Wainwright Financial Advisory Agreement announced via 8-K on Jan 16, 2020.

For the full filings and attached transaction documents pertaining to the FirstFire Financing, visit:

8-K Disclosure filing:

<https://www.sec.gov/Archives/edgar/data/1509957/000149315220000540/form8k.htm>

Reg D filing:

https://www.sec.gov/Archives/edgar/data/1509957/000149315220000513/xslFormDX01/primary_doc.xml

Note that the Company completed a \$3,936,700 Reg. D financing in 2019, but that we deemed it unnecessary to include it in this appendix.

Appendix C – Copied from SEC Filing, Pre 14C dated 1/16/2020¹⁰

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following tables set forth the ownership, as of the Voting Record Date, of our common stock by each person known by us to be the beneficial owner of more than 5% of our outstanding voting stock, our directors, and our executive officers and directors as a group. To the best of our knowledge, the persons named have sole voting and investment power with respect to such shares, except as otherwise noted. There are not any pending or anticipated arrangements that may cause a change in control.

The information presented below regarding beneficial ownership of our voting securities has been presented in accordance with the rules of the Securities and Exchange Commission and is not necessarily indicative of ownership for any other purpose. Under these rules, a person is deemed to be a “beneficial owner” of a security if that person has or shares the power to vote or direct the voting of the security or the power to dispose or direct the disposition of the security. A person is deemed to own beneficially any security as to which such person has the right to acquire sole or shared voting or investment power within 60 days through the conversion or exercise of any convertible security, warrant, option or other right. More than one person may be deemed to be a beneficial owner of the same securities.

Name	Title	Number of Common Shares [10]	% of Common Shares	Number of Series A Preferred Shares [11]	% of Series A Preferred Shares	% of Eligible Votes	Number of Warrants currently exercisable or exercisable in the next 60 days
Marco Alfonsi [1]	CEO, Director	59,398,915	7.12 %	5	25.00 %	12.9 %	0
Stanley Teeple [2]	CFO, Secretary, Director	1,157,811	0.14 %	4	20.00 %	6.6 %	0
Andrew Holtmeyer [3]	VP of Business Development	1,107,769	0.13 %	5	25.00 %	8.2 %	0
Philip Scala [4]	Interim COO	500,000	0.05 %	0	0	0.04 %	0
Frederick Alger Boyer Jr. [5]	Independent Director	3,000,000	0.36 %	0	0	0.24 %	0
Senator Ron Silver [6]	Independent Director	3,000,000	0.36 %	0	0	0.24 %	0
James F. Murphy [7]	Independent Director	3,000,000	0.36 %	0	0	0.24 %	0
All officers and directors as a group [7 persons]		62,164,495	7.45 %	14	70.00 %	27.78 %	0
McKenzie Webster Limited [8]	Shareholder	52,139,025	6.25 %	0	0	4.1 %	0
Pasquale Ferro [9]	Shareholder	22,379,721	2.68 %	5	25.00 %	9.9 %	0

¹⁰ Information Presented in this Section consists at least in part of excerpts from the Company's past financing-specific 8-K and Reg D disclosures filed with the Securities and Exchange Commission. To read the full text of all CANB Reg D (“D”) filings, please see: <https://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0001509957&type=D+&dateb=&owner=exclude&count=40>

(1) As of the Voting Date, Marco Alfonsi owned 59,398,915 shares of common stock and 5 shares of Series A Preferred stock, which are convertible into 50,000,000 common shares and equal 100,000,000 votes. In addition to the listed shares, four members of Mr. Alfonsi's family hold an aggregate of 10,000,000 shares of common stock, which shares have not been included in the above calculations.

(2) As of the Voting Date, Stanley Teeple owned 1,157,811 shares of common stock and 4 share of Series A Preferred stock, which are convertible into 40,000,000 common shares and equal 80,000,000 votes.

(3) As of the Voting Date, Andrew Holtmeyer owned approximately 1,107,769 common shares and 5 shares of Series A Preferred stock, which are convertible into 50,000,000 common shares and equal 100,000,000 votes.

(4) Philip Scala holds options to purchase 500,000 common shares of the Company.

(5) Frederick Alger Boyer Jr. holds options to purchase 3,000,000 common shares of the Company.

(6) Ron Silver holds options to purchase 3,000,000 common shares of the Company.

