Dr Justin Sinclair

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Medicinal Cannabis Expert and Pharmacognosist

Dr Graham Gulbransen

Cannabis Consultant

GP

Addiction Specialist

Associate Professor David Caldicott

Emergency Physician

ED, Calvary Hospital

Clinical Lead, Australian Drug Observatory

Dr Ben Jansen

Director of Cannabis Doctors Australia

Saturday, August 10, 2019 (Room 4)

16:30 - 17:30 WS #135: Prescribing Medicinal Cannabis

17:35 - 18:30 WS #145: Prescribing Medicinal Cannabis (Repeated)

PRESCRIBING MEDICINAL CANNABIS - DOSING

NZMA GPCME 2019

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CDA HEALTH

WWW.CDAHEALTH.ORG

CDA HEALTH

Cannabis Doctors Australia

Leading provider of patient access to legal Medical Cannabis.

- Physical Clinics
- Australia-wide Telehealth
- Affiliated Doctors / Clinics

Burleigh Heads Cannabis

Fully licensed to import and wholesale Medicinal Cannabis.

Secure coldchain distribution facility in Queensland.

Healthy Not High

Uses Australian-grown hemp to produce retail-ready food and nutraceutical products.

Products due for release mid 2019.

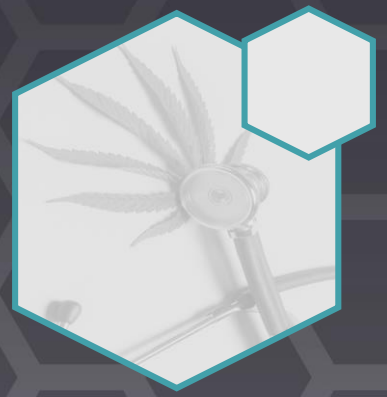
Cannabis Doctors Aotearoa

Provider of legal Medical Cannabis in New Zealand.

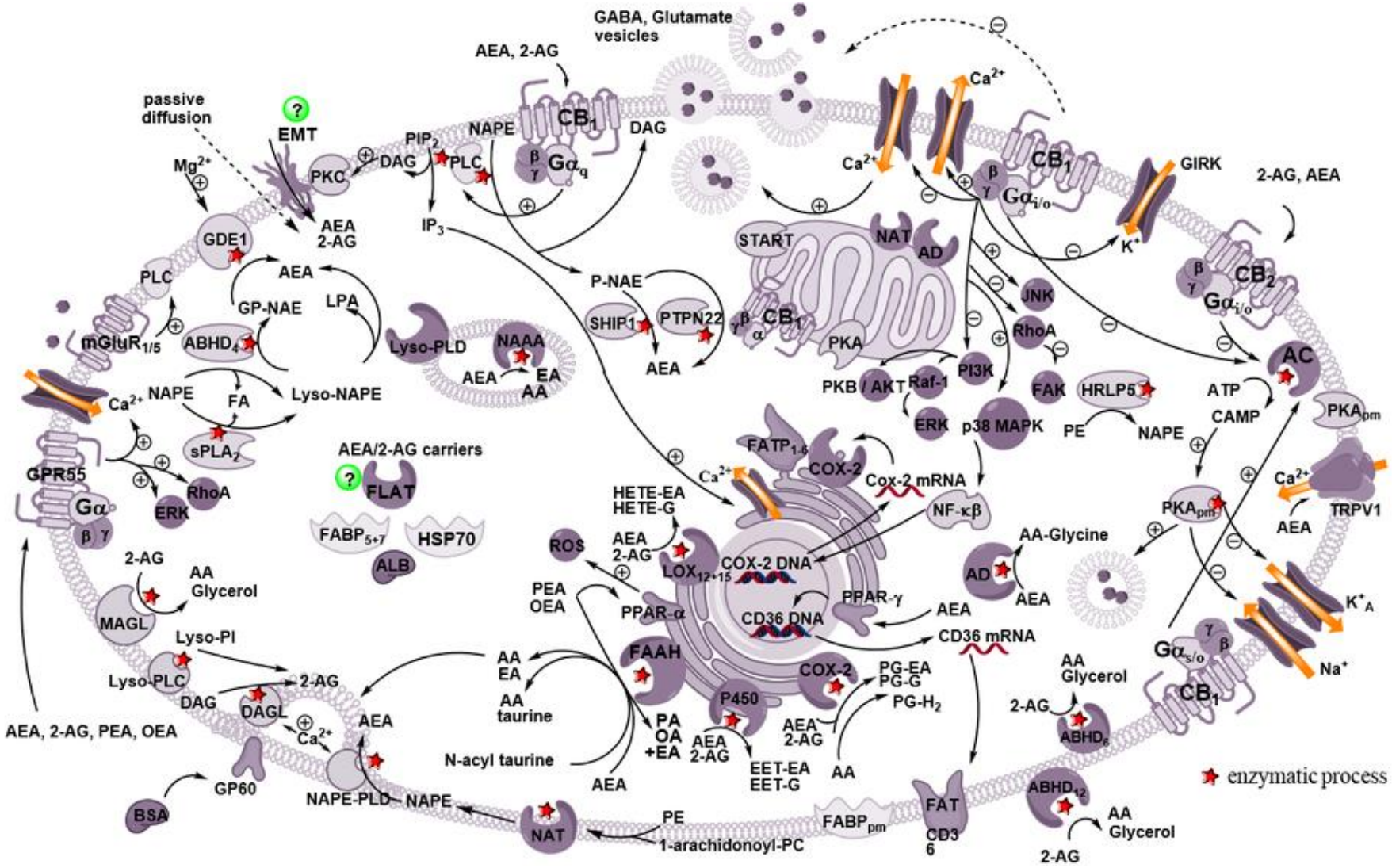
Expansion of wholesaling and clinics.

