## A Breakthrough Alternative in Chronic Pain Management

The opioid crisis first began in the 1990s, as pharmaceutical reps began heavily promoting these legal drugs to medical practitioners for patient use in pain management, boasting their non-addictive properties.

We now have a better understanding of the mechanism in which opioids work and how without proper control, they can actually lead to opioid dependency and death due to overdose. In 2019, there were 49,860 opioid-associated overdose deaths reported in the US alone according to the CDC.

The opioid issue has only continued to grow over the past two decades, as many patients with chronic pain may become addicted and feel they have no other alternative than to stay on opioids. Anyone who's experienced ongoing pain knows it can be devastating, as it affects patients not only physically, but also takes an emotional toll on those living with it each day. They may suffer from depression as they find themselves suddenly unable to care for themselves and their loved ones.

Fentanyl, an even more dangerous synthetic opioid, continues to claim the lives of thousands living with chronic pain in the US and Canada each day due to its even higher risk of addiction and overdose. Between May 2020 - April 2021, **64%** of overdose deaths (100,000 in total) were linked to synthetic opioids, (primarily Fentanyl) according to this CDC report.

So, how do we even begin to put an end to opioid dependency and overdose?

In recent years, cannabidiol has shown much promise as a plant-derived alternative for aiding in pain management, especially in advanced-stage cancer patients. Its side effects are minimal, and it also appears to have a positive influence on mood and sleep. CBD has also been shown to reach pain receptors in the body much quicker than opioids, making it a highly sought-after means for chronic pain management.

Of course, there is still somewhat of a stigma when it comes to medicinal cannabis, and yet it's become legal in Canada and in 18 states in the US. Legislators are beginning to recognize the benefits of legalizing cannabis, if only for tax revenue purposes.

At Tetra Bio-Pharma, we are on the cutting edge of creating cannabidiol-derived drugs that meet the FDA and Health Canada's GMP standards to be prescribed in pain management and marketed under the pharmaceutical industry umbrella. Our researchers must carry out a rigorous testing schedule where temperatures and lab

conditions are constantly being monitored in order for our products to be even be considered ready for FDA clinical trials.

Tetra's work in biopharmaceuticals is now being globally recognized, and we are working tirelessly to provide an effective alternative through inhaled, topical, and oral cannabidiol compounds that work in concert to provide ongoing relief from chronic pain with much fewer side effects than opioids. We are already in the clinical trials phase with some of our products, continuing into 2022 and beyond.

Our overall goal is to provide a safer alternative to opioid-driven chronic pain management that delivers fast, effective relief with minimal side effects.

Together, we can achieve a higher standard of care for those living with chronic pain.