(7) James F. Murphy holds options to purchase 3,000,000 common shares of the Company.

(8) McKenzie Webster Limited is controlled by the Company's former director and CFO, Rolv Heggenhougen. The business address for this shareholder is 445 NE 12th Ave., Fort Lauderdale, Florida 33301. As of the Record Date, McKenzie Webster Limited held 51,139,025 common shares.

(9) As of the Voting Date, Pasquale Ferro held 20,735,218 common shares jointly with his wife and 1,644,503 common shares individually. Mr. Ferro holds 5 shares of Series A Preferred stock individually, which are convertible into 50,000,000 common shares and equal 100,000,000 votes. Mr. Ferro is the President of Pure Health Products, LLC, a wholly owned subsidiary of the Company.

(10) There were 834,181,825 shares of common stock and 20 shares of Series A Preferred stock outstanding as of the Voting Date, for a total of 1,234,181,825 votes currently eligible to be cast on the Record Date.

(11) The Company's preferred stock is classified as Series A Preferred shares and Series B Preferred Shares. Series B Preferred shares have no voting rights. Series B Preferred shares are convertible into shares of common stock; however, there are no Series B Preferred shares outstanding at this time. Each Series A Preferred share is entitled to 20,000,000 votes and can be converted into 10,000,000 shares of common stock.

The following tables set forth the ownership of our common stock by each person known by us to be the beneficial owner of more than 5% of our outstanding voting stock, our directors, and our executive officers and directors as a group, assuming all preferred shares were converted to common shares as of the Voting Date (which they were not).

Name	Title	Number of Common Shares ¹¹	% of Common Shares ¹²
Marco Alfonsi	CEO, Director	109,398,915	10.57%
Stanley Teeple	CFO, Secretary, Director	41,157,811	3.97%
Andrew Holtmeyer	Vice President	51,107,769	4.94%
Philip Scala	Interim COO	500,000	0.05%
Frederick Alger Boyer Jr.	Independent Director	3,000,000	0.29%
Senator Ron Silver	Independent Director	3,000,000	0.29%
James F. Murphy	Independent Director	3,000,000	0.29%

¹¹ Had all 20 issued and outstanding Series A Preferred Shares been converted to common shares there would have been approximately 1,034,181,825 shares of common stock outstanding as of the Voting Date.

¹² No warrants exercisable within the next 60 days

Our Rating System

We rate enrolled companies based on the appreciation potential we believe their shares represent. The performance of those companies rated “Speculative Buy” or “Strong Speculative Buy” are often highly dependent on some future event, such as FDA drug approval or the development of a new key technology.

Explanation of Ratings Issued by Harbinger Research

STRONG BUY	We believe the enrolled company will appreciate more than 50% relative to the general market for U.S. equities during the next 12 to 24 months.
BUY	We believe the enrolled company will appreciate more than 30% relative to the general market for U.S. equities during the next 12 to 24 months.
STRONG SPECULATIVE BUY	We believe the enrolled company could appreciate more than 50% relative to the general market for U.S. equities during the next 12 to 24 months, if certain assumptions about the future prove to be correct.
SPECULATIVE BUY	We believe the enrolled company could appreciate more than 30% relative to the general market for U.S. equities during the next 12 to 24 months, if certain assumptions about the future prove to be correct.
NEUTRAL	We expect the enrolled company to trade between -10% and +10% relative to the general market for U.S. equities during the following 12 to 24 months.
SELL	We expect the enrolled company to underperform the general market for U.S. equities by more than 10% during the following 12 to 24 months.

Analyst Certification

I, Brian R. Connell, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report.

Analyst Highlight

Brian Connell, CFA, Senior Research Analyst

Mr. Connell has over 20 years’ experience in the securities industry, as an equity analyst and portfolio manager, and as the founder and CEO of StreetFusion (acquired by CCBN/StreetEvents), a software company serving the institutional investment community. On the sell-side, Mr. Connell served as the technology analyst for Neovest, an Atlanta-based boutique, and as a Senior Analyst - Internet for Preferred Capital Markets, an investment bank based in San Francisco. Mr. Connell has also held the position of Executive Director of Marquis Capital Management, a technology-focused investment management organization.

Mr. Connell holds degrees in Economics and Psychology from Duke University, and is a CFA Charterholder.

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