Coverage Initiation Report

Rapid Therapeutic Science Laboratories, Inc. (RTSL - OTC Pink)

EQUITY RESEARCH

Industry: CBD Consumer Products Focus: Inhaled CBD Market

June 22, 2020

Brian Connell, CFA Senior Research Analyst brian@emeralder.com

Rating: Strong Buy

12-Month Price Target: \$2.30

RTSL Revolutionizes CBD Vaping Industry with Convenient, Safe, and Economical FDA-Listed CBD Inhaler Device

In 2018, Vaping Represented 18% of the Consumer Market for CBD, and was Growing at Over 60% Per Year

Despite nearly 50 deaths and over 2,000 illnesses caused by cannabis vaping in H2 2019, the vaping market has rebounded and is once again growing rapidly, despite consumer demand for a safer alternative. However, many companies are now hoping to disrupt the vaping industry by introducing a superior inhalation technology for CBD: the pressurized metered dose inhaler, or pMDI. This FDA-approved technology has been perfected over more than three decades for the treatment of asthma and COPD. The problem is, it is very difficult to make it work for CBD in terms of optimal droplet size (3-5 microns), which is the key to deep-lung absorption; CBD also tends to oxidize (i.e. decay) in the can, reducing its bioavailability. The Company has solved these problems, with the help of formulation/process specialist EM3, and has a two-year, renewable exclusive license to use the co-developed processes formulation technology.

Pressurized Metered Dose Inhaler is FDA-Listed, Convenient, Precise, and Safe - and **Obsolesces Vaping**

RTSL's FDA-listed pMDI components and manufacturing equipment is manufactured by Coster USA, a leading industry firm whose parent operates 15 plants in 10 countries. When used with RTSL's formulation and manufacturing process, the Coster pMDI device is extremely effective at delivering CBD directly to the deep lung tissue (alveoli) where CBD uptake and transport to the brain happens in just seconds. The device is compact, easy to carry, very competitive per dose, and does not induce a sore throat or a sensation of bad taste often associated with pMDI delivery of CBD. Based on our analysis, this is a more economical and less

intrusive way to consume CBD than vaping and provides anxiety and pain symptom relief far more quickly than ingestible formulations such as beverages, candies, and baked goods.

RTSL has Contracted with Industry-Leading **Digital Marketing Firm; Launching Consumer** Brand in July.

Although the identity of RTSL's new digital marketing partner is as of yet unknown, we suspect that the Company has hired a true industry heavyweight to manage the digital marketing of their soon-to-be-launched consumer brand. From our conversations with management, it is clear that this firm will be handling all aspects of brand development and marketing planning and execution, with earlyphase program launch slated for the beginning of Q3 CY 2020. If they have selected a capable and experienced firm for this key relationship, it should quickly propel RTSL's market penetration of domestic CBD markets to a significant level.

RTSL Has the Technology, Marketing, and **Team of a Future Market Leader in CBD Delivery Systems**

The Company has a sound execution plan, a producing ISO-5 manufacturing facility, a highlyexperienced leadership team, the ability to raise adequate capital, and a solid relationship with a "leading" digital marketing firm. If it executes according to plan, which we believe is likely, it should quickly ascend to a leadership position in domestic CBD inhalation device sales. Therefore, we rate the shares of RTSL a Strong Buy, and set our 12-month price target at \$2.30 per share, representing a one-year gain of 411%.

Recent Price:	\$0.45			
Market Capitalization (000s)	80.8			
Enterprise Value (000s)**	82.3			
Institutional Ownership	0%			
Insider Ownership	89.23%			
Basic Shares Outstanding (000s)	156,856			
Fully-Diluted Shrs. Outst. (000s)	179,438			
Avg. (30-Day) Trading Vol.	1,445			
Primary Trading Market	OTC PINK			

As of the close, June 19, 2020 ** As of Fiscal Year End 2019

Company Overview

manufactures and markets FDA-listed pressurized metered dose inhalers (pMDIs) that enable users to conveniently and safely self-administer CBD. Historically, pMDIs have not been very successful in the cannabis/CBD market because it is very difficult to make them function properly with CBD. However, the Company has developed a proprietary process and formulation that enables it to work, and thus we believe RTSL is a clear technology leader in pMDI-based CBD inhalation. The Company trades on the OTC Pink under the symbol RTSL.

RTSL Profit and Loss Forecast Model (In \$000s, except for per-share / per-unit data)

Calendar Year	Jun '20	Sep '20	CYE '20	Mar '21	Mar '21	Mar '22	Mar '23	Mar '24
Fiscal Year, ending March 31	Q1 '21E	Q2 '21E	Q3 '21E	Q4 '21E	FYE 2021E	FY 2022E	FY 2023E	FY 2024E
Total Revenues	244	1,416	3,151	5,926	10,737	48,869	95,495	1,61,492
Total cost of good sold	73	341	716	1,346	2,476	9,698	16,830	27,907
Gross profits	171	1,075	2,435	4,580	8,261	39,171	78,666	1,33,585
Gross Margin	70.1%	75.9%	77.3%	77.3%	76.9%	80.2%	82.4%	82.7%
Total operating costs	76	611	1,318	2,467	4,472	18,959	34,279	55,267
As a % of total sales	31.4%	43.2%	41.8%	41.6%	41.6%	38.8%	35.9%	34.2%
Operating profit	95	464	1,117	2,113	3,789	20,212	44,387	78,318
Operating margin	38.8%	32.8%	35.5%	35.7%	35.3%	41.4%	46.5%	48.5%
Pre-tax profit	95	464	1,117	2,113	3,789	20,212	44,387	78,318
Income Taxes	20	97	235	444	796	4,245	9,321	16,447
Marginal tax rate	21%	21%	21%	21%	21%	21%	21%	21%
Net income	75	367	883	1,669	2,993	15,968	35,066	61,871
Net margin	30.6%	25.9%	28.0%	28.2%	27.9%	32.7%	36.7%	38.3%
Earnings per share (EPS), fully-diluted	0.000	0.002	0.004	0.008	0.015	0.075	0.163	0.286
EPS sequential growth rate	720.1%	379.2%	130.7%	88.9%	n.m.	391.7%	115.9%	75.7%
Total shares outstanding, fully-diluted	1,83,688	1,87,938	1,96,188	1,96,438	1,91,063	2,10,063	2,15,063	2,16,063

Donal (Don) R. Schmidt, Jr. President & CEO

Sean Berrier

Senior V.P. of Operations and Production

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TABLE OF CONTENTS

ın	dustry Background	4
	Introduction – Federally-legal cannabis and its primary extract, cannabidiol (CBD) ¹	4
	Global Sales Forecast for Cannabidiol (CBD) Market	
	Proven and Purported Health Benefits of CBD	4
	Where Do Americans Purchase CBD?	6
	Market Size and Forecast	6
	How Much CBD Do Americans Consume Daily, on Average?	7
	Popular Methods of Consuming CBD	7
	Cannabidiol Administration via FDA-Approved Pressurized Metered Dose Inhalers (pMDIs)	
	Comparative Benefits of pMDIs vs. Handheld Vaping Devices	11
	pMDI Science	11
	Formulation and Formula Preparation are Key to Creating an Optimally-Functioning pMDI Device for CBD).12
	How Does a pMDI Device Function?	12
	Conclusion, Industry Background	13
Cc	ompany Analysis	14
	Company Description	14
	Key Strategic Relationship with EM3 Methodology, LLC ¹³	
	Products	16
	The Manufacturing Process and Facility	17
	Sales and Marketing	18
	Digital Marketing	18
	MLM/Channel Marketing	18
	Direct Sales	18
	International Sales	19
	Conclusion	19
	Competitive Analysis	19
	Corporate Structure Analysis	22
	Current Fundraising	23
	Financial Model	24
	Risks	24
	Legal/Regulatory	24
	Financing Risk	25
	Supply Risk	25
	Competitive Risk	25
	IP Protection Risk	25
	Valuation Analysis	25
	Forward P/E Multiple Analysis	25



Disclaimer	30
About Our Company	29
Analyst Certification	28
Conclusion	26
Blended Measure	26
PEG Ratio Analysis	26



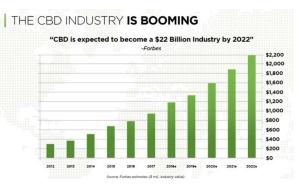
Industry Background

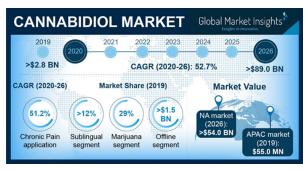
Introduction - Federally-legal cannabis and its primary extract, cannabidiol (CBD)¹

For several years now we have witnessed a strong trend towards a full legalization of cannabis (both hemp and marijuana) and its extracts both at the state and federal level in the U.S. That trend culminated for hemp on December 20, 2018, when President Trump signed the Farm Bill into law, making cannabis legal to grow, sell, and transport anywhere in the country. This law also removed hemp from the FDA's list of controlled substances and placed hemp cultivation under the management of the U.S. Department of Agriculture.

