

Phytocannabinoids – An Exploratory Look at Patient Response to Cannabinoid Therapies
Applied to a Range of Health Challenges

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Introduction

Cannabinoids and terpenes, found in cannabis (hemp or marijuana) have been used for thousands of years in treating many health challenges in societies around the world, however, it is not common knowledge how cannabis is healing the human body; restoring hope for terminal patients when modern medicine has exhausted all other options available to them (Herer, 1998). To provide a very basic understanding, cannabinoids are chemical compounds secreted by the cannabis flower, and provide relief to an array of symptoms including pain, nausea, and inflammation; terpenes are essential oils that contribute to the scent, flavor, and colors of the plant and are known to provide medicinal value.

Israel, Spain, and other countries have been doing research with cannabinoids for many years, their continued efforts driven by the desire to gain understanding of the connection between cannabis, and healing of the human body (Tarnopolsky, 2013). In contrast, the primary focus of research in the United States (U.S.) has been on cannabis as a gateway drug, and the negative effects cannabis may have on the human body and society, as directed by the National Institute of Drug Abuse (Marijuana Research, 2004).

While a large body of knowledge exists relating to the use of cannabinoids as a medicine, there is an even larger body of knowledge designed to identify the negative aspects of cannabis without consideration of the positive effects being presented. In a forest of trees, research is focusing on one tree, THC (Tetrahydrocannabinol), a chemical responsible for psychological effects but what about the other trees in the forest? Herer (1998) suggests that governments, corporations, and law enforcement interests keep the world's focus on THC to ensure that the cannabis plant is not resurrected and denied the credit for the many needs it fills in the existence of mankind (Herer, 1998). The U.S. listing cannabis as a Schedule 1 Drug (at the same time

getting a patent for a specific cannabinoid of medicinal value) as well as the resulting marijuana prohibition, and International Treaties have all played a role in equating cannabis with THC (Herer, 1998).

With the removal of cannabis from the planet since the 1940's, (a multi-purpose plant serving humanity from the beginning of our existence) to make way for the nylon industry (an agenda pushed for other's monetary gain); the negative impact on the health of our planet, mankind, and the animal kingdom has been profound. If hemp had not been made illegal, Herer (1998) notes that "80 percent of DuPont's business would never have materialized, and the great majority of the pollution which has poisoned our Northwestern and Southeastern rivers would not have occurred" (p. 38). Information provided to the American public was designed to support a "Just Say No" belief about cannabis; to get the public onboard with believing cannabis should be obliterated, however nothing could be further from the truth in terms of what history and science says about cannabis. LSD, Cocaine, Ecstasy, Ketamine and other illicit drugs have proven medical benefits, and are used daily in the medical world so why not cannabis (Dybuncio and Jaslow, 2012)?

Knowledge can no longer be kept in a vacuum as the inter-net is empowering anyone with a computer, and inter-net connection to know the truth. The American public is no longer in the dark, raising important questions, challenging the validity of past decisions, and holding decision makers accountable as we move forward. Existing research clearly shows the tremendous promise of cannabinoids for curing cancer, as well as many of the disabling, and deadly diseases of our day (O'Connell, 2007). As one oncologist from a world-renowned U.S. cancer center stated in 2015, "We put people through treatments knowing the pain, suffering, and outcomes. We can only use the tools made available to us. We do the best we can with what we

have” (Ford Cancer University Hospital, unidentified Oncologist, 2015). Little knowledge of the vast array of cannabinoids and terpenes that exist in the cannabis plant (both hemp and marijuana) has been made known to the public until recently, and in discussions with multiple medical doctors, not one interviewed said they had education or training relating to the human endocannabinoid system.

Robert Calkin, a 35-year cannabis advocate who started the first Medical Marijuana delivery service in California, and probably America, known as Green Dot Delivery Service, provided the inroads needed to access those who have been making, and using cannabis medicines for decades. Robert Calkin, a professor at Oaksterdam University and his wife, Noelle Calkin owns and operates the Cannabis Career Institute (CCI) that provides workshops across America to teach people about starting cannabis based businesses. Thousands of people have attended CCI workshops, and many successful cannabis businesses today are deep-rooted in support by CCI. After two years of interviews with those who grow and make cannabis medicinal products, what follows are insights into those experiences.

Background

This article is a look inside the practical use of cannabinoids as a medicine. The quest was to go deep into the cannabis communities within Northern California to gain insights into the lived experiences of those who produce, and use cannabis as a medicine. This article shares patient response information related to the use of specific cannabinoid formulations, and what was learned from these experiences. All clients who participated in using specific cannabinoid formulations, and products discussed in this article did so when asking for help through hearing about the formulations from others. No clients were asked to participate; they asked for the formulas, and freely provided information in their interactions with those providing the

formulations. All clients were informed that no names or identifying information would be used in any information presented as a result of their experiences. All clients were provided with information about cannabinoids as a medicine, and provided web links along with easy to understand papers and videos relating to the efficacy, and safety of cannabinoids before any formulations or products were provided. Peer review studies were provided on request, and considerations were discussed based on experience and current research, however, no promises were made in regards to outcomes.

All clients were encouraged to let their medical professional know what they are considering before starting, and to maintain a relationship with a healthcare provider. Clients who asked for cannabinoid-based products for their many health challenges voluntarily provided the information being shared in this article; it was not gathered within the context of a formal clinical trial.

The majority of people seeking cannabinoids had exhausted all traditional remedies, in cases where traditional remedies existed, and were told by their healthcare professionals that there was nothing left they could do. These experiences were life and death struggles with a level of dynamics that will be detailed in future studies. In many cases, people are trying to save the life of a loved one or at minimum, hoped to improve the quality of life of a person who was suffering. It is the hope of all those who contributed to this paper that their voices will be heard, and cannabis viewed through new perspectives for its potential valuable contributions to the medical field.

The Formulations

Richard Brumfield Jr. founded Full Spectrum Omega in 2008 with the purpose of finding a means to cure his first ex-wife's terminal cancer. Through research and experimentation with

cannabinoids in Canada and the United States, Richard developed a non-euphoric phytocannabinoid elixir called NEPE14 (NEPE = Non Euphoric Phytocannabinoid Elixir). The NEPE14 elixir healed his first ex-wife's cancer and Hepatitis C in 2011, which is on record with a Veterans' hospital in Louisiana. Richard used the elixir in healing his own throat cancer, not once but twice. Richard who is 6'4' in height went from 285 lbs. to 193 lbs. in a short period time while using the elixir, and maintains a healthy weight of 193 lbs. (BMI 23.5) taking the elixir daily.

Phytocannabinoid formulations created by Full Spectrum Omega (FSO) products were used in this effort to help people, and to gain an understanding of the efficacy of cannabinoids as a medicine. FSO products used in this process were chosen because safety was established as evidenced by several years of use in treating a range of health challenges. All formulations are tested for pesticides, herbicides, mold, heavy metals, the cannabinoid profile, and the terpene profile with all products being tested multiple times before being shipped to anyone. Other products will be discussed later in this article.

The level of cannabinoids used in the FSO formulations are below current Federal limitations and uses an agricultural process of blending Essential Fatty Acids, and Phytocannabinoids to create what may be classified as a "medical food additive". The Food and Drug Administration (FDA) Compliance Program Guidance Manual (2008) defines Medical Food as, "...a medical food is a food which is formulated to be consumed or administered internally under the supervision of a physician and which is intended for the dietary management of a specific disease or condition for which distinctive nutritional requirements, based on recognized scientific principles, are established by medical evaluation" (p.4).