Medicinal Cannabis Dosing:

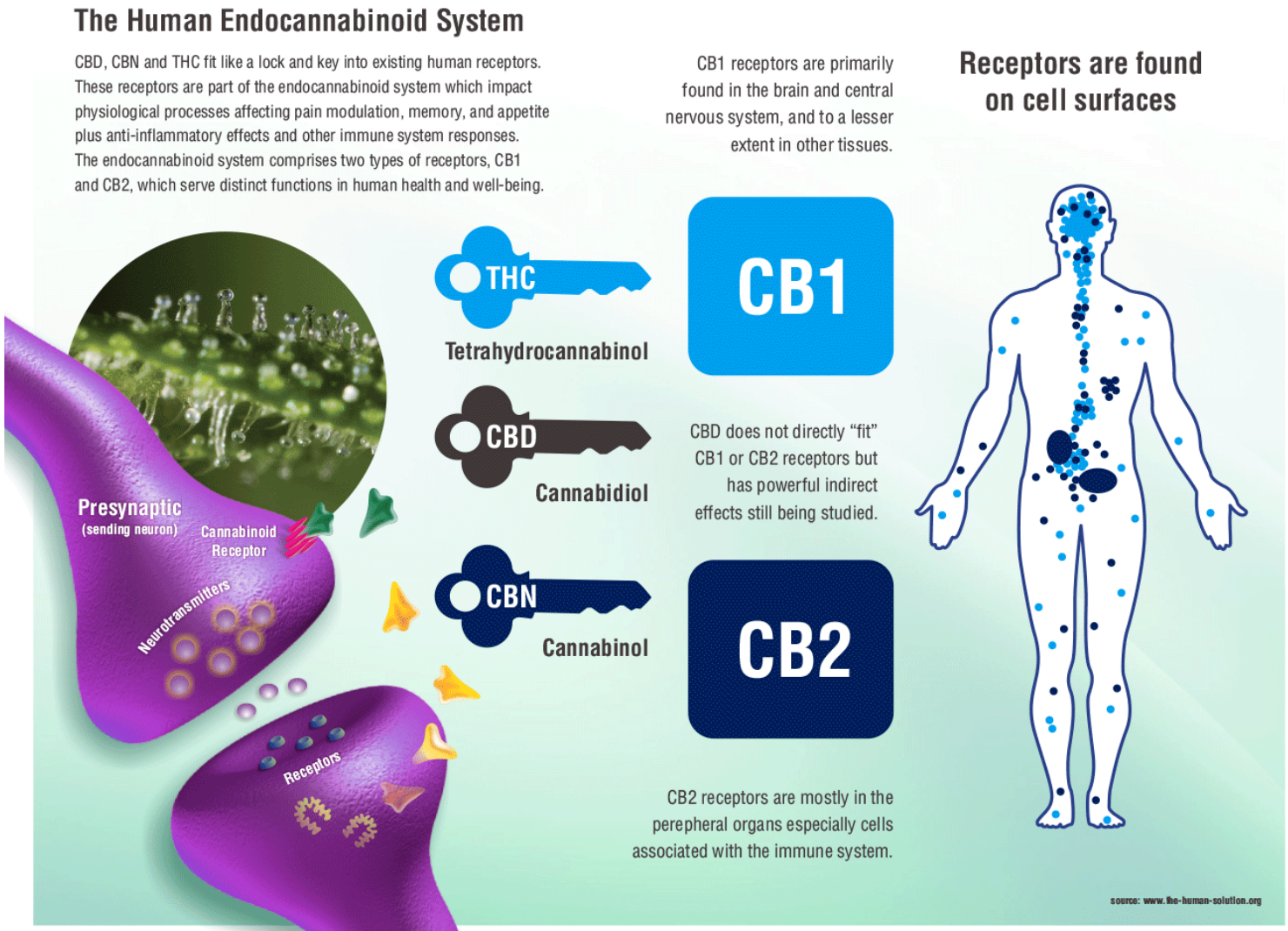
Start Low, Go Slow



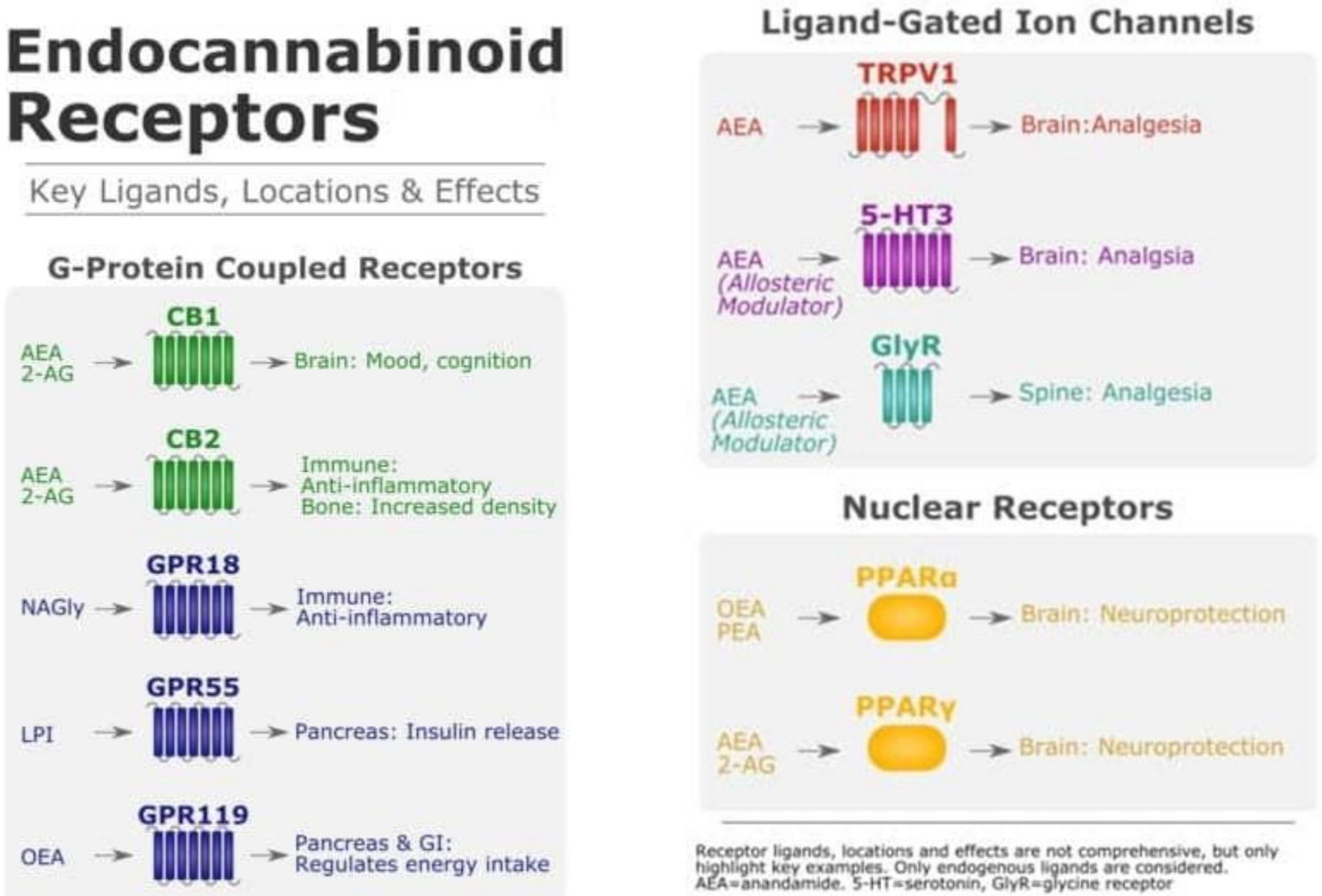
ENDOCANNABINOID SYSTEM