Global Sales Forecast for Cannabidiol (CBD) Market

According to the Global Market Insights, global consumer sales of | THE CBD INDUSTRY IS BOOMING CBD hit \$2.8 billion in 2019, and they forecast 2026 global sales of approximately \$89.0 billion, representing overall growth of 3,079% and a compound annual growth rate (CAGR) of 63.9%. According to various estimates, the inhaled CBD market in the U.S. comprised between 22% and 30% of the total domestic market, which according to BDS Analytics was worth \$1.9 billion in total sales, yielding a 2018 total domestic market size for inhaled CBD products between \$418 million and \$570 million. However, according to Analytics Consumer Research, the 2018 growth rate





in inhaled CBD products was 67%, more than double the overall growth rate for the industry, yielding a 2019 inhaled CBD market in the U.S. worth between \$698 million and \$952 million. We expect this trend to continue as well, because vaporized CBD has a nearly instantaneous effect and is more cost-effective from a bioavailability perspective than other methods of CBD ingestion. We also believe that even more effective and convenient CBD dosing methods will enter this market this year, such as RTSL's pressurized metered dose inhalers, and that their growth rates will be well into the triple digits through 2025 or longer.

Proven and Purported Health Benefits of CBD

So, an ever-growing number of consumers in the U.S. and around the world are consuming CBD, in many cases multiple doses per day – but why? Myriad studies have suggested that CBD binds to the cannabinoid receptors in our nervous system, and in so doing has several positive effects on human physiology, most notably anxiolysis (a reduction in fear and/or anxiety, perceived as relaxation) and analgesia (a reduction in experienced pain). Furthermore, CBD has been found to be clinically effective in treating certain forms of epilepsy, as evidenced by the FDA's June 25, 2018 approval of Epidiolex², the first CBD-based drug to receive such approval in the U.S.

https://news.gallup.com/poll/263147/americans-say-cbd-products.aspx 14% of Americans used CBD as of July

https://www.dea.gov/press-releases/2018/09/27/fda-approved-drug-epidiolex-placed-schedule-v-controlledsubstance-act



However, ongoing research and early research results suggest that CBD's potential benefits may extend far beyond the treatment of epilepsy, with the potential to treat a wide variety of ailments and disorders, such as:

- **Pain.** Initial studies show that CBD, especially when taken in combination with THC, may be effective in reducing the pain associated with multiple sclerosis and rheumatoid arthritis³. According to Harvard Medical School, CBD has been shown to inhibit inflammatory pain and neuropathic pain, which are the two most difficult types of chronic pain to treat⁴.
- **Reduced Anxiety.** Although the data is as of yet inconclusive, initial studies suggest that CBD may be effective at reducing anxiety, and at treating anxiety-based disorders such as post-traumatic stress disorder (PTSD), among others.
- **Insomnia.** Several studies have shown that those taking CBD were less likely to experience difficulty falling asleep than members of control (placebo) groups, and were also more likely to stay asleep for a "full night" vs. those in the control group⁵. We believe that this finding, should it ultimately prove accurate, would be entirely consistent with CBD's likely anxiolytic (anti-anxiety) properties.
- **Opioid Addiction.** There is initial evidence that CBD can treat opioid addiction⁶, as a small study showed a marked decrease in relapse amongst heroin addicts taking CBD vs. the placebo group.

Regardless of whether or not CBD ultimately proves to effectively treat all of these conditions and disorders, we believe that it has demonstrated enough clinical benefit to entrench it as a blockbuster product, in all its forms, for the foreseeable future.

Why Americans Use CBD Products							
Pain (nonspecific)	40%	Recreational	4%				
Anxiety	20%	Depression	2%				
Sleep/Insomnia	11%	Skin care	2%				
Arthritis	8%	For pet	1%				
Migraines/Headaches	5%	Gastrointestinal/Digestive issues	1%				
Stress	5%	Inflammation	1%				
Muscle spasms/Soreness	4%	Other	7%				
General health (nonspecific)	4%	No opinion	1%				
Mental health/PTSD/ADHD/Neurological disorders	4%						

Based on U.S. adults who say they use CBD products. Percentages add to more than 100% due to multiple responses. GALLUP, June 19-July 12, 2019

Negative Health Effects of Ingesting CBD

Most pharmaceutical treatments come with a long list of potential, albeit mostly rare, side effects, and patients considering their use must carefully weigh the potential health risks associated with a treatment versus the probable benefit conferred by it. However, in the case of CBD, the World Health Organization (WHO) has made unequivocal

³ https://www.healthline.com/nutrition/cbd-oil-benefits#section2

⁴ https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476

⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6326553/

⁶ https://www.recoveryanswers.org/research-post/cbd-effect-drug-craving-anxiety-heroin-use/



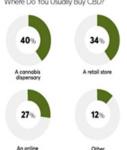
statements that firmly establish that CBD is not additive or habit forming, and that no data has yet to suggest that it is harmful to humans when taken at normal dosage levels⁷. This is not to say that ingesting CBD is necessarily always safe; the WHO was very clear that this applies only to "pure CBD" consumption via safe administration methods. In reality, the quality and purity of CBD oils, tinctures, isolates, and other CBD-infused products varies a great deal, as reported by National Institute of Health (NIH) in a 2018 study. In this study, 14 samples of products containing concentrated CBD were studied, and of those only five products' actual CBD content was within 10% of the CBD concentration indicated on the label. The other nine products were substandard and could be considered to be a safety risk due to uncertainties about CBD content, and possibly due to non-listed and potentially harmful other chemicals resulting from poor manufacturing processes and procedures.

Apart from CBD product quality issues, there is another potentially negative very significant health issue related to CBD consumption, namely its method of administration. Individuals currently consume CBD in a variety of forms, such as ingestibles, topicals, and inhalables, which in some cases introduces additional health risks and the potential for toxicity and long-term health problems. This became all too evident in September of 2019, when substandard vaping devices containing vitamin E acetate killed 48 Americans and made another 2,291 people seriously ill⁹.

Where Do You Usually Buy CBD?

Where Do Americans Purchase CBD?

Although Americans buy CBD products in a wide variety of physical and digital locations, we believe that online sales are by far the most important to the Company. Based on the data in the table below, we see that online sales are forecast to grow at a compound annual rate of 87% per year. The bodes very well for RTSL's long-term business prospects, because we expect the majority of their revenues will come from online sales.



Source: 2019 Consumer Reports, Nationally Representative Study

Market Size and Forecast

	Hemp CBD Topline Market Sizes										
Distribution Channel	2017	2018	2019	2020	2021	2022	CAGR (2017- 2022)				
Dispensaries/ delivery service	\$21,019,342	\$38,095,350	\$50,309,653	\$55,894,425	\$59,639,146	\$61,104,712	24%				
Smoke shops	\$75,903,055	\$133,661,621	\$169,387,178	\$197,649,126	\$225,320,004	\$254,611,605	27%				
Medical companies	\$15,438,108	\$33,500,694	\$211,054,374	\$432,661,468	\$627,359,128	\$734,010,180	116%				
Others	\$34,271,960	\$72,313,836	\$263,945,500	\$535,809,365	\$831,040,325	\$1,004,713,995	97%				
Online	\$114,584,771	\$139,793,421	\$1,287,217,817	\$1,987,464,310	\$2,285,583,956	\$2,605,565,710	87%				
Natural food stores	\$66,167,823	\$173,329,766	\$693,319,063	\$1,701,365,750	\$2,716,785,200	\$3,315,017,944	119%				
Chained retailers	-	-	\$3,011,586,119	\$6,306,430,850	\$10,296,082,285	\$13,911,311,085	67%				
Total Market Size	\$327,385,059	\$590,694,687	\$5,686,819,703	\$11,217,275,293	\$17,041,810,045	\$21,886,335,230	132%				

Source: myPrimeLife

⁷ https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476:

[&]quot;According to a report from the World Health Organization, "In humans, CBD exhibits no effects indicative of any abuse or dependence potential.... To date, there is no evidence of public health related problems associated with the use of pure CBD."

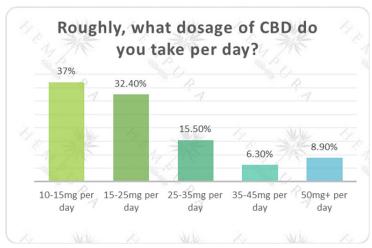
⁸ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6100014/

⁹ https://ministryofhemp.com/blog/vaping-cbd-101/



How Much CBD Do Americans Consume Daily, on Average?

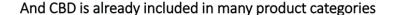
This is an important statistic because it is the driver of CBD purchases per person. Also worthy of note, although not covered in the Consumer Reports 2019 survey, is that Americans over the age of 65 tend to take CBD more regularly and in large doses than younger individuals, presumably because their primary use case is long-term pain management.

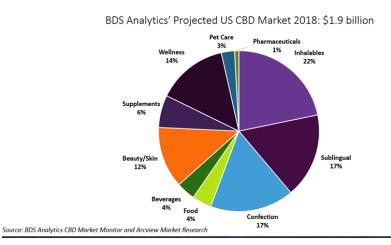


Source: Hempura

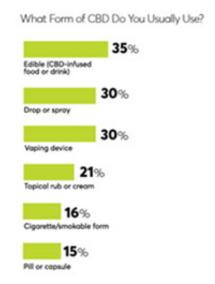
Popular Methods of Consuming CBD

There are a wide variety of CBD consumption methods in the U.S. at this time; each has its own benefits and drawbacks. A consistent theme among them is that on the basis of **cost per bioavailable gram of CBD**, topicals (with the exception of skin patches) and edibles tend to be more expensive, and inhaled oils and isolates tend to be less expensive.