FSO produces and standardizes naturally purified cannabinoids to include cannabidiol based medical food, topical applications, and Investigational New Drugs (IND), researched under the Food and Drug Administration's, "Investigational New Drug Applications and Abbreviated New Drug Applications; Technical Amendment" since 2009 (Investigational New Drug..., n.d.). Full Spectrum Omega, Inc. has developed specialized cannabis cultivators with unique medicinal properties that are utilized in the production of Omega XI products. FSO is able to acquire these strains under California Law Prop 215, "The Compassionate Use Act of 1996" (Compassionate Use Act, 1996).

Full Spectrum Omega - OMEGA XI FORMULATIONS-(A SPECIALLY PREPARED ESSENTIAL FATTY ACIDS (EFA'S) BLEND OF OMEGA 6, OMEGA 3, OMEGA 9 and NON-EUPHORIC PHYTOCANNABINOIDS)

CONTENTS: Essential Fatty Acids (hempseed oil) or EFA alpha-linolenic acid (an omega-3 fatty acid) and linoleic acid (an omega-6 fatty acid) with trace amounts of cannabis components of less than .03 % Δ 9-tetrahydrocannabinol (Δ 9-THC, commonly called THC), THCA, CBD, CBDA, and other cannabinoids and terpenes. The flowers of the plant are specially processed to supplement the human endocannabinoid system production of anandamides and to oxygenate the bloodstream.

This nonchemical catalyst agriculture process enhances the C. Sativa, and C. Indica cannabis plants from their natural plant material state to a liquid state where it can be taken in measureable dosages without the euphoric high. By using a proprietary cold infusion process method, FSO is able to maintain the active ingredients found in Hemp Seed Oil (C. Sativa) and active Phytocannabinoid Essentials (C. Indica) of the cannabis plant. NEPE14 is composed of Essential Fatty Acids (EFA's) that the brain and all living cells require. The formulation is a

blend of EFA's, and cannabinoids combined to form novel "Short Chain Polyunsaturated Essential Cannabinoids Acids". Richard Brumfield, the founder of FSO states, "This unique process allows the bonding of omegas with cannabinoids thereby creating or re-creating the whole genus of the Cannabis plant into a balance which activates the CB1, CB2 and CB3 receptors of the Endocannabinoid systems when ingesting the new blend of polyunsaturated fats" (R. Brumfield, personal communication, June, 5 2014). Dr. Courtney Houchen, section chief of digestive diseases at the University of Oklahoma College of Medicine suggested that in vitro models in the NEPE 14 expressed a CB3 receptor associated with T cells. He went on to suggest that he had been looking for this for 40 years.

How Patient Experiences Compare With Research Literature

Many of the patients requesting help had been told by the medical community that no other options through traditional medical channels existed. In some cases, the patient, and family lost faith in the traditional medical system, and wanted to try alternatives first. Overall, clients expressed a deep trust in their doctors but expressed concerns with the limited tools doctors have available in treating serious conditions. Clients made statements like, "my doctor says cannabis oil is no good and says to stay away from it." Other clients made statements like, "medicine is all about the money." One client stated, "you do not seem like a doctor because my doctors did not spend the time to listen, and discuss how I am feeling the way you do." A few clients said they were just told they had days to live, and they wanted information about cannabinoids to share with their doctor before taking anything. This is understandable given that a relatively low percentage of the population knows anything about cannabinoids outside of watching specials on television about marijuana. All clients were highly receptive to receiving information to inform themselves about cannabinoids.

Hazekamp and Grotenhermen (2010) extended a literature review completed by Amar (2006) to support what is known about cannabinoids in the treatment of human health challenges covering 37 studies and 34 years of research through 2009. The therapeutic and adverse effects of cannabinoids using THC, CBD (Cannabidiol), Dronabinol, Marinol, Nabilone, Cannador, and Sativex were reported. This suggests that the greatest potential for cannabinoids may be an analgesic (pain relief) for chronic neuropathic pain, appetite control, and in diseases such as cancer, aids, and multiple sclerosis (Hazekamp & Grotenhermen, 2010; Robson, 1998).

Kraft et al. (2008) presented data that supports a correlation between lower levels of cannabinoids in producing relief from acute inflammatory pain, and hyperalgesia; higher levels of cannabinoids did not correlate. This supports the experiences of clients in this article. All formulations provided to clients were combinations of very low levels of cannabinoids within a specific formulation, less than .03%. This is important when the use of THC is involved as small doses relative to a patient's tolerance to THC have shown to produce relief of pain with lower levels of efficacy reported with higher levels of THC. The efficacy of THC appears to be based on dosage, the presence of other cannabinoid modulators, and the condition being treated. For example, in addressing symptoms associated with MS and Parkinson's, higher doses of vaped THC provided effective, and complete symptomatic relief for varying durations of time. High doses of THC in clients experiencing pain associated with different cancers experienced greater levels of pain. When dosages were reduced, patients experienced effective pain relief to the point of eliminating other pain relief medications.

A study conducted by Katona, Kaminski, Sanders, and Zajicek (2005) showed evidence that cannabinoids may be an effective therapeutic in treating multiple sclerosis (MS). This aligns with the client responses discussed in this article. Wade, Makela, House, Bateman, and Robson

(2006) suggests that patients with MS who experienced symptom relief from a cannabinoid formulation in the first 10 weeks, maintained relief for extended periods of time without increasing the dosage. This may suggest that people do not develop a tolerance for THC but practical experience suggests that patients do develop higher tolerances for THC over time.

Studies conducted by Iversen (2003); Lynch and Clark (2003); Maldonado and Valverde (2003), suggest that cannabinoids, and opioids have synergistic effects in controlling chronic pain. The clients' experiences presented in this article supports that synergistic effects do occur as evidenced in the reduction of the need for opioid-based pain relief. Cannabinoids affixing to CB1 receptors in the brain stem area do not affect respiration as opioids do. How cannabinoids effect the up or down regulation of the opioid receptor system is not clear and needs to be considered.

A study conducted by Abrams et al. (2007) suggested that smoked cannabis reduced daily pain significantly compared to a placebo. The amount of cannabinoids smoked was comparable to drugs commonly used to relieve chronic neuropathic pain (Abrams et al., 2007); this is supported in the management of pain based on patient responses in this article. In some clients, opioid-based drugs did not provide enough pain relief to provide comfort to the client. When cannabinoids were added to provide additional pain relief, clients experienced complete pain relief resulting in lowered dosages or in some cases, eliminated the use of opioid-based medications altogether. Siegling, Hofmann, Denzer, Mauler, and De Vry (2001) suggested that cannabinoid CB1 receptors are upregulated in chronic neuropathic pain, and enable an increased analgesic effect of THC in chronic pain. Studies suggested that cannabinoid formulations that contain 4:1, 2:1, and 1:1 ratios of THC to CBD support both relief from chronic pain, and are effective in treating mental disorders. THC alone is less effective, and when given at higher

levels can actually increase pain (Conte, 2009; Sandrini, 1993). Studies supported that cannabinoids reduce human pain perception mainly by acting at the pre-motor neuronal level in the spinal cord. Cannabinoids, like opioids, could act by decreasing neurotransmitter release (Hazekamp & Grotenhermen, 2010).

