



Provincial Health Services Authority

Medical Cannabis for Cancer-Related Symptoms Clinical Trial: An aggregate n-of-1 study

A message from Dr. Pippa Hawley, principal investigator and Pain and Symptom Management/Palliative Care physician, BC Cancer – Vancouver.

Dear Study Participants,

First of all, on behalf of the study team, I would like to thank you for volunteering your time and effort to this national trial aimed at furthering our understanding of the benefits of medical cannabis to manage cancer-related symptoms.

Summary of study conclusions

Thanks to your contributions to our study, we have found that medical cannabis oil may be worth considering as an option for symptom management for people with cancer, particularly those experiencing fatigue, sleep problems, anxiety or several symptoms at the same time.

Here are our key findings:

Use of medical cannabis to manage cancer symptoms

1. About half of people with cancer-related symptoms are likely to experience meaningful improvement from at least one type of medical cannabis oil.
2. The improvements that contributed most to people feeling better overall were reduced fatigue, better sleep and lower anxiety. Some people also experienced improvements in pain, appetite, depression, night sweats, nausea and breathlessness.
3. Benefits were similar regardless of a person's age, sex or cancer stage, suggesting these findings may apply to most adults living with or beyond cancer.

How to get started with medical cannabis

4. People respond differently to different cannabis oils, and there's no way to know in advance which type will work best for an individual. Trying THC-dominant, CBD-dominant and balanced THC and CBD oils can help determine which, if any, provides the most benefit.
5. Most people can tell within four days whether a particular cannabis oil is helping, and this is usually enough time to find the right dose.
6. A person's individual biology appears to have a bigger influence on how well medical cannabis works than their cancer type or cancer treatment.

Side effects

7. Side effects from low doses are usually mild and tend to go away quickly if the dose is reduced or the oil is stopped.
8. THC-dominant oils caused more side effects than CBD-dominant or balanced oils. Even so, about one-third of participants preferred the THC-dominant oil.

How to dose medical cannabis

9. A reasonable starting dose is 2.5 mg of THC, 2.5 mg of CBD, or 2.5 mg in total in a balanced product. Many people may need to take it about three times a day, with doses adjusted based on how well it works and any side effects. People using it for sleep may benefit from a larger bedtime dose after starting low and gradually increasing if needed.
10. THC and CBD each contribute to symptom relief. In balanced products, their effects add together, so dosing should consider the combined amount of both ingredients.
11. The results were similar across products from different suppliers, suggesting that comparable medical cannabis oils from approved producers will have the same effects.

Findings to inform future research

12. This patient-focused study design was able to produce strong and reliable results with a relatively small number of participants and may be useful in designing future trials.
13. Asking patients whether they feel better may be a better measure of success than looking only at changes in symptom scores. However, symptom scores still help researchers understand how a treatment is working.
14. The amount of improvement that patients consider meaningful differs from symptom to symptom. For example, people may need to see a larger improvement in sleep before feeling it is worthwhile than they would for anxiety or pain. This information can help improve future clinical trials.

Some of what we found confirmed what we had expected to see, but some findings were new. All of our findings confirmed what patients have been reporting for years but had not yet been proven by traditionally-designed parallel group clinical trials where participants were not allowed to compare one oil with another and a placebo oil.

More detailed findings are available on the [health professional page of the BC Cancer website](#).

Impact to patient care

From this study, we have made a list of clinical recommendations for use by patients and clinicians. These have been added to the [patient information on the BC Cancer website](#) and in a [new page in the section of the website tailored to health professionals throughout BC](#).