Source: BDS Analytics



Source: 2019 Consumer Reports, Nationally Representative Study



Topical, Oral, and Sub-lingual CBD Administration

Certain forms of CBD ingestion are very unlikely to have negative health effects, as long as the quality of the active and other ingredients are as advertised. Non-inhaled forms of CBD include:

- **Edible CBD products**, such as baked goods (e.g. brownies), gummies/candies, beverages, etc. The major drawback with this route of administration is loss of efficacy due to CBD's inability to survive the high acidity in the stomach. The actual bioavailability of CBD in edible products varies between 6% to 15%¹⁰.
- **Topical CBD products**, such as lotions, creams, ointments, and salves. These products are very unlikely to entail health risks, but dermal absorption of CBD is moderate at best
 - **CBD in Skin Patches**, a topical product that is quite different from others in this group, traverses the skin into the blood stream directly, and so has a very high level of bioavailability.
- **Ingestible Oil-based CBD products**, which are usually taken in capsule form. These products have higher bioavailability than do edible products, as concentrated CBD is given temporary protection from stomach acid by the encapsulation material used. Depending on how they are packaged on a microscopic level, bioavailability can range from 10% to as high as 25% or more.
- **Sub-lingually administered CBD drops**, known as tinctures. Tinctures have become quite popular, are usually safe, and have a reasonable level of efficacy due to direct absorption into the blood stream through the sub-lingual tissues. Standard bioavailability ranges from 20% to 35%¹¹.

While none of these administration methods entails any real health risk – again, assuming that the ingested compounds are in fact what they are supposed to be – they do all suffer certain drawbacks when compared with inhaled CBD. These drawbacks include:

- Long delay between ingestion and the onset of beneficial effects. For CBD to reach the human nervous system, it must be transported there by the circulatory system (i.e. blood). For products that are swallowed, it can take 30 minutes or more for any CBD to reach the bloodstream. Tinctures have less of a delay, but still require several minutes to enter the bloodstream through the mouth, whereas inhaled CBD (and THC) reaches not only the bloodstream but the brain itself in a matter of just a few seconds.
- Uneconomical method of administration. Although CBD prices per gram have been declining, and will likely continue to decline for some time to come, the price of ingestible CBD products are a real factor for most consumers. Unfortunately, the problem of high cost is greatly exacerbated by low CBD bioavailability. For example, if CBD-infused brownies achieve 10% bioavailability (which would be about average), it would still mean that the consumer would need to purchase ten grams of CBD content for each one gram of CBD that reached the bloodstream and became bioavailable.

Due to the slow onset of effect and the inherently poor-to-moderate CBD bioavailability levels offered by these CBD dosing methods, and given their higher cost per bioavailable gram, many consumers opt for inhaling their CBD. This entails either vaporizing or combusting cannabis flowers, solid concentrates, or liquid concentrates in the form of CBD oil or solid CBD isolate, so that the CBD can be readily inhaled.

¹⁰ According to the Ministry of Hemp

¹¹ According to the Ministry of Hemp



Inhalation of Vaporized or Combusted CBD

Inhaling CBD has several advantages over ingesting CBD orally, sub-lingually, or topically, as discussed above: it acts on the brain almost instantaneously and is significantly less expensive per bioavailable gram. However, inhalation too has drawbacks, such as typically being less convenient, and always requiring one of a variety of smoking or vaporizing devices, some of which are quite large and bulky, not to mention expensive.

The typical methods of inhaling CBD today include vaporizing, dabbing, and smoking:

• **Vaporizing.** Considered the "cleanest" way to consume cannabinoids including CBD, vaporizers heat cannabis' active compounds to just above their boiling point, causing them escape into the vaporizers' gas chamber while the non-active material remains in solid form and at a sub-combustion temperature. This allows the individual using the vaporizer to inhale relatively pure CBD and/or other cannabinoids or terpenes that have not been damaged by the heat of combustion. The 31% bioavailability of vaporized inhaled CBD is quite good in comparison to that offered by ingestible consumption.

Current vaporizer technology is either based on *conduction* or *convection*; most high-end tabletop vaporizers use convection, whereas almost all smaller "vaping" devices use conduction. Convection vaporizers suspend the target in a different gas chamber from the heating chamber, causing CBD and other cannabinoids to vaporize in the purest way, and also provide a cooler gas for inhalation. These machines tend to be larger, take longer to warm up, and in many cases cost several hundred dollars retail. They also effectively eliminate the risk of combustion, which is ever-present in conduction units.

True vaporizers can vaporize cannabis flower, oil, or waxy concentrate, whereas portable conduction "vaporizers" have their roots in simple e-cigarettes ("first-generation" devices), and only work with cartridges, tanks, or pods. In these conduction vaporizers, the target material makes physical contact with the heat source; such devices tend to be fairly simple, begin working after about 5 minutes, and be relatively inexpensive. These smaller handheld units come in three varieties:

- o **Vape Pens** ("second-generation" devices) use only solid CBD isolate, which is placed directly on the pens' heating coils for product vaporization and inhalation. While this is initially convenient and effective, over time the heating coils oxidize and unknown heavy metals can contaminate the product that a user consumes.
- o **Portable Vaporizers employing a tank** ("third-generation" devices) are larger than vape pens, and come in both reusable and disposable forms; both use CBD e-liquid in the tank that consists of propylene glycol, vegetable glycerin, flavoring, and CBD. The reusable versions are much more expensive than the disposable models and give the user enhanced control over heating and product quality; disposable units are often poorly constructed and contain unknown CBD concentrations and chemical mixtures.
- o **Pod Mods** ("fourth-generation" devices) us a more advanced form of a tank called a pod that may be either pre-filled or refillable and tend to generate a more powerful hit of the ingested substance.

Vaping is a fairly popular way to consume CBD in the U.S., with 2018 vape sales representing 11% of the CBD market and growing 67% vs. prior year sales, vs. just 28% growth in edibles sales during that same year. Vaping revenue growth continued unabated until the fall of 2019, when a strange vaping-related illness broke out, killing 48 vapers and making another 2,291 vapers sick¹². The segment has since rebounded

¹² https://www.webmd.com/mental-health/addiction/news/20190919/530-sick-7-dead-from-mysterious-vaping-illnesses



to prior sales levels, but this serious problem has intensified consumer appetite for more reliable and safe CBD inhalation solutions.

- **Dabbing.** While usually used with THC-rich materials, CBD products can also be dabbed. In dabbing, a small piece of metal (typically added to a water pipe, or bong) is heated to extremely high temperature. At this point, the user quickly tabs some form of CBD concentrate on the super-heated metal, which flash-vaporizes the material and gives the dabber a potentially very potent single inhalation. CBD dabbing works with CBD isolate (up to 99% pure CBD), full spectrum hemp extract, "wax" (another form of isolate), and other terpene-rich formulations known as terpsolate, "shatter", or "crumble."
- **Smoking.** Now relatively common in smoke shops, hemp "pre-rolls" with very high CBD content are being smoked just as cigarettes and marijuana joints have been for decades. While smoking has reasonably high CBD bioavailability and a rapid onset of effect, it nevertheless has been shown to potentially have very seriously long-term health consequences.

CBD Consumption Methods, Conclusion

As the CBD industry has begun to mature slightly over the past two to three years, we have seen inhalation device designs become more diverse, sophisticated, and specialized. During this time, technology has improved, and bioavailability rates have trended upwards. However, even the most modern inhalation systems have drawbacks pertaining to size, convenience, warm up time, and consumables' quality control issues.

We believe this industry is now ripe for a major disruption, by an inexpensive, portable, and disposable aerosol device called a pressurized measured dose inhaler, or pMDI. These devices are very complex from a technical perspective, but since they have been in use for the treatment of asthma and COPD for decades, they are very mature in terms of function and in terms of manufacturing processes and scale. We believe pMDIs offer a combination of convenience, safety, precise dosing, and low cost that will allow them to take the inhaled CBD industry by storm.

Cannabidiol Administration via FDA-Approved Pressurized Metered Dose Inhalers (pMDIs)

The pMDI is a proven medical device that can (and probably should) completely replace all generations of handheld vaping devices for the delivery of CBD directly into the blood stream via inhalation into the lungs. Properly developed and manufactured pMDIs are sterile, stable, have a long shelf life over a wide range of temperatures, and deliver a precise dose of CBD of the utmost purity on each and every use. However, as of this writing, they are still very rarely used by CBD consumers, as the pMDI industry for CBD is still in a nascent stage of development.

As of about two years ago, myriad CBD products companies began announcing inhaler products that "would be" coming to market in the near future based on pMDI technology. These announcements were of course picked up by the trade press and on social media, and so using an "inhaler" to consume CBD and/or THC became very in vogue. According to some industry publications, Inhalers were to revolutionize the process of consuming cannabis through one's lungs.

As of this writing, we were able to find some 35 companies online who were either selling or going to sell CBD and THC inhalers. However, upon deeper analysis, it became clear that very few of these "inhalers" were FDA-approved pMDIs. Of all of the would-be RTSL competitors we could find, several were no longer in business, and we could establish the validity of each competitor's "inhaler" as a bona fide pMDI device in only four cases. Only two of those four companies are direct competitors of RTSL.