Sample Population

30 clients who requested help or guidance were provided formulations and products, however prior to obtaining the products; contraindications were discussed with everyone seeking to use the cannabinoid formulations. Table 1 provides the sample population demographics.

Table 1

Age-Gender Distribution n=30

Age Group	Male	Female
<20	1	0
30-59	7	11
60-79	2	5
80-99	3	1
Total	13	17

FSO Dosing Protocols

In general, 0.5 ml of elixir per 100 lbs. of body weight administered 3 times per day is the standard protocol and taken for at least 8 weeks without interruption. It is important to note that dosage may need adjustment based on a patient's individual tolerance level. For example, Table 2 is a standard dosing protocol with a 3 ml daily dosage administered equally over 3 times a day with the patient tolerating without complaints.

Table 2

Example of Standard Protocol. The example below is based on a patient = 200 lbs. body weight. Average dosage is calculated on 0.5ml per 100 lbs. body weight, administered 3 times per day. Dosage may require adjustment based on patient response to find the patient's optimal dosing tolerance and should be taken over 8 weeks without interruption.

Standard Protocol	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Week 1	3 ml	3 ml	3 ml	3 ml	3 ml	3 ml	3 ml
Morning dose	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual
Mid Day dose	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual
Evening dose	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml), sublingual

However, for some patients, equal dosage administered over 3 times a day can result in the mid-day dosage leaving the patient feeling their energy levels are too low. In this instance, the morning and evening dosages can be increased accordingly, and mid-day reduced to balance their energy while ensuring they still receive the full dose of 3 ml's per day; mid-day dosage should not be eliminated. See Table 3 for an example of a standard dosing protocol adjusted based on a patient being unable to tolerate 1 ml at mid-day.

Table 3

Example of Standard Protocol: Adjusted to Patient Tolerance. The example below is based on a patient = 200 lbs. body weight. Average dosage is calculated on 0.5ml per 100 lbs. body weight, administered 3 times per day.

Mid-day dosage required adjustment based on patient complaints of decreased energy levels. Morning and evening dosages were increased by .25ml and mid-day reduced by 1ml.

Standard Protocol	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Week 1	3 ml	3 ml	3 ml	3 ml	3 ml	3 ml	3 ml
Morning dose	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual
Mid Day dose	1 dropper full (Dropper volume capacity=0.5ml), sublingual	1 dropper full (Dropper volume capacity=0.5ml), sublingual	1 dropper full (Dropper volume capacity=0.5ml), sublingual	1 dropper full (Dropper volume capacity=0.5ml), sublingual	1 dropper full (Dropper volume capacity=0.5ml), sublingual	1 dropper full (Dropper volume capacity=0.5ml), sublingual	1 dropper full (Dropper volume capacity=0.5ml), sublingual
Evening dose	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual	2.5 droppers full (Dropper volume capacity=0.5ml), sublingual

For late stage cancers in patients who are entering accelerated end of life processes, the standard protocol is adjusted. For the accelerated protocol, the standard dosage of 0.5ml per day per 100 lbs. body weight is doubled (1 ml per day per 100 lbs. body weight) 3 times per day until 30 ml's of elixir has been taken. At that point, the dosage reduces back to the standard protocol of 0.5ml per day per 100 lbs. body weight for the remaining days or weeks left in the 8-week protocol. The purpose of the variation in the late stage protocol is to accelerate the oxygenation

of the blood, adjust the body’s PH to a more alkaline state, and to boost the immune system as quickly as possible. Table 4 provides an example of an accelerated protocol in which the patient is tolerating the equal dosages over 3 times per day; however, dosage adjustment similar to the example provided in Table 3 can be applied to patient tolerance. In Table 4 example, at the end of day 5, patient completed 30 ml’s of elixir on the accelerated protocol so day 6 and day 7 dosages were reduced back to standard protocol dosing of 0.5ml per 100 lbs. body weight.

Table 4

Example of Accelerated Protocol for Late Stage Cancer Patients: The example below is based on a patient = 200 lbs. body weight. Average dosage is calculated on 1 ml per 100 lbs. body weight (doubled from standard protocol), administered 3 times per day until 30 ml’s is taken. At that point, dosage returns back to standard protocol of 0.5ml per 100 lbs. body weight administered 3 times per day. Dosage may require adjustment based on patient response to find the patient’s optimal dosing and should be taken over 8 weeks without interruption.

Standard Protocol	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Week 1	6 ml	6 ml	6 ml	6 ml	6 ml	3 ml	3 ml
Morning dose	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml),	2 droppers full (Dropper volume capacity=0.5ml),
Mid Day dose	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml),	2 droppers full (Dropper volume capacity=0.5ml),
Evening dose	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	4 droppers full (Dropper volume capacity=0.5ml), sublingual	2 droppers full (Dropper volume capacity=0.5ml),	2 droppers full (Dropper volume capacity=0.5ml),

Other forms of administration can be utilized, when needed including suppositories (developed using the elixir), inhalation through the nasal passages or through feeder tubes in cases where no other options were available. In all forms of administration, clients are asked to increase their water intake each day and to eat a saltine cracker or potato chip each day with advisement to have their potassium levels monitored while using the formula. Because the formula detoxifies the body, clients may notice a difference in stools, and urine for the first day or two when starting use of the formulation; this is normal. Clients were asked to communicate frequently with their healthcare provider, the provider of the formulation, and were monitored so that dosage could be adjusted as needed and/or other products introduced when appropriate. Insights are provided in the discussion section of this article.

The Full Spectrum Omega XI products have been used over the past 7 years for health challenges ranging from obesity, diabetes, various cancers, stroke, shingles, Hepatitis C, and

others. For more than two years, information has been provided to clients across the United States, Asia, Eastern Europe, South America, Canada, and Mexico to those who are critically ill and have exhausted all other established medical options. The curative and relief rates, to this point are positive, and support the need for more medical doctors to engage in clinical trials. Lab results and analysts to date suggest that a “new compound” has been discovered in the NEPE14 formulation. A reputable cannabinoids analyst from a lab in Marin, CA clearly stated upon analyzing initial lab results that (2015), “you have a product and it is different than anything we have seen.” While FSO has a new compound based on how the product is processed, the formulas are made with cannabis, water, and precise temperature treatments for specific periods of time.

Data Analysis Observations

At the end of this paper, an Appendix is provided of narrative summaries of each patient’s experiences across the sample population explored in this paper. The documented findings reported were provided by either the patient and/or family members, and captured the following information: gender, age range, health challenge(s), last known status, immediate response (24 hours to 29 days) on initiation of 8-week protocol, and extended response (30 days to 1 year).

Of note, the reasons people stopped taking the medicines, where noted, were due to a range of reasons primarily grounded in family member objections to cannabis or no insurance coverage to cover the cost of the medicine. Many of the clients have no monetary resources left having been through exhaustive traditional therapies, and using expensive pharmaceutical medicines. The cost of an 8-week protocol is \$1500.00 to \$3,000.00 depending on the patient’s body mass and in cases where people cannot afford it, FSO (a for-profit Disabled Veterans Service Organization) provides the products at no cost when the resources are available.