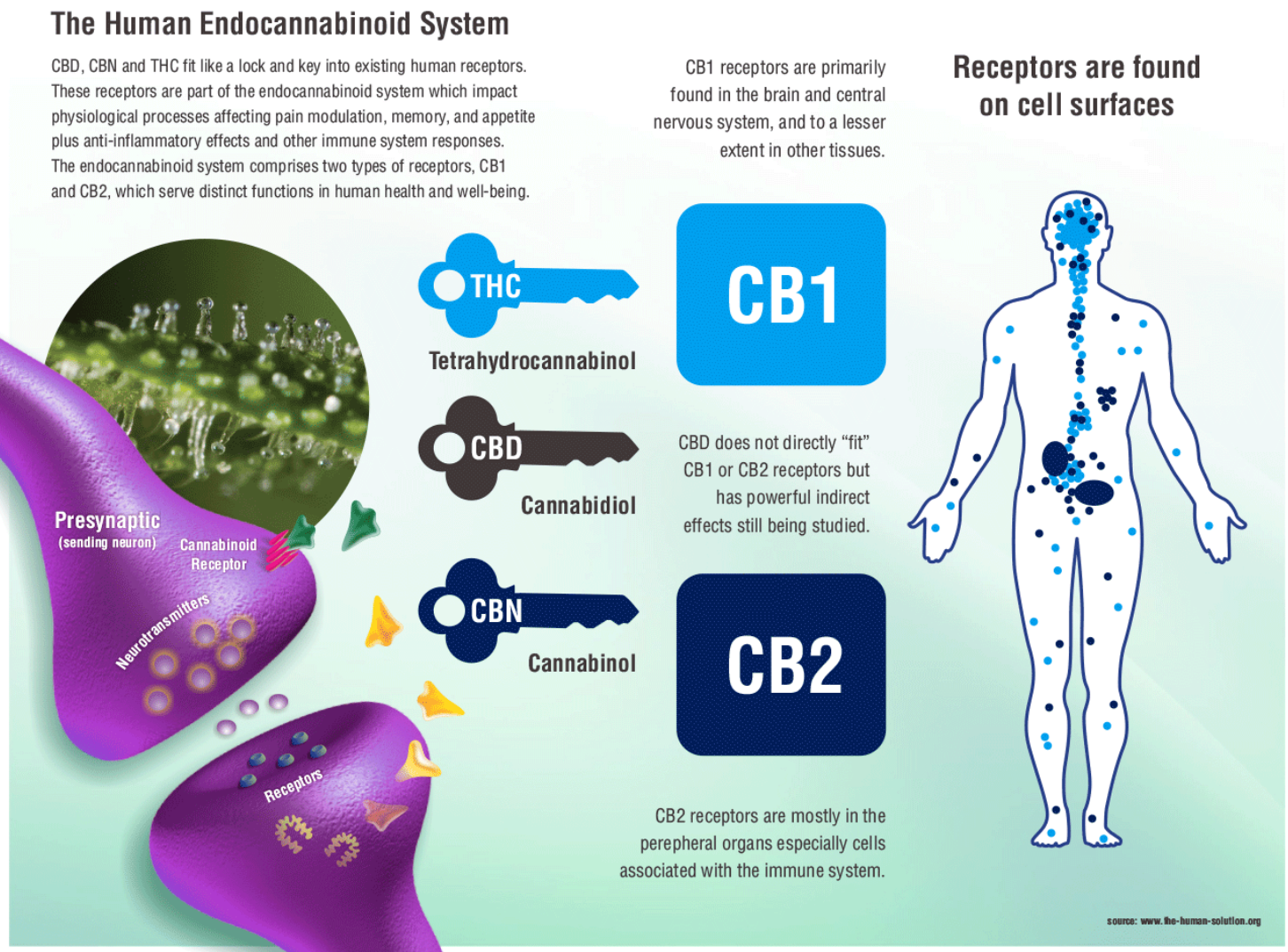
RECEPTORS - CB1 AND CB2



ECS RECEPTORS

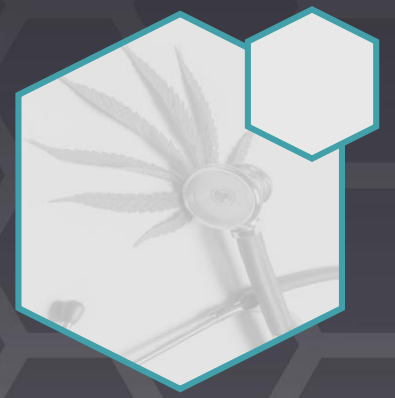


THC AND CBD EFFECTS



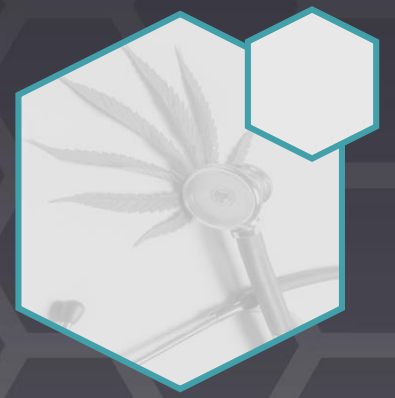
CBD EFFECTS

- Analgesic
- Anti-inflammatory/immunomodulatory
- Anxiolytic
- Antiepileptic
- Antipsychotic
- Antiproliferative
- Counteracts THC psychoactivity