So why, after two to three years from the first product announcements about inhalers, do so few companies actually have one? The answer is simple – to succeed with a pMDI device in CBD you must 1) be able to get a reliable supply of such a device and the relevant consumables, and 2) you need an extremely high degree of education in and experience with fluid chemistry and physics, and 3) you need a high level of formulation and manufacturing competency. The simple fact of it is that most entrepreneurs in the cannabis / CBD market simply don't have these three things - many of them not even one.

However, we believe RTSL has all three, based on the experience of its team, the formulation and processes that it has developed, and close strategic relationship that it has with and the exclusive license that it holds from EM3 Methodology, LLC and its founder Rick Adams. This puts the Company in excellent position to become the industry leader in this as-of-yet nascent market that could, in theory, eventually replace the entire hand-held vaping market for CBD.

Comparative Benefits of pMDIs vs. Handheld Vaping Devices

Unlike all other inhaled means of consuming cannabis extracts such as CBD, pressurized metered dose inhalers (pMDIs) virtually guarantee:

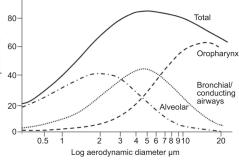
- Each dose will be the same size and have the same bioavailability (if the inhaler is used properly)
- The payload chemical will be pure and its ingredients consistent
- The delivery mechanism will be harmless each and every time it is used
- The user will never inhale carcinogens or any other harmful substances
- The inhaled product will never combust or degrade from heat exposure
- The inhaled product will reach the alveoli deep in the lungs for rapid uptake by the blood and brain

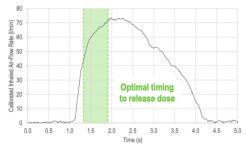
In our view, this is a powerful set of benefits that vaping in particular cannot match. However, these benefits are only real if the MDI device can properly aerosolize the pharmaceutical payload and carry it into the deep lung tissue. Unfortunately, this is far from given when delivering a product such as CBD.

pMDI Science

The Company uses what is known as a "pMDI," which stands for pressurized metered dose inhaler (also known as a "puffer"). To make a CBD pMDI the way it should be made, several 1007 processes must be successfully undertaken, and designed to be completely repeatable. And, the device itself must function reliably and effectively despite its complex construction and many moving parts. In the CBD & 60world, the most important parameter of a pMDI device is droplet size, which should be approximately three microns in diameter. As illustrated below, and all should be approximately three microns in diameter. this is the droplet size best absorbed by the alveoli where gas exchange between blood and air occurs in the lungs. Note that in order of expanding size, larger droplets tend to impact in 1) conducting airways, 2) in the throat.

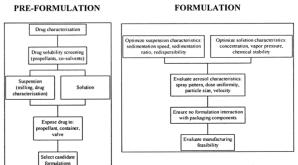
The second most important parameter is the timing of the dose in the pMDI's propellant gas, based on the inhalation rate of the user. As the illustration indicates, this also has a pronounced effect on the ultimate efficacy of the device.







Formulation and Formula Preparation are Key to Creating an Optimally-Functioning pMDI Device for CBD



Effects of temperature, temperature cycling, humidity, agitation

Evaluate visually:
aggregation, discoloration, corrosion, drug adhesion to packaging content to packaging content co

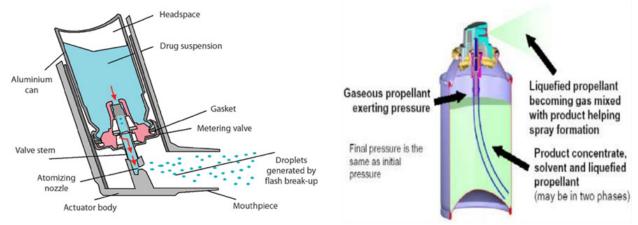
The first process is the initial formulation of the active pharmaceutical ingredient (API), which requires that it handle both a solvent and propellant well. Then, the initial formulation must be manufactured, and the MDIs filled with it in such a way that drug delivery is optimized. Finally, the product must remain stable for long periods of time in a wide variety of temperatures. While this sounds easy enough, the number of variables involved and the difficulties specific to CBD make it quite challenging.

In this context, the key is that the API leave the inhaler at a certain velocity and at a particle size that will be well absorbed by the lungs. It is this last requirement that is so difficult with CBD, because it is oily and sticky, and unless the formation and manufacturing are done "just right" it actually performs fairly poorly in a metered dose inhaler. Due to the Company's CEO's deep background in the relevant branch of science and the Company's collaboration with

key leaders in this field, they believe they have managed to solve this problem. They also believe that few if any other individuals and companies have this adequately figured out.

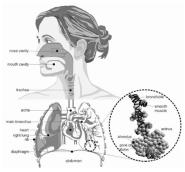
How Does a pMDI Device Function?

Only a few companies in the U.S. manufacture FDA-approved MDIs, due to the complexity of the device and the need for it to be manufactured to extremely precise engineering specifications, all at a low average cost and price.



The Pressurized Metered Dose Inhaler (pMDI)

As can be readily seen, this seemingly simple (and often disposable) device is in fact quite complex. In terms of the actual efficacy of a product such as that manufactured by RTSL, it is a combination of formulation, preparation and filling, and the device's function itself that lead to an optimal or suboptimal result. The droplet size is the key – too small (i.e. nano-droplets) and the lungs won't absorb most of it (e.g. cigarette smoke) – too big, and the droplets won't penetrate past the mouth and throat into the deep lung tissue the device targets. But, despite all of these complexities and challenges, we believe RTSL has it "figured out." And since we don't believe many if any other companies have it figured out to the degree that RTSL does, we believe product quality / user experience will be a key competitive differentiator for the Company.





Conclusion, Industry Background

CBD and CBD-infused products are in high demand in the U.S. and abroad, and the number of new CBD consumers is growing very rapidly. There are a wide variety of methods by which consumers can get their CBD, which historically have included smoking and vaping, but not the use of a metered dose inhaler that is inherently superior to smoking and vaping. Therefore, we believe that the current intersection of time-tested FDA-approved pharmaceutical delivery devices with CBD, a relatively new and effective therapeutic compound, is likely to create a very large market for MDIs that contain CBD almost overnight.



Optimal Vapor Stream from a Properly Formulated and Filled pMDI Device



Company Analysis

Company Description

Rapid Therapeutic Science Laboratories, Inc. (RTSL) is an aerosol company in the business of creating and marketing medicinal CBD products that provide convenience, peace of mind, and a harmless way to consume proper doses of CBD. The Company produces both its own branded products (a new brand for direct-to-consumer sales, and *RxOid* for medical distribution channels), and a white label product, in the form of an FDA-listed pressurized metered dose inhaler (pMDI) that provides 100 doses of CBD. These devices have historically been used to treat asthma, COPD/Emphysema, and other lung disorders, but do not usually work very well with CBD products. This is because CBD's chemical properties are such that it is very difficult to get a pMDI to make the proper droplet size for minimum side effects (e.g. irritation, sore throat, bad taste) and the maximum absorption rate and bioavailability. RTSL has solved this problem, and management believes at this time they are the only CBD-focused company to have really done so, giving them an important "better mousetrap" advantage in the gargantuan market for CBD consumer products.

Rapid Therapeutic Science Laboratories is based in Dallas, TX, and trades on the OTC Pink under the symbol RTSL. The Company does plan to uplist to the OTC-QB at some point in the near future and is already considered a fully-reporting company by the Securities Exchange Commission (SEC).

Key Strategic Relationship with EM3 Methodology, LLC¹³

RTSL has built its business plan around several strategic relationships and certifications, the most important of which is with a company called EM3 Methodology, LLC.

EM3 Methodology, LLC, based in Tucson, AZ, is a science & research company that specializes in all aspects of product development, manufacturing and process design, facility setup, and operations training for cannabis-related MDI product manufacturers. According to its website, "EM3 has been researching aerosolized and dry powder cannabinoid delivery to the pulmonary tract of the human body since the summer of 2001" and has found a method to delivery cannabinoids to the deep lung tissue via MDI devices. This is a feat that to the best of our knowledge only they have effectively accomplished.

That said, EM3 generates the bulk of its revenues by reselling MDI turnkey manufacturing systems, as well as specific equipment units and pre-assembly MDI components to its clients, most of which are manufactured by Coster Group (Italian), a family-owned enterprise with 15 factories in 10 countries, and a leading international MDI equipment and components manufacturer. Everything EM3 sells to its clients and licensees, such as RTSL, is an FDA "listed" product of the highest quality. Because of its revenue model, analogous to the "razor blade" business model followed by Gillette¹⁴, EM3 is highly incentivized and committed to seeing each of its clients become successful in their respective businesses, as that will ensure they continue to be loyal and high-volume customers of EM3.

¹³ http://em3methodology.com/

¹⁴ The "razor blade model" refers to the idea that hand razor manufacturers typically sell their razors at or below cost, knowing that once an individual has bought a high-quality, inexpensive razor, they will always make periodic purchases of the high-margin razor blades that fit the particular razor they originally purchased. Historically, this has proven to be a very successful business model, as evidenced by the stellar long-term financial performance of Gillette, up until it was purchased for \$57 billion by Proctor and Gamble (PG – NYSE) in 2005.



