Facts about Cannabinoid Medicines

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Conditions and symptoms where there is evidence[1] that cannabinoid medicines may be beneficial when first line therapies have failed:

- Chronic pain of different aetiologies, with the best evidence for neuropathic pain;
- Spasticity due to central cord lesions, with best evidence for multiple sclerosis;
- Symptoms in patients living with cancer, particularly chemotherapy-induced nausea and vomiting (CINV), and pain.

There is some evidence, particularly in the preclinical arena, that cannabinoids may be effective in treatment resistant epilepsy[2], but robust clinical data is lacking.

Possible beneficial effects of cannabis[1] include:

- Decreased pain;
- Decreased spasticity symptoms;
- Decrease in chemotherapy-induced nausea and vomiting;
- Improvement in short-term sleep outcomes;
- Possible improvements in anxiety.

Cannabis is not appropriate for patients[3] who fall into one or more of the following categories:

- Have a previous psychotic or concurrent active mood or anxiety disorder;
- Are pregnant, planning on becoming pregnant, or breastfeeding; and/or
- Have unstable cardiovascular disease.

Potential short-term side effects/adverse events[4]:

- Very common (>1 in 10): dizziness; fatigue
- Common (1 in 100 to <1 in 10): vertigo; vision blurred; nausea; dry mouth; diarrhoea; vomiting; constipation; oral pain; oral discomfort; mouth ulceration; dyspepsia; glossodynia; asthenia; feeling drunk; feeling abnormal; application site pain; malaise; fall; anorexia; increased appetite; muscular weakness; somnolence; headache; disturbance in attention; dysgeusia; muscle spasticity; balance disorder; dysarthria; lethargy; paraesthesia; memory impairment; amnesia; disorientation; depression; euphoric mood; dissociation.
- Rare (<1 in 100): tachycardia; abdominal pain upper; pain; urinary tract infection; nasopharyngitis; lower respiratory tract infection; muscle spasms; back pain; pain in extremity; arthralgia; multiple sclerosis relapse; tremor; insomnia; cough; pharyngolaryngeal pain; hypertension.

Potential long term side effects/adverse events[5]:

- Increase the risk of triggering or aggravating psychiatric and/or mood disorders (schizophrenia, psychosis, anxiety, depression, bipolar disorder);
- Decreased sperm count, concentration and motility, and increased abnormal sperm morphology;
- Impact on cognitive functions (ability to think and make decisions);
- Possible development of tolerance;
- Withdrawal-type symptoms when use is abruptly halted or discontinued;
- Possible psychological dependence (addiction).

Before prescribing cannabinoid medicines, physicians need to consider if there is sufficient evidence that the anticipated therapeutic benefits for the patient's particular health condition outweigh the potential harms. Similarly, continuation of cannabinoid medicines is warranted only if the prescriber is satisfied that there has been clinical improvement, which may include function and/or quality of life improvements.

Medicinal cannabis is available in Australia as an unregistered medicine, through special access provisions of the Therapeutic Goods Act 1989 (Cth). Various presentations are available as either:

1. Prescription only, pharmacy dispensed, controlled drug, containing THC (Schedule 8 on the Poisons Standard);

   or

2. Prescription only, pharmacy dispensed formulation containing CBD (Schedule 4 on the Poisons Standard).

The exception to the above is Nabiximols a Schedule 8 registered oromucosal spray containing cannabinoids, for multiple sclerosis related spasticity.

Cannabis dosing:

- There is no standard dosing that is suitable for all patients;
- The common approach is to "Start Low – Go Slow";
- Dosage should be titrated to the optimal dose for an individual patient and the patient monitored for side effects and efficacy[4];
- Once the effective dose has been determined then patients can start dosing OD, BID, TID or QID, based on their symptoms.

Drug-Drug interactions:

- Care should be taken with use of other drugs that cause sedation, including sedatives, tranquilizers, muscle relaxants, antidepressants, and other CNS depressants, as there is the possibility of additive effect[11].
- Caution is recommended for concomitant use of Neuvis® with any drug (including complementary medicines or supplements) metabolised by cytochromes P450[6]. To date, limited studies in humans that have demonstrated adverse drug-drug interactions with THC however it has been shown to be a potent inhibitor of CYP2C9, which significantly diminished the metabolism of warfarin in vitro and several case studies have been reported[7].
- CBD is a potent inhibitor of CYP2C and CYP3A classes of P450 enzymes in vitro and in animal models[8].

Monitoring:

There are no specific biochemical requirements for monitoring patients on medicinal cannabis, other than monitoring LFT's in patients co prescribed high dose CBD and sodium valproate[9]. Monitoring should ensure that patients are attaining appropriate symptomatic or functional improvement. It is recommended that validated tools such as the Brief Pain Inventory (BPI) or the Functional Outcomes of Sleep Questionnaire (FOSQ) be used.

Consideration can be given to using urine drug screening to ensure that, if prescribed, THC is in the patient's system and other illicit drugs are absent.

A monitoring plan may include an initial follow up be conducted within 1-2 weeks of initiating cannabinoid medicines and then monthly until the patient is stable. Subsequent visits might be three monthly. Frequency of follow-up will need to be judged based on risk factors including polypharmacy, complex medical history or those with a history of drug abuse.

At follow up visits, physicians should monitor for adverse effects and provide strategies to minimise these.

Recommendations for driving:

Cannabinoid medicines may cause drowsiness and patients should not drive a vehicle or operate machinery if affected. Alcohol should be avoided.

In accordance with the TGA guidance document for patient information, patients should not drive or operate machinery while being treated with medicinal cannabis. Measurable quantities of THC or its metabolites may be present in the body for more than a day after dosing. Drug-driving is a criminal offence, and patients should discuss the implications for safe and legal driving with their doctor[9].

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SAS online system

The streamlined SAS online system allows prescribers to submit applications to the TGA and State or Territory Health Department simultaneously. The system will send a single correspondence containing both the TGA and relevant state or territory decision letter after respective evaluations have been completed within 48 hours (2 business days) of having received all the information required to make a decision.

Currently most states and territories (except for Tasmania)
can simultaneously apply via **online system** https://sas.tga.gov.au/

Please see the link below for **online application guidance**
https://www.tga.gov.au/sites/default/files/special-access-scheme-sas-online-system-guidance.pdf

For prescribers in Tasmania:
Submitting your application via the online system will only satisfy
TGA requirements (please go to the above link for TGA application only).

Relevant specialist medical practitioner needs to submit a separate application
to the **secretary of the Tasmanian department of health** (DoH).
https://www.dhhs.tas.gov.au/__data/assets/pdf_file/0009/258912/Medical_Cannabis_Controlled_Access_Scheme_-_Flow_Charts_-_Health_Professional.pdf

AusCann Medical Information Portal

AusCann has developed an objective information gateway via its online **Medical Information Portal.**
Access the Portal from the AusCann website: **www.auscann.com.au**

Please contact AusCann via **medicalenquiries@auscann.com.au**
for further information, education or support.

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