THC EFFECTS

- Analgesic
- Sedative
- Anti-spasmotic
- Anti-dystonic
- Anti-emetic
- Anxiolytic

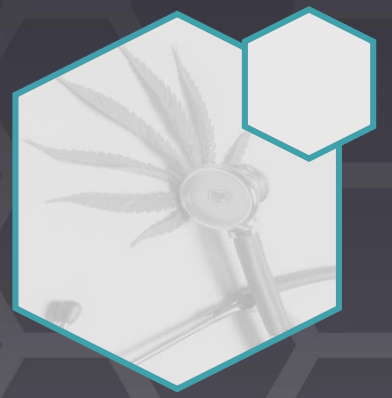


CANNABINOID EFFECTS

Health Effects of Marijuana	THC	THC-A	THC-V	CBN	CBD	CBD-A	CBC	CBC-A	CBG	CBG-A	Benefits
Pain relief	■			■	■		■		■		Analgesis
Reduces inflammation		■			■	■	■		■	■	Anti-inflamatory
Supresses appetite			■								Anoretic
Stimulates appetite	■				■						Appetite stimulant
Reduces vomiting and nausea	■				■						Antimetic
Reduces contractions of small intestine					■						Intestinal antiprokinetic
Relieves anxiety					■						Anxiolytic
Tranquilizing / psychosis management					■						Antipsychotic
Reduces seizures and convulsions		■	■		■						Antiepileptic
Suppresses muscle spasms	■			■	■						Antispasmodic
Aides sleep				■							Anti-insomnia
Reduces efficacy of immune system					■						Immunosuppresive
Reduces blood sugar levels			■		■						Anti-diabetic
Prevents nervous system degeneration					■						Neuroprotective
Treats psoriasis					■						Antipsioratic
Reduces risk of artery blockage					■						Anti-ischemic
Kills or slows bacteria growth					■		■	■	■		Anti-bacterial
Treats fungal infection								■	■		Anti-fungal
Inhibits cell growth in tumours / cancer		■			■	■	■		■		Anti-proliferative
Promotes bone growth			■		■		■		■		Bone-stimulant