The EM3 / Texas MDI License

Effective November 15, 2019, Texas MDI (89.25% owner of RTSL) entered into a license agreement with EM3 Methodologies, LLC, effective through October 1, 2021 and renewable for successive two-year terms subject to additional payment to EM3 by Texas MDI ("TMDI"). Pursuant to this license, TMDI has an exclusive license to research, develop, make or have made, use, sell, contract fill, and export and/or import and commercialize the Licensed Products (as defined) using EM3's proprietary Desirick Procedure that enables the production of MDIs using hemp derived cannabinoids, under the Rxoid brand or on a white label basis.

This license granted TMDI exclusive rights to EM3's technology in Texas, Florida, California, and Nevada exclusive of any other client of EM3; however, the license grants TMDI non-exclusive use of this license on a worldwide basis. Furthermore, TMDI had made substantial material improvements to the Desirick Procedure prior to the execution of the EM3 Exclusive License which will remain the property of TMDI if any license is not renewed.

The Texas MDI / RTSL Sub-license

TMDI has sublicensed its EM3 license to RTSL in return for 140,000,000 shares of its common stock, and an agreement to reimburse TDMI for any additional license payments made to EM3, such as those that would be required to extend the license beyond October 1, 2021. The RTSL sub-license grants it the right to exclusivity in the same four states, which currently represent 32.5% of the U.S. market for CBD-related products as of 2019, as well as non-exclusive license to the global market.

EM3 Services Provided to RTSL

In regards to RTSL, the holder of exclusive sub-licenses of licenses granted to Texas MDI by EM3 Methodology in four states (Texas, California, Florida, and Nevada)¹⁵, EM3 helped the Company develop a proprietary formulation and proprietary manufacturing processes for the delivery of CBD and other cannabinoids via a pressurized metered dose inhaler (pMDI), and by contract it cannot share the details of either RTSL's formation or manufacturing systems and process with any other entity. Furthermore, EM3's founder Rick Adams helped RTSL setup its new

manufacturing facility in Texas (that is being ISO certified), and fully trained its manufacturing staff to operate the machinery sourced from EM3 to cGMP-compliant specifications as defined by the FDA. Rick also holds the title of Chief Technical Science Officer at the Company, although it is obviously not a full-time role for him.

According to EM3's website, it has in the past run literally hundreds of candidate formulae through what is known as a next-generation impactor (NGI) to make sure that the final formula will produce exactly the target droplet size necessary to make MDI-based delivery of the formula to perform optimally in reaching the targeted deep lung tissue (i.e., the alveoli). Clearly, EM3 has been an extremely important relationship for RTSL, and we believe it will continue to be its most important strategic partner for the foreseeable future.



Next-generation impactor (NGI) used by EM3

¹⁵ https://www.sec.gov/Archives/edgar/data/1575659/000139390519000335/minr 8k.htm



Products

RTSL makes its own proprietary pMDI products under the brand name **Rxoid** and has a new consumer brand under development, and also manufactures products on a white label basis for other retailers, MLM organizations, and other private selling groups. It currently manufactures a 5 mg and 2.5 mg pMDI devices containing laboratory-purified CBD (or a CBD/CBG blend) in addition to FDA-approved propellant.

Rxoid Brand (www.rxoid.com)

The Company's Rxoid brand is intended for resale by pharmacies and medical groups, and is branded specifically to appeal to the professional "medicinal" market. It is currently being sold to a multi-level marketing (MLM) group in Texas, and is available in two local pharmacies in the Dallas-Fort Worth metroplex.







The "New" Consumer Brand

This brand is still in pre-launch for RTSL, which will begin marketing three versions of this brand digitally starting next month, targeting "Chill," "Focus," and "Energy" use cases. The Company anticipates that this brand will appeal to the mainstream users of CBD products, over 50% of which typically purchase their CBD online. In the future, the Company plans to add one or two additional brand extensions to this new brand, to accommodate additional use cases for the product.

Future Products and Line Extensions

In the more distant future, perhaps beginning in 2021, the Company plans to launch additional products and line extensions based on new chemical formulae derived from cannabis:

- CBD and CBG: Supports enhanced pain control, and reduction in inflammation and anxiety.
- CBG: Supports pain management without concomitant entourage effects.
- CBD and CBN: Supports sleep.
- CBT and/or THCva (non-psychoactive): Supports weight loss.
- Product Line Extensions for Entourage Effects:

It is also testing formulae that could suppress viral infections in the mouth, nose, or on masks, and a potential Adderall (ADHD treatment) replacement based on terpenes found in the cannabis plant.



The Manufacturing Process and Facility

The Company currently manufactures its products in a Dallas-based high-quality laboratory that can accomodate three Coster semi-automatic filling machines, plus the other equipment RTSL needs for mixing and preparing its formulations and assembling its pMDI devices. It currently has one such machine operating now and has another on-site that it will begin operating once its first machine reaches single-shift maximum capacity. Each machine can reliability produce 5,000 units daily if the facility runs a single shift, and that capacity would go up to 9,000 units daily under a two-shift scenario. The Company can purchase and setup a third semi-automatic machine in this facility for a capital expenditure of approximately \$100,000. To summarize, with current equipment plus one additional semi-automatic filling station, running two shifts, RTSL's maximum manufacturing capacity would be approximately 27,000 units per day. Assuming a 261 work-day year (262 days during leap years), this equates to annual capacity of 7,047,000 units.

Future Capacity Expansion

RTSL's Coster semi-automated filling machines can produce between 15 to 20 cans per minute, but Coster's larger fully-integrated rotary lines can produce up to 300 cans per minute. The Company plans to expand its capacity at some point, first by replacing its semi-automated machines with Coster's fully-automated fillers, and eventually by moving into a larger production facility equipped with fully-automated production lines that can produce 300 cans per minute.

RTSL's Manufacturing Infrastructure Upgrade Path



Coster (Smaller) Fully-Automated Filling Machine



Two Fully-Automated Coster Lines in Production

Inventory and Inventory Planning

One of the challenges with which RTSL must content is new order lead times, which are currently running in the 90-day to 120-day range for consumables (cans, valves, actuators, and propellant). The Company currently has approximately 8,000 units of finished product in inventory, and another 200,000 units' worth of consumables on site. For its own *Rxoid* and new consumer brands, RTSL will need to plan (and finance) its future needs for consumables 90-120 days in advance, which could be an issue if sales ramp up very quickly, which we expect they will, or if leads times unexpectedly lengthen further. However, The Company's business policy with white label sales is to get 50% of the total order value up-front, which covers the consumables costs of that order by a factor of 4x or 5x. As the Company continues to get white label contracts and the initial cash flows therefrom, it will cushion the negative cash flow effects that future sales growth in its own brands would otherwise cause.



Quality Control and cGMP / ISO 13-485 Compliance



The FDA's cGMP guidelines exist to ensure consumer safety and high-quality products in the food, beverage, and pharmaceutical industries. RTSL's manufacturing facility is working towards its stated goal of being in full compliance with the FDA's current Good Manufacturing Practice guidelines¹⁶ pursuant to ISO Standard 13-485¹⁷ for the manufacture of pMDI devices. Note that the FDA standards set minimum practices and process guidelines, and that many companies in pharmaceuticals manufacturing seek to exceed these guidelines. However, in the CBD products

industry, the majority of smaller manufacturers (and most of RTSL's competitors) do not meet cGMP standards set by the FDA.

Sales and Marketing

Given the quality of the Company's product and its competitive advantages vs. the incumbent "vaping" products that currently dominate today's CBD inhalation market, we believe that effective sales and (especially) marketing is the singular key challenge facing RTSL. If the Company can market its products effectively and cost-efficiently, then it should be able to ramp sales and earnings very quickly – in fact far more quickly than we have forecast in our models.

Digital Marketing

The Company has contracted with an as-of-yet undisclosed "industry leading" digital marketing firm in the cannabis consumer marketing space. Based on our conversations with management, we believe its is nearly ready to begin digitally marketing its new consumer brand with the help of its digital marketing firm. If they are able to begin marketing activities on July 1, or shortly thereafter, by mid-August RTSL should begin to get good data about average cost per customer acquisition, and initial customer reordering rates. If the data shows, as we expect it will, that each new customer for RTSL is cash flow positive based on the initial order only, then RTSL will surely increase its monthly marketing budget as quickly as it possibly can, with only its manufacturing capacity constraining how quickly it can grow. While it remains to be seen how effective this campaign will ultimately prove to be, we believe that RTSL's products, which are priced competitively on a per-use basis vs. vaping devices, will be very successful in penetrating the online vape market.

MLM/Channel Marketing

In addition to its digital marketing initiatives, RTSL is actively pursuing white label sales to medically-focused marketing organizations, multi-level marketing (MLM) companies, multi-physician offices, and pharmacies. The Company currently has one MLM customer on track to do about \$900,000 in annual orders and is in active discussions with several others. Over time we expect that sales in this area – both white label, and *Rxoid* branded – will be an important source of revenues and profits for the Company. Note that gross margins in this area are only slightly lower than in the Company's own branded sales (71.8% vs. 85.1% forecast for FY2021).