A general observation important to note is that patients with low blood pressure should approach cannabinoid-based medicine with caution and discuss regimens with their health care providers. While blood pressure increases during the first 15-20 minutes after a dose, there is an observed 10 to 20 point drop in blood pressure following the immediate increase. In addition, those diagnosed with Schizophrenia should also use caution and work closely with their health care providers to determine if they are appropriate candidates for cannabinoid-based medicine.

On review of the data, some significant observations emerged that are worth highlighting. In table 5, three female patients with Breast Cancer started on the elixir, in which two completed the 8-week protocol and one patient stopped the elixir 3 weeks into the protocol. Of those three patients, the patient that stopped the elixir, passed away 6 weeks later, however, the two patients who completed the protocol are cancer free at the time of this paper.

Table 5

Breast Cancer-Field Observations- Outcomes on and off elixir

Age Group	Sex	Health Challenge	Response to elixir	Stopped elixir	Last Known Status
50's	Female	Breast CA (Metastasized)	Improved appetite, Increased energy, improved sleep, reduced pain, improved mental disposition	Yes-3 weeks into protocol	Expired 6 weeks after stopping elixir
40's	Female	Breast CA (Metastasized to bone)	Cancer markers returned to normal range, lesions (active cancer in bones) eliminated, bone regenerated	No	Cancer Free(1 year)
40's	Female	Breast CA (Stage 2)	Completed 8-week protocol, improved mental disposition, improved sleep and appetite, reduced pain, increased energy	No-continues on maintenance dose	Cancer Free (6 months)

In table 6, two patients, one male, and one female with skin cancer started on the elixir, in which both completed the 8-week protocol. Both patients have been cancer free for > 16 months and remain cancer free at the time of this paper.

Table 6
Skin Cancer Field Observations-Outcomes on elixir

Age Group	Sex	Health Challenge	Response to elixir	Stopped elixir	Last Known Status
30's	Male	Melanoma on chest (terminal)	Topical elixir applied, tumor gone in 16 days and chest area healing.	No	Cancer Free (16 months)
50's	Female	Basal cell carcinoma on neck	Topical elixir applied with high response. The tumor began to shrink in the first three days with Basal Cell carcinoma gone in 3 weeks of applying the topical 3 times a day. No MOHS	No	Cancer Free (18 months)

In table 7, two patients, both males with Glioblastoma (Stage 4) started on the elixir, in which one patient completed the 8-week protocol and one stopped at 6 weeks. The patient who stopped the elixir is not cancer free but is functioning at 1 year; however, the one patient who completed the protocol is 8 months cancer free with no additional traditional treatments needed.

Table 7
Glioblastoma Field Observations-Outcomes on elixir

Age Group	Sex	Health Challenge	Response to elixir	Stopped elixir	Last Known Status
50's	Male	Glioblastoma(Stage 4)-Given 1- 2 weeks to live	The patient was feeling much better in 24 hours following taking the elixir in terms of energy and diminished pain, High response. Patient was feeling well enough at two weeks to help install a hot tub for his wife in his backyard.	Yes-Stopped taking elixir at six weeks	Not Cancer Free but still functioning at 1 year
70's	Male	Glioblastoma(Stage 4)-Began elixir one month prior to radiation treatments	Immediate response, increased energy, no pain, appetite, and sleep returned to normal. Completed the radiation treatments with no loss of hair, no pain medication needed, and no loss of hair.	No	Cancer Free (8 months) with no additional traditional treatments

Discussions

Many of the people that used the phytocannabinoid-based elixir discussed in this article were sent home or referred to hospice for end of life care. Sharing experiences with the patients and spending hours talking with them about every concern and pain they had, provided hope in their lives. The clients made statements like, “thank you for caring and taking time to help me.” To what extent hope plays a role in the healing, and comfort of people in distress cannot be ignored nor underestimated. Providing hope and comfort to the patients discussed here was clearly a positive factor in the patients’ wellbeing in all cases. Others asked questions like, “Can you send me links to share with my doctor so that I can get an approval to take the elixir?” One client called saying his doctor told him he had less than a week to live, and he had heard about the elixir, and would like some articles to show his doctor. This suggests that people have high levels of confidence and trust in their doctors.

In communications with clients who have exhausted all traditional options to maintain life, the point must be made that just because the traditional medical establishment says your life is over does not mean that there is nothing else available or that life must be over. There are alternatives that provide hope, relief, and in some cases, a cure. Taking time to communicate, listen to people, and caring about them is highly positive for those suffering. Support and reinforcement that the patient is not alone is extremely important. Despite the outcome, patients found tremendous peace of mind by talking to others who were alive and well and found peace when they are surrounded with love and understanding. In many of the clients worked with, hope was gone before a discussion had taken place and based on the experiences with those clients, and their families, discussions restored hope for them. It gave peace and comfort, opening the door for healing. Where healing did not occur, the clients still received tremendous benefit as

they were able to have quality time with their families and loved ones with quality of life enhanced.

At minimum, the patient experiences support that the use of cannabinoids are effective in reducing pain, improving sleep, improving appetite, and produced an uplifted mental disposition. Cannabinoids present serious considerations for palliative care. In the clients that lost their battles to the diseases discussed, their lives were able to be extended by weeks, and in some cases months. The extended time was viewed as a gift where patients spent that time engaging with family and friends, in going places, and experiencing joy at a time when life was ending. There is a strong contrast in this verses patients being highly medicated with opioids, and unable to speak or interact with family while lying in a bed waiting to die. As one woman with late stage small cell lung cancer stated, “the time I am given is good.” This was stated while the she was driving with her granddaughter to spend some time together. It was interesting to note that patients who were able to take the cannabinoids were able to function at a higher level up to a few days from the time they passed. When the end arrived, they passed quickly without prolonged suffering and in other cases, patients walked out of hospice situations in remission.

In the case of a client who is in her 60's experiencing early symptoms of MS, severe scoliosis, a lack of energy, extreme stress, and could no longer work, the Phytocannabinoid elixir gave her a life back. She is able to walk her dog (something she had not done in 2 years), go to work, and enjoy her children and grandchildren without overwhelming pain and depression. This literally changed her life; her husband calls it a miracle.

In the case of a man with Rheumatoid Arthritis (RA) in his lungs, Leukemia, and loss of bone marrow, he literally wanted to die, and said so prior to starting the elixir. He did not want to take the elixir or anything else. The pain and suffering was unbearable with no relief experienced

in the gauntlet of traditional therapies he had gone through. Within 24 hours after taking the first dose of elixir, his mental disposition had changed 180 degrees. The first night he slept well, and woke up the next morning hungry. His wife called saying that he was responding to the elixir and made it her mission to ensure her husband took the elixir as recommended. This is a case with excellent results as the RA was diminished to the point that the oncologist is questioning the need for additional chemo. His white blood cell count is normal suggesting that something significant has happened in his body to produce healthy white and red blood cells, and the Leukemia is gone. The patient's oxygen saturation level increased to 97% within 24 hours of taking the elixir where prior he was confined to an oxygen bottle. This young couple now have their life back and the client is improving every day, his desire to live fully restored.

In the case of the client with malignant melanoma, the tumor on his chest was gone in 16 days using a Phytocannabinoid based topical oil (Hemjoba Gold Oil), and taking the elixir. The following pictures show the stages of healing during the 16 days while on treatment.



It is noted that the tumor was pushed out at 10 days and healed from the inside out. The day 16 picture shows the closing of the hole where the tumor was; the client remains cancer free 16 months later.