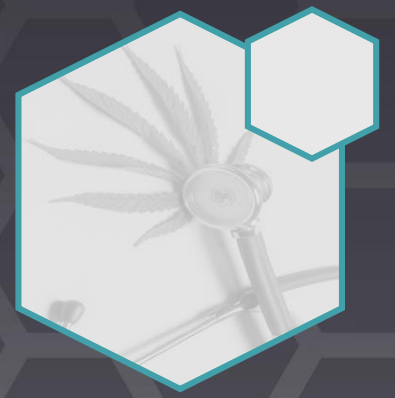
CBD SIDE EFFECTS

- Mild P450 inhibition
- Dry mouth
- Nausea
- Diarrheoa
- Allergy to carrier oil

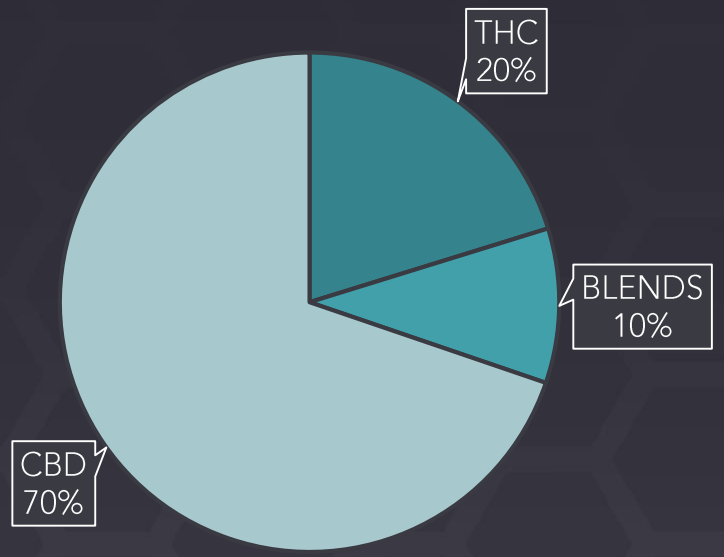


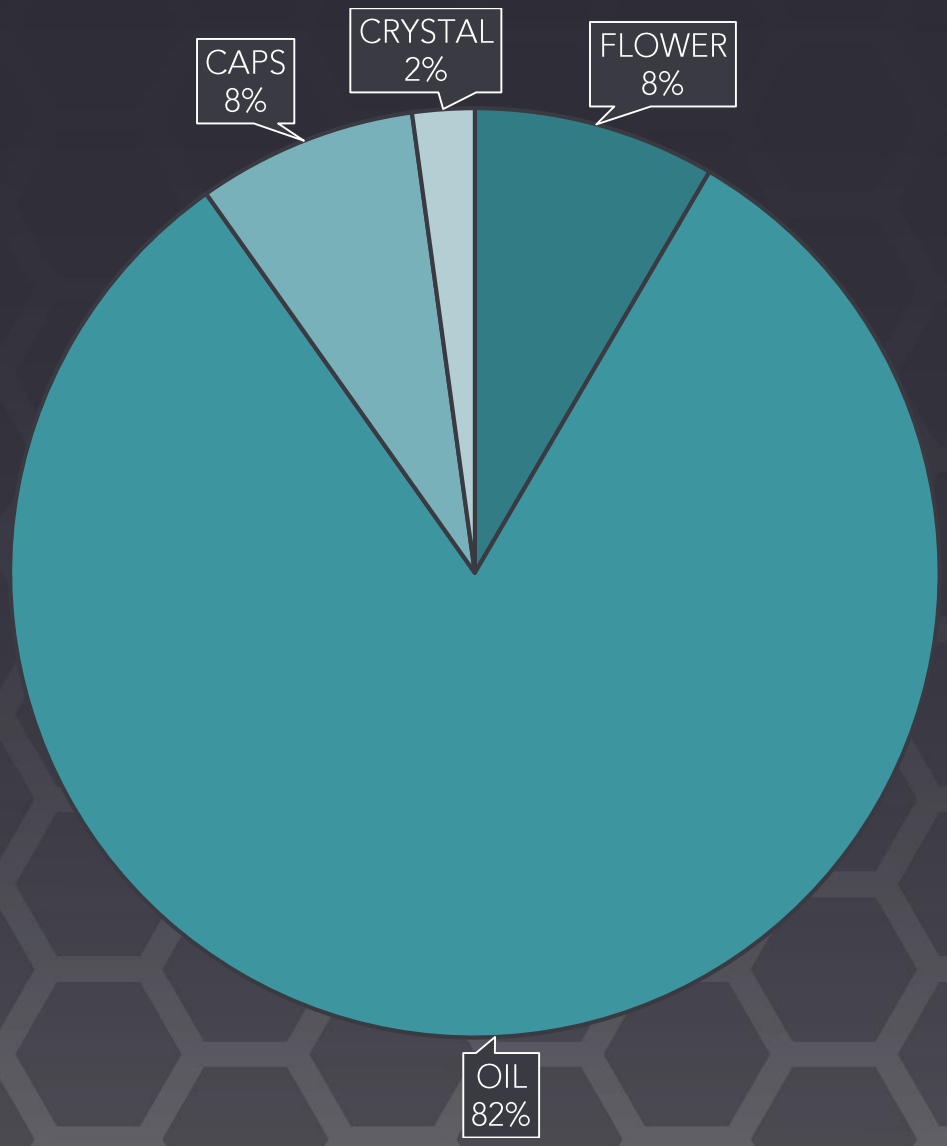
THC SIDE EFFECTS

- Dose dependent*
- Mild P450 inhibition
- Red conjunctiva
- Increased hunger
- Euphoria
- Impaired short term memory
- Sedation and impaired cognitive function
- Anxiety, paranoia, thought disorder
- Toxic psychosis, unmasking of schizophrenia



