## APPENDIX 5: CANNABIS DOSE TITRATION / PRODUCT SELECTION

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|----|--|---|
|    | Product selection / dose titration  ☐ N/A  |   |
|    | Current authorization: ☐ Yes ☐ No  |   |
|    | Total quantity:  |   |
|    | Product:   |   |
|    | <b>RECOMMENDATIONS</b> (in order of preference)  |   |
| a. | Product selection  |   |
|    | Trial pharmaceutical cannabinoid product (nabilone, nabiximols). Refer for prescription.   |   |
|    | Pharmaceutical cannabinoids are preferred as regulated products with a larger evidence base.   |   |
|    | Trial/switch to oil cannabis formulation, oral or sublingual:  Trial/switch to high CBD/low THC oil formulation taken orally or sublingually. Suggest maximum THC:CBD ratio of 1:10 for high CBD low THC product. <sup>17</sup> Trial/switch to balanced CBD:THC |   |
|    | (1:1 ratio) oil formulation taken orally or sublingually.  Advise patient of correct volume  |   |
|    | of oil to administer based on concentration of the product. <sup>18</sup>  |   |
|    | Due to limited evidence on dosage and interval, there are no validated dosing recommendations.   |   |
| b. | <b>Dose titration</b> (dosing approach example)  |   |
|    | Starting doses for CBD may be 2.5–5 mg, once daily in the evening.  Titrate dose by 2.5–5 mg CBD every 3 days to minimal effective dose, with maximum dose of 40 mg CBD per day. Dose can be divided 2–4 times per day as needed. <sup>17</sup>                  |   |
|    | Consider adding THC if patient is not reaching treatment goals when CBD dose reaches 40 mg per day. Maintain CBD dose while adding THC.  |   |

- ☐ Starting doses for THC may be 1–2.5 mg THC, once daily in the evening.
  - ☐ Titrate dose by 1–2.5 mg THC every 5 days to minimal effective dose, with maximum dose of 40 mg per day. Dose can be divided 2–4 times per day as needed.<sup>17</sup>

Younger, experienced users may tolerate the higher range. Inexperienced users, older adults or patients with comorbidity or polypharmacy may only tolerate 2.5 mg CBD or 1 mg THC.<sup>3,18</sup>

☐ Once stable on minimal effective dose, consider switch to capsules for convenience. Maintain the same doses of THC and CBD when making the switch.

Bioavailability may vary when switching to capsules. Educate patient on potential for change in effects and difficulty in titrating with capsules.

c. Patient's plan (Include timeframe)

### Tips for dose titration

- Finding the right therapeutic dosage is an individualized process for each patient.
- Euphoria or getting "high" is not required for effective symptom management.
- Use a "start low and go slow" titration schedule with careful assessment in collaboration with patient and prescriber.<sup>18</sup>
- Consider restarting titration when switching products or licensed producers because effects may vary even when THC and CBD content appear identical. Cannabis products are not interchangeable.

# Tips for product selection

- Combining CBD with THC can reduce THC-mediated side effects.<sup>19</sup>
- Oil formulations are preferred because they are easier to titrate and have more constant absorption and bioavailability.
- Edibles are not preferred due to lack of standardization and large variability in absorption and bioavailability.
- Vaping is not preferred due to variability in absorption and bioavailability from inhalation, as well as lack of long-term safety data and concerns about vapingrelated harms.
- Many people believe there are therapeutic differences between indica, sativa and hybrid strains, but there is no evidence to guide product selection based on plant strain.<sup>8</sup>
- It is unclear if systemic absorption occurs with topical cannabis products. There are currently no such products with a DIN that have been approved by federal health regulators.<sup>8</sup>

# **Bioavailability**

- Bioavailability of inhaled products (15–50%) is greater than for oral products (6–20%).<sup>7,8</sup>
- Onset of action is delayed with oral vs. inhaled; wait 30–60 minutes to determine onset; peak effects occur within 2–4 hours.<sup>7</sup>

For a patient using inhaled THC 10%, a 0.5 g joint may provide 7.5–25 mg THC. An oral dose of 10 mg (e.g., 1 mL of a 10 mg/mL product) would likely provide 0.6–2 mg THC. Oral ingestion typically requires a 2.5-fold increase in daily amount consumed compared with inhaled.<sup>7</sup>

However, dose conversion is unreliable between dosage forms and different products, so titrate gradually.