The client with the plaque psoriasis over a large percentage of his body, used the cannabinoid based topical (Hemjoba.com lotion), and observable results in the treatment of plaque psoriasis were noted. Within the first 5 minutes, the client had noticeable relief, and by the end of the first week of using the product, the pain and itching reduced by 40%, as estimated by the client. The client stated he was pain free, and the itching had diminished to a “mild nuisance”. This has significant implications if what is being experienced by this client is representative of what is seen in patients with a high initial response rate. The expectation that this person will be free of the plaque psoriasis within four to six weeks is possible. This is an ongoing treatment and additional information will be presented in future studies.

One of the commonalities observed in the information presented is in the response rate at the beginning of the treatment protocol as noted below:

High Response Rate

Patients with a high initial response tend to be the ones that experience a predictable set of events leading to the healing of their condition within a relatively short amount of time, weeks to months.

Moderate Response Rate

Those that have a moderate initial response level tend to require a month to six weeks before a major change in the treated condition is recognized. Once a major positive change is observed, from that point, for example, a healthcare professional suggests the disease has stopped progressing; the client begins to heal quickly. There seems to be a tipping point or threshold where change happens fast, and once that point is reached, healing accelerates.

Low Response Rate

Those that have a low initial response tend to realize relief and comfort, but depending on the condition, may not realize enough healing to turn the situation around. Of consideration, clients that had breaks in the use of the elixir for 2 to 3 weeks during the first two months of use did not continue to heal; regardless of the initial response rate. Even when significant progress was made, a lapse in use turned the progress off. In some cases, the patients could be turned around, in other cases, the client was lost or continued to endure their health challenges. The variables in this kind of analysis are many, and the population explored too small to make any inferences in the information presented. The information presented here are the experiences and observations of a small number of people using specific cannabinoid formulations.

In the case of clients presenting with Stage 4 Glioblastoma, all patients realized reductions in pain relief and tumor size using Hemjoba Gold Oil and the elixir in combination. Cannabinoids readily move through the blood brain barrier so attacking the tumor(s) from both ingesting the elixir, and in massaging the oil into the entire head and neck produced accelerated pain relief and a reduction in inflammation. Accelerated relief is experienced when a topical cannabinoid lotion or oil is massaged into areas on and around where the problem is in the body. For example, rubbing an oil or lotion into the chest of those fighting lung or breast cancer provided accelerated symptomatic relief in patients using the elixir. Cannabinoid based lotions, and oils have also provided stand-alone relief for many conditions in clients.

It is important to note that an initial high response rate created some challenges as clients had to be reminded that they were still healing despite feeling well enough to get around, and be active again. Some clients felt so good they saw no reason to continue to take the elixir, and in stopping, found their condition deteriorating again within a week or two. The clients are

informed that there is a lot of healing that needs to take place, and it will take some time if it is going to happen. They are reminded to avoid any lapses in taking the elixir and they need to keep going until the 8-week protocol is completed, even if they feel better. In some cases, clients may need to take the elixir indefinitely as evidenced in clients that appeared to have no immune system remaining after extended chemotherapy, and radiation treatments.

In some cases, clients felt better and were eating but wanted to sleep for the first few days after starting the elixir. An interesting consideration here is that many people live under so much stress, and time commitments that they fail to listen to their bodies, something we encourage them to do throughout their treatments. When sleep is needed, it is important to sleep as the body is healing. The rate of healing in some cases happens so fast that challenges with nutrition may also come into play so when particular foods are appealing, they are encouraged to eat them. Clients are encouraged to consider working with a nutritionist to ensure weight can be increased when needed, and that the body has the fuel needed to heal.

The clients offered weekly feedback, and keep daily journals of their experiences. Adjustments were made in clients' formulations and dosing schedules, as needed to address pain based on the information they provided. This is highly empowering for clients from two perspectives, 1) they gain control over their health care decisions and 2) they are able dial into a comfort zone that allows them to enjoy their families, and their lives without the feeling of being deathly sick, depressed, or in an opioid-based coma where they are unable to do anything.

Unfortunately, more education is desperately needed around cannabis (medical marijuana) as some families are so against cannabis that they will allow a loved one to die before using something like marijuana. For clients who may choose to use cannabis-based medicine, some family members will throw out the client's cannabis based medicine because they think of

it as marijuana. This is a reality check as it happens and a testament of the hard work ahead to undo the damage from indoctrination around marijuana from decades ago. Observations suggest that cannabis-based medicines can be scary for those who are uninformed and/or support a prohibitionist mindset i.e.; marijuana is of the devil. As an example, Richard Brumfield was contacted to provide the FSO elixir to a patient looking for alternative treatments for Breast Cancer. This woman was in her late 40's, and had undergone multiple rounds of chemotherapy and radiation, including a double mastectomy. Richard sent the elixir to her after she stated that she could not take another round of chemotherapy, and she was afraid she would die. She started taking the elixir and within a few days her sister reported that she was eating and sleeping well, had renewed energy and her sense of humor had returned. At this point, communications stopped, and two months later, it was communicated that the family did not want her taking medicine with marijuana in it; the elixir had been poured down the drain. This woman passed away six weeks later and while it is not known if she would have died had she continued on the elixir, it reflects significant findings that must be considered, especially as observed in table 5 where 2 other woman who remained on the elixir are now cancer free.

Along the Way – Observed Events

A client with multiple sclerosis (MS) uses vape cartridges with high THC to stop spasms, and restore mental clarity. Over two years the MS has not progressed, and the client points to signs that the disease is regressing. Upon physical observations of the client having a seizure, and seeing the immediate relief obtained with a single draw from a vape cartridge suggests the need for detailed research within medical research communities. The suggestion could be made that anyone with MS should have easy access to THC vape cartridges.

In clients with Dementia and Parkinson, the windows of mental clarity they experienced when using cannabinoid based elixirs and THC vape cartridges is life changing for them. Spasticity can be radically reduced instantly, and mental clarity realized just as fast. In others with Dementia, being able to remember everyday things that enable them to better function can be obtained. A loving conversation with a family member becomes a great gift, as individuals afflicted with Dementia are able to articulate their thoughts, and emotions, not to mention the joy by family members who thought their loved ones had forgotten them forever. While some are slower than others to respond due to the severity of their condition, all observed clients have experienced improvements.

A woman in her 70's has suffered with the symptoms of shingles since 1999. In using a phytocannabinoid based lotion and a THC infused beeswax with menthol crystals made by David Hargett with Innovative Extractions, has enabled this woman to stop using a morphine pump, and to attend church with her boyfriend each week. This is life changing as prior to use of these products, the woman was in danger of losing her eyes due to the shingles. She was unable to go anywhere or do anything except try and keep the pain at a manageable level. All of this is now in the past, and she is enjoying her life as communicated by a family member; morphine is no longer necessary.

A young man in his early 20's suffering from severe depression and ADHD eats THC infused edibles each day to function. Being unable to keep a job, the young man left home in search of a meaningful life and shares that THC infused edibles has changed his life. In some people, low amounts of THC can produce a great sense of wellbeing and happiness while high amounts of THC can produce the opposite affects, depression, and a sense of worthlessness. For this young man, high levels of THC enabled him to hold a job, and function as a happy and

productive member of his community. These types of observations bring many additional considerations into play, e.g., titration may be necessary to dial into an effective and safe dosage for clients. The vast number of cannabinoid and terpene arrays found in the increasing number of strains used in producing cannabinoid-based medicines can produce different dynamics within each individual. Some modulators are stronger in one strain versus another, and one person is more responsive to effects of modulation versus another person. Cannabinoids and terpenes have medicinal value on many levels and titration is the means for people to find out what works best for their unique needs. This requires that healthcare professionals be adequately trained in the administration of cannabinoid-based medicines and while a Physicians Desk Reference (PDR) for cannabinoids may be desired; it would be extremely difficult to incorporate due the highly individualized dosing.