PRODUCT FORM

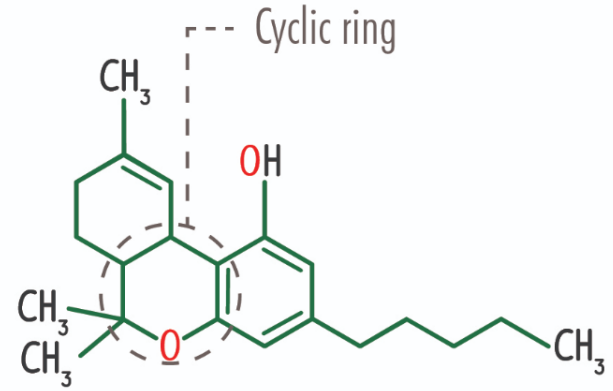




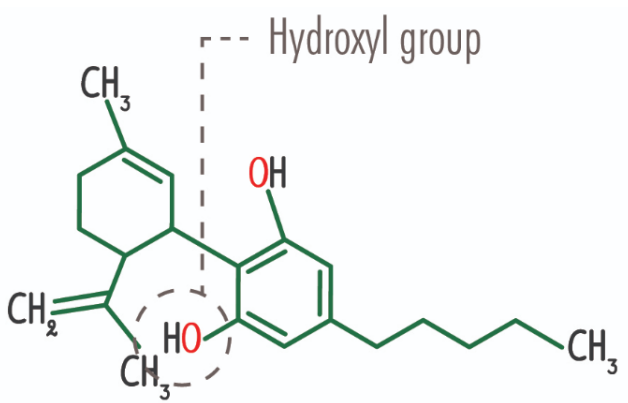
MEDICINAL CANNABIS RX

- Consent Form
- Rx: CBD > THC/CBD
- - CBD PO 10mg twice a day starting dose, increase by 10mg every week
- - THC PO 1mg to 20mg BD-QID reg or Q2H PRN, increase daily

THC AND CBD



Tetrahydrocannabinol (THC)



Cannabidiol (CBD)

PAIN RX CBD

- CBD PO 1 drop twice a day starting dose, increase by drop every week
- max 150mg BD
- 20 drops/ml

PAIN RX THC

- THC PO 1mg to 20mg BD-QID reg or Q2H PRN
- max 100mg per day
- 20 drops/ml
- Sativex spray THC 2.7mg/CBD 2.5mg

	Number of sprays		
Day	**Morning sprays** (between waking-up and 12 noon)	**Evening sprays** (between 4 pm and bedtime)	**Total sprays each day**
Day 1	0	1	**1**
Day 2	0	1	**1**
Day 3	0	2	**2**
Day 4	0	2	**2**
Day 5	1	2	**3**
Day 6	1	3	**4**
Day 7	1	4	**5**
Day 8	2	4	**6**
Day 9	2	5	**7**
Day 10	3	5	**8**
Day 11	3	6	**9**
Day 12	4	6	**10**
Day 13	4	7	**11**
Day 14	5	7	**12**

If you need more relief from your muscle stiffness after Day 10, continue to add one spray each day either in the morning or evening. For example, on Day 11 you would use nine sprays and on Day 12 you would use ten sprays.
You should not use more than 12 sprays in one day

ANXIETY PRESCRIPTION

- Rx: CBD >> THC/CBD
- - CBD PO 10mg twice a day starting dose, increase by 10mg every week, max 300mg/day
- - THC PO 1mg to 20mg BD/QID, max 100mg/day

MC RX AVERAGE

- Anxiety: CBD 50mg BD
- Autism: CBD variable, THC rarely in children
- Cancer Pain/CINV: CBD 50mg BD, THC 10mg QID PRN
- Epilepsy: Start 1mg/kg BD > max 10mg-25mg/kg BD
- Fibromyalgia: CBD 25-50mg BD
- Insomnia: THC 10-20mg Nocte
- MS Pain: 10mg:10mg BD
- PTSD: CBD 100mg BD, THC variable
- Schizophrenia: CBD 50-300+mg

