

July 16, 2019

Norman E. Sharpless, MD
U.S. Food & Drug Administration
5630 Fishers Lane
Rm. 1061
Rockville, MD 20852

Re: Docket No. FDA-2019-N-1482
Scientific Data and Information about Products Containing Cannabis or Cannabis-Derived Compounds;
Public Hearing; Request for Comments

Dear Dr. Sharpless,

Thank you for the opportunity to submit comments on the U.S. Food and Drug Administration's (FDA) proposed rule concerning scientific data and information about the safety, manufacturing, product quality, marketing, labeling, and sale of products containing cannabis or cannabis-derived compounds.

The Michael J. Fox Foundation for Parkinson's Research (MJFF) and the Parkinson's Foundation (PF) collaborate to support the community of Parkinson's disease (PD) patients by advancing research that leads to new treatment options and a cure. New treatment options include research on medical cannabis and its component compounds to determine potential therapeutic use. MJFF requests and supports the elimination of barriers to conduct research on medical cannabis. PF urges FDA to recognize the unique characteristics that define people who live with Parkinson's disease in terms of delivery, safety, and labeling. Our two organizations are jointly submitting comments because neurologists report that 94% of PD patients are asking about medical cannabis (Bega et al. 2014), but the research to prove its benefits does not exist yet (Kluger et al. 2015). More research is necessary to determine if it safely and effectively treats the symptoms of PD. Additionally, it is prudent for this research to become the foundation for policy and regulatory decisions that protect and promote public health.

PD is a chronic neurodegenerative disease that gradually worsens over time. Currently, there is no treatment to stop, slow, or reverse the progression of the disease, nor is there a cure. Nearly one million people in the United States live with PD (Marras et al. 2018). It is a movement disorder that causes tremors, slowness, stiffness, and balance problems, but also causes non-movement symptoms such as pain, mood disturbances, memory problems, and insomnia. The total societal cost and economic burden of the disease is \$51.9 billion with \$25.4 billion attributed to direct medical costs, such as hospital admissions and medications, and \$26.5 billion for non-medical costs such as lost wages, early force retirement, and family caregivers (Hamilton and Yang, 2019).

Current research related to medical cannabis and PD has been limited due to the federal government classification of cannabis as a Schedule I drug, small sample sizes within studies, a lack of standardized doses, and varying potencies of available drug products. PD research uses different formulations and dosing that vary from person to person, and this is a challenge for guiding research towards the appropriate utility of medical cannabis for PD patients. The few randomized clinical trials focused on PD have resulted in insufficient evidence that medical cannabis is a safe and effective treatment for PD.

Are there special human populations or animal populations that should be considered when assessing the safety of products containing cannabis and cannabis-derived compounds?

When considering the safety of cannabis and cannabis-derived compounds, it is important to note that people living with a neurodegenerative disease like PD are often of an advanced age, typically with comorbid conditions (Kalia & Lang 2015). As a result, they are fundamentally a different population than the young, relatively healthy controls that comprise many safety studies of cannabis and cannabis-derived compounds. Moreover, people with PD also suffer symptoms of their disease and side effects of their medications that could be exacerbated by cannabis compounds. For example, these symptoms include postural instability, dyscoordination from dyskinesias and dizziness precipitated by hypotension of neurogenic origin or from PD medications (Kalia & Lang 2015). Each of these symptoms are also known side effects of cannabis-based compounds (MacCallum & Russo 2018) and may contribute to falls, which is one of the leading causes of morbidity and mortality for people with PD (van der Marck et al. 2014).

How does the mode of delivery affect the safety and exposure to cannabis and cannabis-derived compounds?

Trials exploring oral routes of administration for cannabis-derived compounds should be considered for the unique alimentary canal pathology present in PD. A majority of people with PD are known to have delayed stomach emptying and reduced colonic motility that affects not only normal digestion but also the absorption of their medications (Fasano et al. 2015). The already slow uptake of orally delivered cannabis-derived compounds (MacCallum & Russo 2018) combined with the disease-related intestinal pathology of people with PD may lead to unpredictable effects if not considered in study design.

How should consumers be informed about the risks associated with such products? What specific risks should consumers be informed about? Are there any subpopulations for which additional warnings or restrictions are appropriate?

As we have already outlined, many symptoms of PD are also known side effects for cannabis-derived medications. We urge for the FDA to take into consideration this special population and the need for people with PD to be especially vigilant of the negative impact cannabis-derived medications may have on their condition. Therefore, special warnings to consumers with neurologic disease such as PD, should be included in the labeling of cannabis-derived products. Information is key for consumers to make decisions that are appropriate to their health needs.

Thank you again for the opportunity to provide comments to these important questions on this topic. Continued research into cannabis and PD is critical for supporting patients living with the disease and future generations who may be impacted by it. If you have further questions or need clarification, please contact Ted Thompson at tthompson@michaeljfox.org and James C. Beck at jbeck@parkinson.org.

Sincerely,

Ted Thompson, JD
Senior Vice President, Public Policy
The Michael J. Fox Foundation for Parkinson's
Research

James Beck, PhD
Senior Vice President, Chief Scientific Officer
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