An older woman with MS who has been in a wheel chair for a long period of time had not moved her fingers for 5 years according to a family member. The woman was given a Phytocannabinoid topical (Hemjoba Pain Relief Lotion), and it was applied to her hands a couple times a day for a week. When her family was asked if there were any noticeable differences in her physical condition, the response was, “other than her moving her fingers a little bit, I do not see anything.” When asked how long it had been since the family member had seen her move her fingers, the family member broke down, starting crying, and said “5 years.”

A father, who has been treated for multiple cancers and has nine tumors on his liver, used a phytocannabinoid elixir for three days. On the 4th day, the patient reported this is the best he has felt for years and “today is a good day”. The client is just starting the 8-week Phytocannabinoid protocol and results will be reported in future articles.

A middle-aged male who experienced severe burns on his hand applies a phytocannabinoid-based lotion to the grafted skin. The rate of healing has been so fast that it was painful, and he had to cut back on the frequency of use. The client reported that he could watch as blood flow developed through the grafts and the skin came to life. The healing that would typically take months or years to occur happened in weeks.

Ovarian and colorectal related cancers are the most difficult to work with Brain, Liver, Blood, Bone, Lung, Breast, and other cancers appearing to respond quicker to Phytocannabinoid formulations. While pain relief and other benefits were experienced with those having Ovarian and Colorectal cancers, the formulations had to be taken for longer periods to see any change in condition. In some cases, the clients' time was too short, given their condition to endure long enough for healing to occur. Currently, enhanced formulations have been developed based on feedback from clients and the formulations are being used in helping these clients. More about this in future studies.

Summary

The information presented is a snapshot of experiences that took place from 2012 – present. At a minimum, the evidence is overwhelming and conclusive; cannabis has great potential for many medicinal applications. There is no question that cannabis has medicinal value, it is a research-based fact. Listing Cannabis as a Schedule 1 Drug is inaccurate and needs to be corrected so that scientists and doctors of our day can advance medical science and offer their patients alternatives that do not leave them saying, “there is nothing else I can do for you.”

Dozens of clients, many who had no traditional remedies available to them are healed and living full lives today. The clients that were terminally ill, and not able to be turned around experienced a higher quality of end of life processes that enabled them to interact with loved

ones and pass on with dignity and at peace. Based on observations conducted over two years, cannabinoid-based medicines are effective and safe for use in palliative care. Many oncologists, MD's, nurses, and others have known this for years. Clients realize improved mental dispositions (they are happy, or content, and/or at peace within their being), pain reduction, prescription pain medications reduced or eliminated, energy levels increased, oxygen levels within the body increased, improved mental clarity, and a higher quality of life.

When Phytocannabinoids are used in combination with traditional therapies, accelerated healing was experienced, and the side effects were either diminished or eliminated as experienced by numerous clients. In some cases, other products like CBD oils, advanced Phytocannabinoid formulations made from advancing strains of cannabis were successfully used when patients needed greater pain relief. The fact is for many cannabinoid formulations that have no THC or no euphoria associated with them, are effective across a range of conditions. When THC and/or THCA are added, the synergies with the cannabinoid array are enhanced. There are many formulations emerging in states where the scientific communities can work with cannabinoids and it is an exciting time.

For many who live with everyday emotional distress, joint pain, skin irritations, obesity, Type II diabetes, glaucoma, MS, plaque psoriasis, shingles, ADD, ADHD, cancer, and a myriad of other conditions, there is promise and in many cases relief for them right now. The case is already made, all one needs to do is to read the existing research; Cannabinoids are good medicine. My colleagues and I have seen it with our own eyes, and have spent hundreds of hours on the phone with patients working through adjustments in dosing and formulations to diminish their pain and suffering. In addition, hundreds of hours have been spent talking with family members and hearing their thanks for making a difference in their loved one's lives.

Knowing basic information about how cannabinoids work with the human endocannabinoid system can lead to great relief, and healing for many. Cannabis is not a miracle drug; it is plant that is supported by evidence as being highly beneficial in the everyday lives of humans and animals. The handful of contraindications are easy to know and understand and aside from the discomfort people experience who cannot tolerate the euphoria associated with low doses of THC, no negative side effects have been observed in two years of working with people with many different illnesses.

Finally, it should be acknowledged that physicians want to offer hope and alternatives to their patients as much as patients want them, however, as one oncologist noted, “We can only use the tools made available to us. We do the best we can with what we have” (Ford Cancer University Hospital, unidentified Oncologist, 2015). The time has come to remove the negative stigma placed around cannabis, stop focusing on one tree amongst the forest of opportunity and advance medical research to what is showing us through these patient experiences, that a terminal diagnosis may not always equate to end of life.

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Appendix

<p>Subject: 1 Gender: Female Age Range: 50's Health Challenge: Breast Cancer metastasized, 2 rounds of chemo, radiation, double mastectomy Last Known Status: Passed away 6 weeks after stopping elixir</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response, Improved appetite, Increased energy, Improved sleep, reduced pain, improved mental disposition <i>Extended Response (30 days to 1 year)</i> Stopped taking the elixir 3 weeks into the protocol</p>
<p>Subject: 2 Gender: Female Age Range: 40's Health Challenge: Breast Cancer metastasized to bones, 2 rounds of chemo, radiation, double mastectomy, trial drug treatment Last Known Status: Cancer Free 1 year+, supported by a nutritionist and exercises daily.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response, Improved appetite, increased energy, improved sleep, reduced pain, improved mental disposition, reduction in prescription medicine use <i>Extended Response (30 days to 1 year)</i> Cancer markers returned to normal range, lesions (active cancer in bones) eliminated, bone regenerated, Returned to exercising, shopping, working in the yard, etc.</p>
<p>Subject: 3 Gender: Female Age Range: 30's Health Challenge: Metastatic cancer (ovaries, colon, brain, lung, liver) exhausted all traditional therapies. MD's determination, terminal with weeks to live. Last Known Status: Patient reported to be in the hospital near death 45 days later.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--Increased energy, reduced pain, improved mental disposition, improved cognitive functions, improved appetite, improved sleep patterns. <i>Extended Response (30 days to 1 year)</i> Stopped taking the medication at one month to start taking an alternative Super Vitamin C treatment.</p>

<p>Subject: 4 Gender: Female Age Range: 30's Health Challenge: Ovarian cancer metastasized, all traditional therapies exhausted, terminal with weeks to live. Confined to bed. Last Known Status: Cancer free.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response-- Improved appetite, improved sleep, increased energy, reduced pain, improved mental disposition, out of bed.</p> <p><i>Extended Response (30 days to 1 year)</i> Healthy, functioning normally.</p>