Direct Sales

At some point in the near future the Company plans to hire two outside salespeople to develop direct sales relationships with various high-volume customers, such as retailers and doctor's groups. We believe that this is currently of tertiary importance to RTSL, although direct sales will no doubt make a meaningful contribution to RTSL's top and bottom lines if management chooses to dedicate adequate focus to developing its direct sales organization.

¹⁶ The most recently available guidelines appear to still be in the comment phase. https://www.fda.gov/regulatory-information/search-fda-guidance-documents/metered-dose-inhaler-mdi-and-dry-powder-inhaler-dpi-drug-products-quality-considerations

¹⁷ https://www.iso.org/standard/59752.html



However, it is worthy of note that the Company is planning to target big box retailers such as Wal-Mart, CVS, Walgreens, Target, and Boots. To qualify for such big box customers, the Company needs to obtain its ISO 13-458 certification; it already has product liability insurance (very rare amongst CBD product companies). So while not a key focus of RTSL at this stage in its development, it could very quickly became a large top-line contributor.

International Sales

So far, we have considered (and modeled) only domestic sales and marketing. However, the Company does have a small overseas digital sales effort, and we believe European sales could be eventually a reasonably significant portion of the Company's business.

Conclusion

In summary, the Company has a solid white-label sales effort underway, and it has already developed one customer, and will likely soon have several others. The digital marketing effort, however, has yet to begin; that said, we feel exceptionally good about RTSL's digital marketing plan and the sales results it is likely to create.

Competitive Analysis

RTSL faces myriad competitors in the vaping industry, some of which are very formidable, but none of which yet have directly competitive pMDI products, othen than Vapen Clear. In this competitive analysis, we give a brief summary of those companies that could pose a real competitive threat to RTSL. However, our overall position is that the domestic and global vaping markets are vast and very rapidly growing, and we believe that pMDI devices are a better method of administration than vaping devices. Therefore, we believe that there is "plenty of business to go around" for several pMDI CBD inhaler brands and companies and believe that RTSL is likely to garner enough market share to become a very successful company. Penetrating and disrupting the current inhaled-CBD market will remain a marketing-driven endeavor, and we believe RTSL management has likely selected an excellent digital marketing firm to help it reach its marketing goals.



Vapen Clear (vapenclear.com)

Vapen is a well-known brand in the vaping industry, and the are an EM3 client in terms of their pMDI devices. While they may not have the exact same process or formulation as that of RTSL, they do already have a real market presence in both vaping and MDIs, and were awarded a U.S. patent last year for their MDI device¹⁸. At this point, we believe that this could be the most significant RTSL competitor in the market. Also, their product contains 10mg per dose, also has a 100-dose useful life, and is priced just \$10 higher than the Company's product at \$89.99 retail.



EOS Labs, LLC (www.eosinspire.com)

EOS is an Oregon-based company that lists 35 retailers that stock its products, all in the Portland area. Their tagline of "100% Smoke Free inhalers" and their client relationship with EM3 Methodology, LLC clearly positions them as a direct competitor of the Company. However, their local focus suggests that they may be thinking small and will ultimately remain a largely local supplier of pMDI CBD products. Their product also dispenses a 10 mg dose and has 100 doses per unit, and is priced at \$79.95 retail¹⁹.

¹⁸ https://timesofcbd.com/vapen-mj-gets-patent-granted-for-its-new-metered-dose-cannabinoid-inhaler/

¹⁹ https://www.smokecartel.com/products/inspire-cbd-inhaler





Wellness BioSciences RX (www.wbrxglobal.com)

This is another direct competitor of RTSL, boasting Coster components, cGMP compliance, and an ISO-8 cleanroom for manufacturing and product assembly. Its formulation is unknown to us, although its listed ingredients are: Medical-Grade HFA134, Medical-Grade Ethanol, CBD (derived from hemp). Their product is available for purchase via their website, but their 5 mg product (standard 100 dose inhaler) is priced at \$149.99, which is not price competitive with other offerings.



Emerald Daze (https://www.facebook.com/EmeraldDazeOregon/)

Yet another competitor of RTSL, Emerald Daze has a 10mg, 100 dose pMDI that looks in all respects similar to others' competitive products. We have no information about this product, other than it had good reviews in the trade pubs²⁰ and on the online site cbdtoz.com where it is for sale²¹ (but out of stock) for \$100.000 retail.



Syqe Medical (<u>www.syqemedical.com</u>, Israelí Co.)

This Company has received a lot of press, received a \$50 million investment in December of 2018, and has signed a national distribution agreement with TEVA Pharmaceuticals (TEVA – NYSE) covering all sales and distribution of the Syqe device in Israel. The Company does not have a directly competing product, as its claim to fame is using a dry powder inhalation device based on cartridge-carried vapor chips and a high-tech metered dose delivery device.

As of September of 2019, Syqe was seeking to IPO on the Toronto Stock Exchange (TSE), but as of yet has not gone public there.



WellBeings, LLC (www.well-beings.com)

WellBeings inhalers do not appear to be real pMDIs, but rather a "nano mist" product that is unlikely to function well; products of this nature deposit most material in the mouth and throat, as the lungs do not absorb nano particles very well.

Other Companies that seem to offer CBD MDIs include:

- Cannamist: Inhaler label says CBD Oil; never a good idea to put oils in the lungs can cause lipoid pneumonia
- CBD Luxe: uses compressed air; simply will not function like an MDI, as dose will decline with air pressure
- Maven: also trying to use "full spectrum" hemp oil, which is dangerous, as it can cause lipoid pneumonia if inhaled²²
- AeroInhaler: We know little about this product, although it does not appear to be a pMDI device

As is evident by the number of companies that either have or purport to have CBD-based pMDIs on the market, it will be very difficult for the average consumer to differentiate between all of the available products, at least initially. However, if RTSL is effective at branding its product, and if it can soon use "social proof" that demonstrates that its product is in fact one of the best, in terms of efficacy, no sore throat or bad taste, etc., then it should garner more than enough of this market to meet or exceed our numbers. Note that our Competitive Analysis section is in no way exhaustive, as there are simply too many would-be competitors entering this market; however, we doubt that many of them actually have the expertise to manufacture and market a true pMDI CBD inhalation product.

²⁰ https://cbdoilreview.org/emerald-daze-review/

²¹ https://cbdtoz.com/product/metered-dose-inhaler/

²² https://www.healthline.com/health/lipoid-pneumonia



The Team

Donal (Don) R. Schmidt, Jr., Chairman and CEO

Mr. Schmidt is a Certified Public Accountant (#054611) and a licensed attorney (#00798486) in the States of Texas and Colorado. Prior to forming RTSL, he pursued private ventures and managed a boutique law firm. During this time, he served as general counsel for a regional computer software development firm.

From August 2010 until February 2013 he served as Chairman of the Board and Chief Executive Officer and President of Sun River Energy, Inc. During his tenure Sun River rose from a pink sheets company to Nasdaq. For the 11 years prior to Sun River, Mr. Schmidt was an independent oil and gas producer. Mr. Schmidt also served on the Board of Directors of several public companies as well as interim president of other public companies.

Mr. Schmidt was the managing law partner at Raney and Schmidt, PC. From 1997 until 2006. Mr. Schmidt, an airline transport rated pilot, also owned an FBO and Part 135 charter company.

Mr. Schmidt attended the University of Texas for four years on an academic scholarship where he studied Petroleum Engineering. He played varsity football for two seasons. He graduated with a B.S. in Mathematics and Chemistry from Texas Tech University in 1984. Additionally, he earned both an M.B.A. in Finance (1988) and M.S. in Accounting (1987) from the University of Texas at Dallas. Mr. Schmidt, a member of law review, graduated in two years from Texas Wesleyan University School of Law in 1996.

Mr. Schmidt was a full-time professor in the Texas A&M System from 1990 until 1994 before he started law school. He was a co-author of two college accounting textbooks. During this time, he owned a CPA practice and a FINRA-registered broker-dealer where he was a fully-licensed principal.

Prior to accepting a position with the A&M system he was a senior auditor at KPMG Peat Marwick in Dallas, serving as an oil and gas specialist. Mr. Schmidt's first professional position was with CIGNA Corp., reporting to the CEO/COB.

Mr. Schmidt is a lifetime member of several hunting organization having hunted and fished internationally for many years. He has served as general counsel for the Wild Sheep Foundation. He also served as a trustee for several private trusts, including holding the chairman's role of the Our Redeemer Lutheran Church Permanent Trust for six years. He is a co-trustee of his family's farm and ranch properties. Presently he serves as a personal advisor to Earth X's founder, Trammel S. Crow, on world-wide conservation efforts.

Mr. Schmidt ran for U.S. Congress in 1993 and has declined invitations to run for state-wide office as well as consideration as a regent at a public university.

He is married to Sloane Brown Riley of Fort Worth. They have three adult children, plus a seventh grader.

D. Hughes Watler, Jr., Director and CFO

Mr. Watler is a seasoned financial professional with over 25 years of direct experience in industry. He has served as the financial officer of several public and private companies with responsibilities for all aspects of corporate financial management. Previously, he was an audit partner with Price Waterhouse, LLP.

