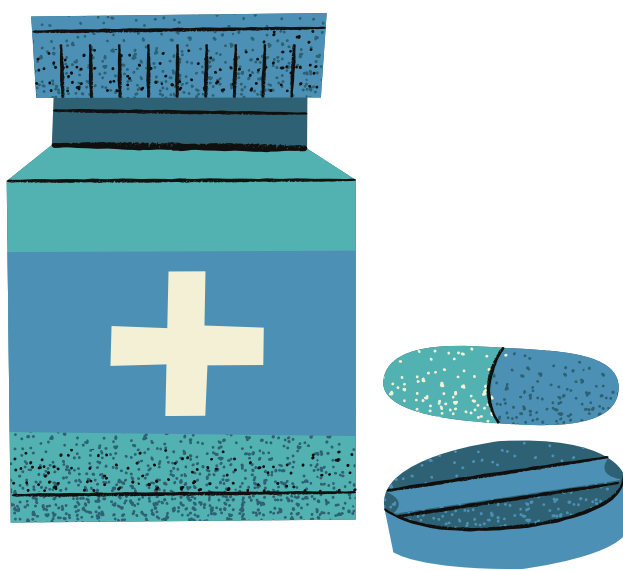


# Cannabis as Adjunctive Treatment to Prevent Opioid Dose Escalation and Encourage Tapering of High-Morphine Equivalent Opioids

A clinical tool to serve as a foundational clinical guideline for the initiation of medical cannabis in the management of Chronic Non-Cancer Pain (CNCP) patients using chronic opioid therapy



**Source**  
MacCallum, C. et al. (2020). Cannabis as Adjunctive Treatment to Prevent Opioid Dose Escalation and Encourage Tapering of High-Morphine Equivalent Opioids.

## Understanding cannabinoid use for CNCP

Cannabinoids and opioids can offer synergistic analgesic effects when used together correctly. There is also promising data to support that medical cannabis can reduce the opioid dose required for pain relief, in turn reducing the risk of opioid overdose.

This cannabis adjunct treatment plan has a strong focus on efficacy, safety, titration, and monitoring. This plan mimics the steps for the 2017 Canadian Guideline for Opioids for CNCP.



### Step 1: Assessment

Cannabis is to be considered for individuals not reaching pain management roles when consuming over 90mg of morphine equivalent dose (MED).

- Clinicians are encouraged to discuss **benefits and risks** of cannabis use to patients. This includes:
- potential impact on driving
  - potential THC impairment
  - pharmacokinetic interactions

Clinicians should assess **personal and family history of mental health illness** when considering initiating and increasing THC dose.



### Step 2: Starting Cannabis Dosing

For the most precise dosing, and lower potential respiratory harm, the proposed method of cannabis use is **injection**. Cannabis oils can provide **up to 6-8 hours of symptom relief**

For inflammatory pain and autoimmune conditions, it is advised to start with a strain containing predominantly CBD for daytime use.  
**Recommended starting dosage: 5-10mg CBD, 1-2 times daily**

For CNCP patients with difficulty sleeping or increased pain at night, it is suggested to start with **2.5mg THC in the evening**. If the patient is elderly, has complex comorbidities, or extensive polypharmacy, a dosage of **1-1.25mg THC should be considered**.



### Step 3: Slow Titration

For patients using a THC-based product (including a 1:1 THC:CBD ratio), a dosage increase of **1-2.5mg THC every 2-3 days** is suggested. THC should be titrated until the lowest effective dose is reached in order to minimize side effects.

Clinicians should remind patients that **the dose is increased until the point at which the treatment goal is reached, not euphoria**.

If a patient has **residual day symptoms**, clinicians may want to consider adding a daytime dose of THC, or using a 1:1 CBD to THC ratio product. Some patients may require up to 3 doses/day to manage symptoms.

#### Start Low and Go Slow

Most cannabis-related side effects are dose-dependent, and a result of THC. New cannabis users without a developed tolerance to THC may be more prone to side effects such as dizziness, drowsiness, anxiety, and euphoria. Tolerance to these side-effects normally develops within a few days of a dose increase. Side effects can be mitigated by initially receiving a low dose, and titrating slowly.

**After every dosage increase, the clinical response and side-effects should be re-evaluated.**

**If adverse effects are seen:** reduce to previously tolerated dose and use a slower titration amount moving forward. To reduce side-effects, use CBD-predominant strains during the day while reserving THC-containing strains to evening dosing when possible.

For **CBD prominent products:** a suggested increase of 5-10mg every 1-2 days until a minimum of 50mg daily is reached before considering the patient a "non-responder". Daily dosages of over 50mg CBD may be considered if the patient is partially responding.

### Step 4: Continuous Monitoring

Clinicians are recommended to reassess patients in **2-4 week intervals during the initial titration phase** to monitor for effects, response, and to offer support. Once a therapeutic effect has been achieved, follow-ups may occur less frequently (3-6 months).

The involvement of other healthcare providers and family members is recommended for improved monitoring for efficacy and side-effects.

Use of a **validated pain tool** is recommended to assess and document treatment response. Questionnaires such as GAD and PHQ9 are also suggested for anxiety and depression respectively.



### Step 5: Optimizing the Titration

Patients using **CBD-dominant oil:** If a 50mg daily dose is reached without achieving pain management goals, clinicians are advised to add 2.5mg THC at bedtime and possibly during the day. THC should be titrated following Step 3 while maintaining the CBD dose.

Patients with **treatment-resistant neuropathic pain:** a 1:1 CBD:THC balanced cannabis oil is suggested. Literature suggests the addition of CBD may mitigate THC side-effects.

**Breakthrough pain** may be best addressed through inhaling **vaporized THC** due to its quick 5-10 min onset time that lasts 2-4 hours. It is important to note that vaporized THC concentrates may have more intense psychogenic effects.

**Topical cannabis** preparations: Ideal for **localized symptoms**. Onset time is approximately 15-30 minutes. This may be an ideal method for patients against taking THC oil due to impairment during the daytime.



## Tapering Cannabis and Stopping the Trial



If the patient reaches a total of **≥ 30mg THC daily** without an adequate response, the patient can be considered a **"non-responder"**

Prior to THC monotherapy, a **trial of daytime CBD** dosing should occur.

Clinicians are encouraged to taper cannabis by decreasing the THC dose by **2.5-5mg every 2-3 days** until discontinuation. Slower titration may be required if the patient experiences significant cannabis withdrawal.

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