<p>Subject: 5 Gender: Female Age Range: 40's Health Challenge: Colon cancer, metastasized, exhausted available traditional therapies, sent to hospice, confined to bed unable to eat. Spouse sent to hospice at the same time due to terminal brain cancer. The patient's life expectancy was 1 to 2 weeks. MD's recommend hospice. Last Known Status: She passed away 9 months later.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--Improved energy, improved mental disposition, and diminished pain. The patient was able to get around and function on a limited level for months. Required the pumping of fluids from the stomach.</p> <p><i>Extended Response (30 days to 1 year)</i> The patient had tumors blocking both the inside of the colon and strangling the outside of the colon. The patient would not drink water and stopped taking the elixir after the first bottle (one week). She was so sick from traditional therapies that she refused to take anything. She passed away 9 months later.</p>

<p>Subject: 6 Gender: Male Age Range: 50's Health Challenge: Stage 4 Glioblastoma sent to hospice with 1 to 2 weeks to live. Last Known Status: Not Cancer Free but still functioning at 1 year.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response--The patient was feeling much better in 24 hours following taking the elixir in terms of energy and diminished pain. Patient was feeling well enough at two weeks to help install a hot tub for his wife in his backyard. He and wife did not go to hospice, they went home and the patient did exceptionally well given all things considered i.e. wife suffering with terminal colon cancer.</p> <p><i>Extended Response (30 days to 1 year)</i> The patient stopped taking elixir at six weeks. As his wife's condition deteriorated, he stopped taking the elixir. There was a direct correlation observed in the decline of the patient in relation to the health of his wife per his family's feedback. His wife passed 9 months after taking one ounce of the elixir.</p>

<p>Subject: 7 Gender: Male Age Range: 30's Health Challenge: Melanoma on chest, terminal, all traditional therapies exhausted. Last Known Status: Cancer free at 16 months.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response--Eliminated pain, improved energy, improved mental disposition. THC introduced to try accelerating healing.</p> <p><i>Extended Response (30 days to 1 year)</i> Began using elixir and elixir based topical, tumor gone in 16 days and chest area healing.</p>

<p>Subject: 8 Gender: Female Age Range: 50's Health Challenge: Basal cell carcinoma on neck. Last Known Status: No recurrence after 18 months; No MOHS done.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response--Using a topical made with the elixir, tumor began to shrink in the first three days.</p> <p><i>Extended Response (30 days to 1 year)</i> Basal Cell gone at 3 weeks of applying the topical 3 times a day.</p>

<p>Subject: 9 Gender: Female Age Range: 60's Health Challenge: Low energy, intense back pain due to severe scoliosis, depression, high stress levels, was struggling to go to work, signs of MS with slurred speech, and muscles spasms. Last Known Status: All initial health challenges gone or under control.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--The patient responded in 1 week with increased energy, moderate response, lower stress levels, and less pain. She was able to reduce the number of prescriptions being taken.</p> <p><i>Extended Response (30 days to 1 year)</i> One year later the patient is on a maintenance dose of the elixir and is fully functional with all initial health challenges being gone or under control. Speech normal, no spasms, able to work full time, no stress, no pain, and was able to stop taking multiple prescription medications.</p>

<p>Subject: 10 Gender: Male Age Range: 70's Health Challenge: Stage 4 Glioblastoma – began elixir one month prior to rad treatments Last Known Status: Cancer free 8 months later with no additional traditional treatments</p>
Field Observations
<p>Immediate Response (24 hours to 29 days) High response--No pain, increased energy, appetite, and sleep returned to normal</p> <p>Extended Response (30 days to 1 year) Completed the radiation treatments with no loss of hair, no pain medication needed, and no loss of hair</p>

<p>Subject: 11 Gender: Female Age Range: 70's Health Challenge: Late stage colon cancer experiencing constant severe pain, terminal Last Known Status: The patient is currently recovering from the surgery and now is requesting THC vape cartridges. The outcome of the surgery is not known</p>
Field Observations
<p>Immediate Response (24 hours to 29 days) High response--Diminished pain, improved sleep, improved energy levels. There were reduced large pockets of inflammation in the abdomen with no noticeable swelling. She looked 9 months pregnant the day before taking the elixir. CBD and THC introduced to help reduce increasing pain. The patient was feeling good and able to function for 3 weeks after starting the elixir</p> <p>Extended Response (30 days to 1 year) The patient responded well to the treatment and stopped taking it at 3 weeks for a month. The pain in the stomach became so severe that she cried at night and needed opioid based painkillers that did not get rid of the pain. The patient did not tolerate THC well and made her uncomfortable. The patient opted for surgery at the recommendation of her MD</p>

<p>Subject: 12 Gender: Male Age Range: 50's Health Challenge: Prostate Cancer – early stage Last Known Status: The patient is cancer free and functioning normally</p>
Field Observations
<p>Immediate Response (24 hours to 29 days) High response--Increased energy, improved sleep, improved appetite, eliminated pain. Able to urinate without pain the first night and going forward</p> <p>Extended Response (30 days to 1 year) Taking the elixir both orally and using suppositories, the patient used 4 ounces of elixir taken over 8 months</p>

<p>Subject: 13 Gender: Female Age Range: 40's Health Challenge: Menstrual pain, cramps, ill tempered. Last Known Status: Elimination of discomfort on maintenance dosing</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response-- Elimination of discomforts, cramps, and improved mental disposition</p> <p><i>Extended Response (30 days to 1 year)</i> The patient has continued to take a maintenance dose of the elixir and combines the use of vape formulations containing THC when needed</p>

<p>Subject: 14 Gender: Male Age Range: 60's Health Challenge: Late stage prostate cancer, beginning to work with oncologist Last Known Status: The outcome is unknown at this point. Details requested from family.</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response--Improved sleep, improved appetite, positive disposition and great sense of humor</p> <p><i>Extended Response (30 days to 1 year)</i> 4 months after starting the 8-week protocol with the elixir, the patient is said to be doing very well</p>

<p>Subject: 15 Gender: Female Age Range: 90's Health Challenge: Dementia Last Known Status: The family says they see major improvements in the overall health of the patient with greatly improved cognitive functions</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Low response--- improved ability to communicate with clarity by phone, able to travel, family notices improvements in overall health</p> <p><i>Extended Response (30 days to 1 year)</i> Taking the elixir at full dose, week 4</p>

<p>Subject: 16</p> <p>Gender: Male</p> <p>Age Range: 40's</p> <p>Health Challenge: Leukemia, RA in lungs, confined to bed. Low blood cell counts, functional bone marrow severely diminished. The patient told his wife to just let him die the day prior to starting the elixir. Extreme pain and felt very sick</p> <p>Last Known Status: The patient has been scheduled for additional chemo and the oncologist is questioning the need to do more chemo given the patients state of health. Data continues...</p>
Field Observations
<p>Immediate Response (24 hours to 29 days)</p> <p>High response--Improved sleep, improved appetite, increased energy, reduced pain and able to move around and drive to chemotherapy appointments. RA diminished in lungs, blood cell counts still low</p> <p>Extended Response (30 days to 1 year)</p> <p>Blood transfusion in which one bag of blood was administered containing a microbe that made the patient extremely ill. The patient was hospitalized, and unable to take the elixir for 3 weeks. Lungs began filling with fluids, placed on oxygen, treated with antibiotics. The antibiotics killed the microbe and the patient sent home on oxygen. Chemotherapy resumed a few weeks after release from the hospital. The bone marrow had stopped producing adequately and the patient was on oxygen with no energy and unable to sleep. The patient began the elixir upon arriving home and 5 days later the patient's oxygen was at 97%, the patient has energy, sleeps well, has an appetite, and his white blood cell count is normal. The red blood cells remain slightly low</p>