Mr. Watler has an extensive background with numerous types of debt and equity financings as well as with many forms of public securities filings. He has demonstrated expertise in the areas of: Merger & Acquisition transactions, Financial Planning and Analysis, Securities and Exchange Commission regulations, Corporate governance, Risk management (commodity hedging), and Internal controls.

Mr. Watler holds a master's degree in business administration (MBA) from the University of Texas.



Richard (Rick) Adams, PhD, Chief Technical Science Officer; Founder, EM3 Methodology, LLC Mr. Adams is the founder of EM3 Methodology, LLC, RTSL's strategic partner. Mr. Adams is a Stanford University trained anesthesiologist with a Ph.D. in Organic Chemistry.

Robert (Rob) Renick, V.P. of Sales

Mr. Renick has 25+ years of senior management experience with large MLM and Affiliate Marketing Groups in both national and international territories.

Ryan Southern, V.P. of Marketing and Client Relations

Mr. Southern brings almost 20 years of experience in sales, marketing, management, and talent development to the table. He spent several years in pharmaceutical sales, earning his way to President's Club twice before moving into a regional manager role. In the regional manager's role he learned how to manage different personalities and get the highest level of production from salespeople in six different states. During this time, he was responsible for development and monitoring all marketing and the respective sales representatives for the roll out of Mucinex from start to finish. From there he moved into a role in sales development, teaching key account managers to effectively sell in product to major retailers. He has spent the last 5 years in global leadership and talent development roles building training and development curriculums and coaching senior leaders to be more effective in their roles. His combination of selling, management and training skills make him an invaluable resource in launching, selling and marketing the Texas MDI inhaler with medical professionals and retailers. In addition to being instrumental in launching Mucinex, Mr. Southern has been a senior executive for marketing and sales of Airborne, Move Free, Mucinex Delsym, Durex Condoms, Nurofen, and Cepacol, among others.

Sean Berrier, Senior V.P. of Operations and Production

Mr. Berrier brings over 30 years' experience in the cannabis and CBD space. He has developed and set up multiple grows and also owns his own farm in Southern Oregon with 6 1/2 acres of cannabis production in the Applegate Valley. Mr. Berrier has extensive knowledge in cannabis, CBD, Terpenes, extracted (separated) cannabis oil and CBD isolate, and THC distillate. He is well known for being able to identify quality products in the cannabis space. Mr. Berrier will be invaluable in leveraging his industry connections to procure the highest quality ingredients for MDIs and negotiating favorable rates for those ingredients.

Corporate Structure Analysis

As of December 31, 2019 (Q3 FY 2020 10-Q), Rapid Therapeutics Science Laboratories, Inc. has 156,856,000 shares outstanding, of which Texas MDI, Inc. owns 140,000,000 shares (89.25%). Texas MDI is owned mostly by RTSL's CEO Donal (Don) Schmidt, and also minority owned by Sean Berrier, RTSL's Senior V.P. of Operations and Production.

Notably, in this 10-Q there are three debt issuances still outstanding

- \$300,000 in convertible promissory notes issued to two accredited investors, maturing in one to five years, accruing interest at 5% per annum, convertible into common stock at \$0.05 per share. Total conversion would result in the issuance of an additional 6,000,000 shares.
- \$165,240 in convertible promissory notes issued to former owners in acquisition of Power Blockchain, accruing interest at 5% per annum, principal repayments originally due in four equal installments on 2nd, 3rd, 4th and 5th anniversaries, convertible into common stock at \$0.13 per share, with final maturity on February 1, 2023. Total conversion would result in the issuance of an additional 1,271,077 shares.



\$765,535 in Other short-term notes issued to various affiliates of the former owners of Power Blockchain for acquisition of Treasury Stock, computers and equipment, and working capital financing, at stated interest rate of 10%. Effective on Nov 15th, 2019, the Company and the noteholders agreed that these notes' maturity dates would be extended for one year or until the Company raised an additional \$500,000 through new issuance of equity securities, at which time principal and interest due would be converted into common shares at \$0.05 per share. If fully converted based on the stated face amount in the relevant 10-Q, it would result in the issuance of an additional 15,310,700 shares.

If all outstanding convertible debt of the Company had been converted on December 31, 2019, the total number of new common shares issued would have been 22,581,777, bringing the ownership of Texas MDI down to 78.0% and the total shares of RTSL outstanding to 179,437,777 shares.

Current Fundraising

The Company is currently raising money in a private placement for accredited investors only. The Company's goal in this financing is to raise \$4 million in equity capital by issuing restricted shares at \$0.25 per share. Furthermore, each share thus issued will also entitle the purchaser to receive a warrant to purchase an additional common share at a strike price of \$1.00. These warrants will persist in perpetuity until the three-day trailing volume-weighted average price of RTSL shares exceeds the warrants' strike price, at which time the expiration day of the warrants will be set 180 days from the date the three-day trailing VWAP exceeded the warrants' strike price. These are not cashless warrants, and each warrant entitles the holder to purchase one restricted share of RTSL at the warrant's strike price.

If this fundraising is completely subscribed as planned, and if and when all warrants are exercised, it will cause the Company to issue an additional 32,000,000 shares of common stock, in return for an additional \$20,000,000 in equity capital. At this time, the fully-diluted shares outstanding would equal approximately 211,438,000 shares, all other things being equal.

The Company's planned use of proceeds for the \$4,000,000 it is seeking is as follows:

- \$630,000 Marketing: Digital ads, media buys
- \$370,000 Brand Development: Digital Channeling, Geo-fencing, travel, brand awareness
- \$200,000 FDA/Lab: ISO 5/13485 Lab certification, additional filling machines
- \$800,000 inventory: Pre-order additional consumables and API
- \$797,000 G&A: if needed
- \$1,203,000 General Working Capital

We do not believe that the Company will likely complete the full \$4 million under the financing, but it may, and we do believe it will complete over one-half of this target fundraising amount. Based on our model, the Company shouldn't need much more than an additional \$2 million for its core business, although it may want to enter into JVs with companies in the marijuana/THC business, strictly as a contract MDI producer. Management has made it clear to us that RTSL will never in any way be a marijuana-related company.



Financial Model

We built our forecast P&L model on some basic assumptions, namely:

- Unit gross costs for branded products (including shipping, depreciation, labor, facility-rent, etc.) would begin at approximately \$13.80 per unit, and would decline over the next three years to approximately \$11.50 per unit.
- Unit gross costs for white label products (excluding shipping) would begin at approximately \$6.60 per unit and would decline over the next three years to approximately \$4.00 per unit.
- RTSL will be paying out approximately 15% on all digital sales' retail price, as commissions. Shipping costs will remain fixed for digital sales at \$7.00 per unit.
- The Company's online CACs (customer acquisition costs) will start at \$60 per customer, but then trend downwards to \$30 per customer by calendar 2022. The average customer will initially make a total of two additional orders during the first 12 months beginning on the date of their first purchase, but over the next one to two years, new customers will make an average of five additional orders during this 12-month period. We did not model any additional orders after 12 months, although we believe that on average there will be some and possibly many subsequent orders.
- Sales commissions for direct sales of RTSL brands will average 15%, and 7.5% for white label sales.
- Branded products will carry a \$79.95 retail price point, and white label products will be sold for \$20/unit in large orders.
- The Company will sell approximately 10 white label units for each branded unit sold. We feel this is a very conservative mix, and that branded sales will likely make up 20% to 30% of all unit sales, rather than the 9.1% suggested by this ratio.
- The Company will likely spend an additional 5% of total gross revenues to sales & marketing expenses, above and beyond sales commissions.
- The Company will likely spend 2.5% of sales on research & development activities.
- The Company will likely spend 15% of sales on general & administrative expenses.
- The Company will likely issue 250,000 new restricted shares each quarter to pay vendors and consultants.

Based on these numbers, and based on the maximum possible number of shares that will be issued under them, including the conversion of all convertible debt and the exercise of all warrants, and a full \$4 million raised under the current offering, this model suggests that RTSL will deliver fully-diluted EPS of \$0.163 in FY 2023 (ending in March 2023) and fully-diluted EPS of \$0.286 in FY 2024 (ending in March 2024).

Risks

Like any early-stage enterprise, RTSL faces various risks related to its ability to raise capital, its ability to compete effectively, possible legal/regulatory risks in the CBD market, and its ability to protect its intellectual property and trade secrets. However, given its early stage of development, our overall assessment of the riskiness of the enterprise is "less risky than is typical."

Legal/Regulatory

Although hemp and the chemicals it contains are now fully legal to cultivate, transport, and sell in the U.S., the FDA still has authority over prescription drugs, which include CBD, the only ingredient in FDA-approved Epidiolex. Unfortunately, the FDA has not yet made its position clear on CBD when sold in pure form, but most companies in the space belief that FDA enforcement will be strictly based on labeling and advertising claims. Since RTSL doesn't make marketing claims about its CBD products, we feel this risk is minimal.

Note that in the State of Texas CBD is specifically legal to manufacture and consume, based on the passage of House Bill 1325 that was signed into law by Texas Governor Gregg Abbott last summer. Texas CBD manufacturers may export to other states and soverignities under this Texas law as well.



Financing Risk

RTSL is in need of additional capital, and is conducting a private placement to raise it. If for some reason it cannot raise additional capital, this could severely affect its ability to execute its business plan, specifically its digital marketing plan. However, we believe that management is more than capable of securing adequate capital for this Company, and so feel this risk to be only moderate.

