Section 2: Non-Confidential Abstract

Please provide a scientific abstract of the Project. Clearly state the problem you are trying to solve, your hypothesis and approach, and expected results. **Please Note: This section may be provided to a diverse set of stakeholders including the public.**

Using a new data repository of 10,269 adult patients located in Ontario, Canada who have been authorized medical cannabis at all Canadian Cannabis Clinics (CCC), our current research has shown that the majority of patients (66.0%) indicated that they were seeking medical cannabis for the treatment of chronic general or musculoskeletal pain(2). Given that this therapy for pain management is likely to grow over the next decade due to the increase in the number of cannabis users in Canada, there is a growing concern that associated impairments in cognitive function may have dire consequences for the health and safety of Canadians (e.g. potential increases in cannabis-related motor vehicle collisions or work place accidents, etc.). As such, we plan to address this issue by attempting to identify specific cultivars (i.e. strains) of cannabis that contain the optimal cannabinoid profile (and/or other active ingredients such as terpenes, polyphenols, flavonoids, etc.) that can be used for pain management yet have the least effect on measures of cognitive function. Indeed, a wide variety of cannabis cultivars generate vastly different profiles of phytochemicals that can influence normal brain function, as well as the perception of pain. Therefore, the idea that all cultivars of cannabis will have the same impact on brain function or the perception of pain is a major misconception. Thus, cannabis users seeking pain management, without intoxication, are not properly informed about the cultivars of cannabis available to control their pain while not dramatically affecting their level of impairment. Thus, the goal of our research is to better understand which cultivars of cannabis are most suited for pain management while leaving the user with the lowest possible level of impairment. Overall, this research will assist physicians and/or "self-medicating" individuals who are seeking cannabis for pain management to choose cultivars of cannabis (or products derived from these cultivars) that will reduce the perception of pain while having the least impact on their cognitive function so as to reduce the potential risks/side effects associated with cannabis use.