<p>Subject: 17</p> <p>Gender: Female</p> <p>Age Range: 70's</p> <p>Health Challenge: Late stage small cell lung cancer with all traditional options exhausted. Severe pain, difficulty breathing, eating, and sleeping and confined to bed, hospice recommended</p> <p>Last Known Status: The last 3 days of life were spent in the hospital, passed away</p>
Field Observations
<p>Immediate Response (24 hours to 29 days)</p> <p>High response-- Reduced pain, increased energy, improved sleep, and appetite. Patient was able to travel by car and talk on the phone. Patient under care of MD</p> <p>Extended Response (30 days to 1 year)</p> <p>Patient survived 7 months having little pain, a happy mental disposition, good strength, and energy</p>

<p>Subject: 18 Gender: Female Age Range: 30's Health Challenge: Late stage small cell lung cancer (metastasized). Patient extremely ill, in the hospital, under care of oncologist, life expectance less than a week Last Known Status: Passed away with decreased levels of pain</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--Increased sense of better overall health, sleep, and appetite improved with lower levels of pain. Able to reduce prescription pain medication</p> <p><i>Extended Response (30 days to 1 year)</i> Patient lived another six weeks having low levels of pain, improved sleep, improved appetite, and ability to communicate with family</p>

<p>Subject: 19 Gender: Female Age Range: 60's Health Challenge: Leukemia, lung and brain cancer, terminal with one to two weeks to live. Completed all appropriate traditional treatments available and continued in severe pain, confined to bed, and felt very sick Last Known Status: Patient lived three years and died having stopped using the elixir for six months. Observation noted the elixir provided an immune system for the patient. Traditional chemo and radiation may have killed her immune system</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response--Sleep, pain, and appetite excellent, blood cell counts moving up and mental disposition highly positive. Ability to move around on her own</p> <p><i>Extended Response (30 days to 1 year)</i> Lesions gone with cancer markers normal, cancer free for three years. Quality of life restored. Significant observation: When the patient stopped taking the elixir for more than 90 days, tumors would return; when use resumed the tumors were eliminated</p>

<p>Subject: 20 Gender: Male Age Range: 80's Health Challenge: MS, stroke, wheel chair bound long term. Last Known Status: No progression of MS for the past 8 months</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response--Increased energy, ability to move muscles and to walk on a limited basis, improved mental disposition, improved sleep, improved appetite, overall life changing for the patient</p> <p><i>Extended Response (30 days to 1 year)</i> Patient used the elixir for a month with positive results. The patient moved to THC based vape cartridges to address remaining spasticity and mental clarity. Patient improved in all areas of health and the progression of MS has halted with symptoms being controlled</p>

<p>Subject: 21 Gender: Female Age Range: 50's Health Challenge: Breast Cancer (Stage 2), low energy, under care of oncologist Last Known Status: Cancer Free</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--Started elixir and took protocol for 8 weeks noting improved mental disposition, improved sleep, and appetite, reduced pain, increased energy.</p> <p><i>Extended Response (30 days to 1 year)</i> Cancer free, high energy, good appetite, at 6 months, maintenance dose, supplement with CBD.</p>

<p>Subject: 22 Gender: Male Age Range: 90's Health Challenge: Tongue cancer, late stage, large tumor on tongue, unable to speak clearly, unable to eat whole foods, good mental disposition, severe pain Last Known Status: Unknown</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--Started 8-week protocol of elixir; reduction in size of tumor, improved speech, reduced pain, improved sleep overnight</p> <p><i>Extended Response (30 days to 1 year)</i> The patient could not undergo surgery before taking elixir, however since taking elixir, improvements have qualified patient for surgery</p>

<p>Subject: 23 Gender: Male Age Range: 40's Health Challenge: Sciatic nerve pain in back, unable to sleep in bed, limited sleep, severe pain, no relief from traditional medication and surgery Last Known Status: Current status unknown</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Low response--Lower level of pain but still unable to sleep in bed and sleep is limited. Good appetite, increased energy, positive mental disposition</p> <p><i>Extended Response (30 days to 1 year)</i> Completed 8-week protocol with limited results; Lower levels of pain continue, high energy, appetite normal. Unable to sleep on soft surface, discontinued elixir at 8 weeks</p>

<p>Subject: 24 Gender: Female Age Range: 50's Health Challenge: Late stage Metastatic cancer, in hospital, 1 to 2 weeks to live; started one bottle of elixir and discontinued due to family preferences. Last Known Status: Passed away</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Low response--Improved mental disposition, improved sleep, lower pain level, discontinued pain medications. <i>Extended Response (30 days to 1 year)</i> Patient lived 5 weeks</p>

<p>Subject: 25 Gender: Male Age Range: 80's Health Challenge: Late stage throat cancer, response unknown, no communication from family Last Known Status: Not known</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Not known <i>Extended Response (30 days to 1 year)</i> Not known</p>

<p>Subject: 26 Gender: Male Age Range: Teens Health Challenge: ADHD, Started on CBD. Problems focusing, low energy levels, Last Known Status: No symptoms of ADHD noted, 1 year doing well</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--Started on CBD. Improvement in ability to focus, increased energy level, improved mental disposition, no depression <i>Extended Response (30 days to 1 year)</i> High-energy athlete (all American), fully functioning, no depression, with increased ability to focus; daily maintenance dose of CBD</p>

<p>Subject: 27 Gender: Female Age Range: 70's Health Challenge: Diabetic, low energy, depression, poor sleep, poor circulation, poor oxygen levels Last Known Status: 1.5 years doing well</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--Using elixir with topical oil the patients circulation is improved, oxygen level improved, feeling and sensations returned to lower legs and feet.</p> <p><i>Extended Response (30 days to 1 year)</i> Patient off diabetic medication with high degree of mobility, no depression, improved sleep, improved appetite.</p>

<p>Subject: 28 Gender: Male Age Range: 40's Health Challenge: Plaque psoriasis (large percentage of body), miserable itching continuous with extreme pain Last Known Status: More data to follow...</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response--Used topical lotion with elixir base. Reduced itching by 80%, Plaque psoriasis reduced by 40% in first week, no pain</p> <p><i>Extended Response (30 days to 1 year)</i> Current client</p>

<p>Subject: 29 Gender: Female Age Range: 50's Health Challenge: Herpes Simplex Virus, frequent outbreaks of sores on lips and nose due to stress, wind, and lack of sleep, other. Last Known Status: Unknown</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> High response--Outbreaks stopped</p> <p><i>Extended Response (30 days to 1 year)</i> 1 year with no outbreaks with daily maintenance of elixir, patient lost 15 lbs. and has kept it off. The client stopped taking the elixir for several months into year 2 and the outbreaks returned.</p>

<p>Subject: 30 Gender: Age Range: Health Challenge: Healthy wanting to lose weight. Last Known Status: Maintaining 162 lbs. 5'10"</p>
Field Observations
<p><i>Immediate Response (24 hours to 29 days)</i> Moderate response--Increased energy, more relaxed and mental clarity, lost 15 lbs. in six months</p> <p><i>Extended Response (30 days to 1 year)</i> 1 year lost 32 lbs. without directly changing eating habits. Tastes for food changed, eating less</p>