Supply Risk

Due to capacity constraints in the pMDI components manufacturing industry, the time it takes between placing a new parts order and receive that order from the manufacturer (Coster) can be 90 – 120 days. If this were to unexpectedly lengthen, it could cause RTSL to experience delays in its manufacturing, and thus impede its ability to ship the product it sells. Management is fully aware of this risk, and we believe is taking appropriate steps in inventory planning and pre-ordering to mitigate it to a large extent. Based on this, we believe this is a minimal risk for the Company.

Competitive Risk

Any company at this early stage that competes in an industry as dynamic as the inhaled CBD products industry faces competitive risks. New technologies could be introduced that obsolesce those underlying the Company's products, and competitors could do a better job in manufacturing, marketing, or pricing their products so that they outcompete the Company. These are standard risks that we feel comfortable with in regards to RTSL.

IP Protection Risk

At this time, the Company does not have any patents and has not yet applied for any, although it may in the future. Furthermore, it relies on its relationship with EM3 Methodology, LLC, to keep its proprietary formulations and manufacturing processes secret. If its trade secrets were disclosed by EM3 or by other personnel in possession of them, it could possibly reduce the Company's technology-quality and user experience advantages that management now believes it has. However, we do not think such a disclosure is likely, and hence are not overly concerned with this risk.

Valuation Analysis

In contemplating the best way to approach valuing the shares of RTSL, we at first looked at RTSL's peer group, but found that it was only moderately representative of the situation and positioning of RTSL. Good comparables were exceedingly difficult to identify. We therefore settled on a simpler EPS multiple analysis and PEG ratio analysis as the basis for our valuation estimate, based on our projected earnings for the Company's fiscal year ending in approximately 21 months for the P/E analyst and based on the next four calendar quarters' diluted EPS estimates and forward growth rate for the PEG analysis.

Forward P/E Multiple Analysis

Our EPS forecast for this time period is \$0.0755 on a fully-diluted basis, with a forward-looking 12-month EPS growth rate of 116%. In such a hyper-growth scenario, a forward P/E ratio of 40 (or even 50 to 60+) would be completely justifiable. However, based on a standard forward P/E measure, we would be considering the following 12 months' EPS, rather than the months from 10 to 21 months into the future. For this reason, we decided to apply only a 30x multiple to the EPS of this time period, which we believe more than adequately accounts for the additional nine months between now and the EPS measurement time period. This measure results in a target price of \$2.26 per share.



PEG Ratio Analysis

A PEG ratio is defined as a company's forward P/E ratio divided by its forward growth rate (but without the percentage sign). For example, a company with a forward P/E of 20 and a forward EPS growth rate of 10% would have a PEG ratio of 2.0 (20/10=2). The "rule of thumb" is that any company with a PEG of 1.0 or less is likely a good investment, as long as the quality of inputs to the equation are good.

In RTSL's case, over the next four calendar quarters, our fully-diluted earnings per share total is forecast at \$0.0273 per share. Looking forward, our "next" 12 month's total EPS is forecast at \$0.0946, representing forward EPS growth of 246%. Given that our forecast growth slows considerably the following year, and again the year after that, we decided to target a very low PEG ratio of just 0.35 (rather than 1.0), based on forward EPS (future Q1-Q4 beginning July 1) and forward EPS growth in the following year (future Q5 – Q8 beginning July 1). That target PEG ratio equates to a current share value of \$2.35 per share.

Blended Measure

Our equally-weighted blended forward P/E ratio analysis and current PEG ratio analysis lead us to a current value of \$2.30 per share, which we will establish as our 12-month price target. Note that there is considerable upside to this price target if RTSL exceeds (or even just meets) our revenue and fully-diluted EPS forecasts over the next few quarters.

Conclusion

RTSL is a product technology leader in a nascent but rapidly emerging segment of the CBD consumer industry, namely inhaled CBD. Although the Company's pressurized metered dose inhaler systems represent just a nominal share of the inhaled CBD segment's total revenues at this time, we believe its inherent superiority to the incumbent vaping technologies will be disruptive to the entire CBD products industry – not just to the vaping sector. pMDIs are simple to use, allow for precise and consistent dosing of pure CBD isolate, have a rapid onset of relief via the pulmonary tract directly to the brain, and are both cost-efficient and highly price-competitive on the basis of CBD bioavailability per gram. We believe these factors, when taken in combination, will quickly sway not just vapers and dabbers, but also many purchasers of CBD edibles and topicals as well to switch their chosen method of CBD administration to pressurized metered dose inhalers. Given the Company's exclusive rights to use EM3's formulae and processes that it helped RTSL develop, and given RTSL's selection of a leading digital marketing firm with a core competency in cannabis (identity still unknown), we believe that RTSL is very likely to quickly build significant market share by cannibalizing not only current vaping-related CBD revenues, but also by commandeering a significant portion of overall CBD industry edible revenues.

Therefore, we initiate research coverage on Rapid Therapeutics Science Laboratories with a *Strong Buy* rating and set our 12-month price target at \$2.30 per share, representing a 411% gain from current levels.

RTSL Profit and Loss Forecast Model (In \$000s, except for per-share / per-unit data)

Calendar Year	Jun '20	Sep '20	CYE '20	Mar '21	Mar '21	Jun '21	Sep '21	CYE '21	Mar '22	Mar '22	Mar '23	Mar '24
Fiscal Year, ending March 31	Q1 '21E	Q2 '21E	Q3 '21E	Q4 '21E	FYE 2021E	Q1 '22E	Q2 '22E	Q3 '22E	Q4 '22E	FY 2022E	FY 2023E	FY 2024E
Total Revenues	244	1,416	3,151	5,926	10,737	8,296	10,785	13,481	16,307	48,869	95,495	1,61,492
Total units sold	11	48	111	211	381	295	384	480	577	1,736	3,330	5,676
Sequential growth rate (Qs, & CAGR)	1119.9%	480.2%	122.6%	88.0%	n.m.	40.0%	30.0%	25.0%	21.0%	355.2%	95.4%	69.1%
Total cost of good sold	73	341	716	1,346	2,476	1,739	2,258	2,584	3,116	9,698	16,830	27,907
Gross profits	171	1,075	2,435	4,580	8,261	6,557	8,526	10,897	13,191	39,171	78,666	1,33,585
Gross Margin	70.1%	75.9%	77.3%	77.3 %	76.9%	79.0%	79.1%	80.8%	80.9%	80.2%	82.4%	82.7%
Operating expenses												
Total operating costs	76	611	1,318	2,467	4,472	3,453	4,200	5,108	6,198	18,959	34,279	55,267
As a % of total sales	31.4%	43.2%	41.8%	41.6%	41.6%	41.6%	38.9%	37.9%	38.0%	38.8%	35.9%	34.2%
Operating profit	95	464	1,117	2,113	3,789	3,103	4,327	5,789	6,993	20,212	44,387	78,318
Operating margin	38.8%	32.8%	35.5%	35.7 %	35.3%	37.4%	40.1%	42.9%	42.9%	41.4%	46.5%	48.5%
Pre-tax profit	95	464	1,117	2,113	3,789	3,103	4,327	5,789	6,993	20,212	44,387	78,318
Income Taxes	20	97	235	444	796	652	909	1,216	1,469	4,245	9,321	16,447
Marginal tax rate	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
Net income	75	367	883	1,669	2,993	2,452	3,418	4,573	5,524	15,968	35,066	61,871
Net margin	30.6%	25.9%	28.0%	28.2%	27.9%	29.6%	31.7 %	<i>33.9%</i>	33.9 %	32.7%	36.7%	38.3%
Earnings per share (EPS), basic	0.000	0.002	0.005	0.010	0.017	0.014	0.018	0.024	0.029	0.085	0.183	0.322
Earnings per share (EPS), fully-diluted	0.000	0.002	0.004	0.008	0.015	0.012	0.016	0.021	0.026	0.0755	0.163	0.286
EPS sequential quarterly, and sequential annual growth rate	720 %	379%	131%	89 %	n.m.	46%	29%	34%	21%	392%	116%	76%
Total shares outstanding, fully-diluted	1,83,688	1,87,938	1,96,188	1,96,438	1,91,063	1,97,688	2,13,938	2,14,188	2,14,438	2,10,063	2,15,063	2,16,063



Our Rating System

We rate subject companies based on the appreciation potential we believe their shares currently represent.

Explanation of Emerald Equity Research's Rating System						
Rating	Rating Definition / Interpretation					
STRONG BUY	We believe the subject 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 subject company will appreciate more than 30% relative to the general market for U.S. equities during the next 12 to 24 months.					
NEUTRAL	We expect the subject 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 subject 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 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.



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Equity Research Analyst Highlight

Brian Connell, CFA Senior Research Analyst

Mr. Connell has nearly 30 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 sellside, 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, CA. Mr. Connell has also held the position of Executive Director of Marquis Capital Management, a technology-focused hedge fund based in Atlanta, GA.

Mr. Connell holds degrees in Economics and Psychology from Duke University, is a CFA Charterholder, and while on the sellside held FINRA Series 3, 7, 24, 63, and 65 registrations.



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