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CDA CLINICS

ORAL DOSING GUIDE

CONDITION	THC:CBD	RECOMENDED DOSE
Anxiety	CBD	2.5mg BD, titration double dose Q3days up to 300mg BD max
Chemo-induced Nausea	THC>>CBD	2.5mg titrated up to 20mg QID reg or PRN
Chronic Pain	1+:1, a cohort of patients respond to CBD alone	2.5mg PRN titration up to max 20mg per hour and max 120mg per day
Endometriosis	THC<CBD	2.5mg titrated up to 25mg QID reg or PRN
Epilepsy	CBD, in resistant cases add a little THC after CBD titration	2.5mg/kg BD, increase Q1 week by 2.5mg/kg QID to max dose of 1000mg/day
Fibromyalgia	THC<CBD	2.5mg titration up to 25mg QID reg or PRN
Inflammatory Disease	CBD (some evidence for CBDA and THCA)	2.5mg titration up to 25mg QID reg or PRN
Insomnia / Sleep Disorder	THC>CBD	2.5mg Nocte, titration to max 50mg
Migraine	1:1	2.5mg titration up to 25mg BD reg or PRN
MS Insomnia / Sleep Quality	1:1	2.5mg Nocte, titration to max 50mg
MS Pain	THC > CBD, some respond to either	2.5mg PRN titration up to max 120mg per day
Dystonia / Spasticity	1:1	2.5mg PRN titration up to max 120mg per day
Neuropathic Pain	1+:1, a cohort of patients respond to CBD alone	2.5mg PRN titration up to max 20mg per hour and max 120mg per day
Paediatric Epilepsy	CBD, in resistant cases add a little THC after CBD titration	1mg/kg BD, increased Q1week by 1mg/kg BD to max dose of the lower of 20mg/kg/day or 1000mg/day (some studies go to 50mg/kg/day)
Palliative Care Regular Dosing	1:10 moving to 20:4 if required	2.5mg BD titrated up to 120mg per day
Palliative Care PRN Dosing	1:10 moving to 20:4 if required	2.5mg PRN titration up to max 20mg per hour and max 120mg per day
PTSD	1+:1, a cohort of patients respond to CBD alone	2.5mg PRN titration up to max 20mg per hour and max 120mg per day
Schizophrenia	CBD	25mg BD, titration to max 1200mg per day (consider QID dosing)
Sleep Apnoea	THC	2.5mg Nocte, titration to max 50mg

Doses above are oral.
PRN = As required, BD = Twice per day, TID = Three per day, QID = 4 times per day, Nocte = Each night, Titrate = Gradually adjust, Q2 = every 2 days.
Example prescription wording: Oil 2.5 mg BD, max 10mg /day.

CDA CLINICS

VAPE DOSING GUIDE

CONDITION	THC:CBD	RECOMMENDED DOSE
Anxiety	CBD	1mg QID, titration double dose Q3days up to 50mg QID max
Chemotherapy-Induced Nausea	THC>>CBD	1mg titrated up to 20mg QID reg or PRN
Chronic Pain	1+:1, a cohort of patients respond to CBD alone	1mg PRN titration up to max 20mg per hour and max 100mg per day
Dystonia / Spasticity	1:1	1mg PRN titration up to max 100mg per day
Endometriosis	THC<CBD	1mg titrated up to 25mg QID reg or PRN
Epilepsy	CBD, in resistant cases add a little THC after CBD titration	1mg/kg BD, increase Q1week by 1mg/kg QID to max dose of 500mg/day
Fibromyalgia	THC<CBD	1mg titration up to 25mg QID reg or PRN
Inflammatory Disease	CBD (some evidence for CBDA and THCA)	1mg titration up to 25mg QID reg or PRN
Insomnia / Sleep Disorder	THC>CBD	1mg Nocte, titration to max 50mg
Migraine	1:1	1mg titration up to 25mg QID reg or PRN
MS Insomnia / Sleep Quality	1:1	1mg Nocte, titration to max 50mg
MS Pain	THC > CBD, some respond to either	1mg PRN titration up to max 100mg per day
Neuropathic Pain	1+:1, a cohort of patients respond to CBD alone	1mg PRN titration up to max 20mg per hour and max 100mg per day
Paediatric Epilepsy	CBD, in resistant cases add a little THC after CBD titration	0.5mg/kg QID, increased Q1week by 0.5mg/kg BD to max dose of the lower of 10mg/kg/day or 500mg/day (some studies go to higher dose)
Palliative Care Regular Dosing	1:10 moving to 20:4 if required	1mg QID titrated up to 100mg per day
Palliative Care PRN Dosing	1:10 moving to 20:4 if required	1mg PRN titration up to max 20mg per hour and max 100mg per day
PTSD	1+:1, a cohort of patients respond to CBD alone	1mg PRN titration up to max 20mg per hour and max 100mg per day
Schizophrenia	CBD	5mg QID, titration to max 1000mg per day
Sleep Apnoea	THC	1mg Nocte, titration to max 50mg

Doses above are for inhaled vaporizer.
Product type (e.g. crystal) may require starting at 10 mg. For vapourised product focus on PRN titration to symptom effect, e.g. 0.1g dried flower or 1mg Q10mins PRN for symptom control titration to max 2g/day. After an inhaled dose of vaporizer wait 10 mins to see if symptoms are controlled; a repeat dose or larger dose can then be tried every 10 mins.
PRN = As required, BD = Twice per day, TID = Three per day, QID = 4 times per day, Nocte = Each night, Titrate = Gradually adjust, Q2 = every 2 days, Q10 mins = every 10 mins.
Example prescription wording: (1) Flower 0.1g Q10mins PRN, max 2g/day; (2) Vape Solution 1 mg Q10 mins PRN, max 10mg /day.

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CLINICS

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