

# Symptom Benefits of Cannabis



## Medical Cannabis Use in Cancer

- Average age 59 years
- 54% female
- 26% previous recreational users
- Symptoms - sleep (78%), pain (78%), weakness (73%), nausea (65%), anorexia (49%)
- Discontinuation -19% by 6 months
- Most - subjective improvement (96%)



**NAUSEA**

# Nausea-Chemotherapy

- 30 RCT
- NNT nausea - 6
- NNT vomiting - 3
- Nabilone > prochlorperazine, domperidone, alizapride
- THC = metoclopramide, haloperidol, chlorpromazine
- THC did not add to ondansetron as prophylaxis
- Mechanism - 5HT<sub>3</sub> receptor antagonist



# Nausea-Chemotherapy

- Rotation to smoked cannabis from THC
- Response 25% Dose
- Nabilone 1-2mg twice daily
- Dronabinol 5mg q2-4h



# Management of CINV

- Olanzapine, NK1 inhibitors, 5HT3 receptor antagonists, corticosteroids
- Little mentioned or rescue
- Paradoxical hyperemesis may mimic CINV
- Pain trials in cancer had emesis as S/E of cannabis

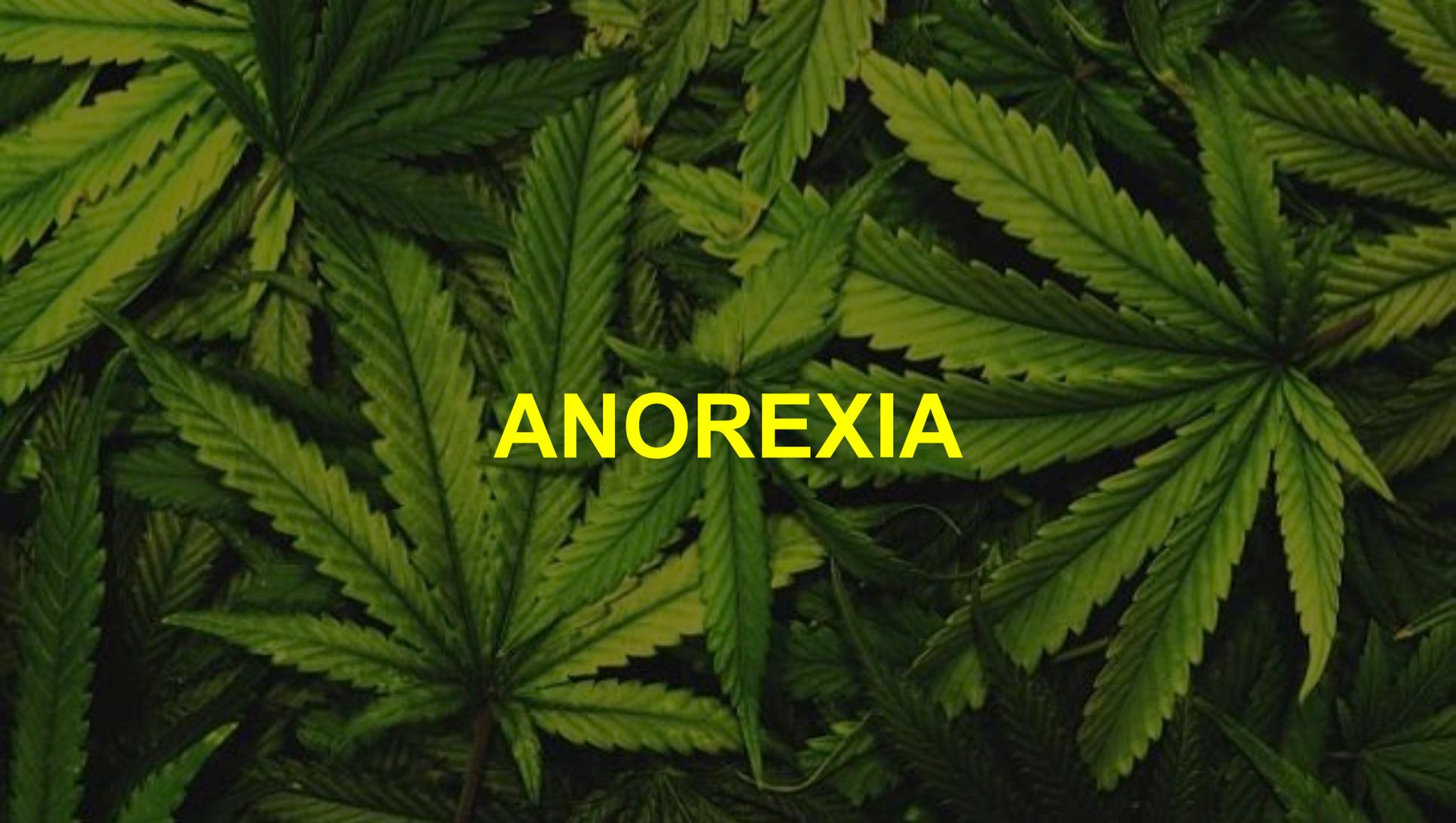




## Advanced Cancer

- Case report GI metastases
- Isolated case series
- No RCT

Walsh, D. (2017). [Support Care Cancer](#)



**ANOREXIA**

# Anorexia

- Reduced food intake, early satiety, diurnal intake variations, hypogeusia & dysgeusia
- D-RCT: 3 arms - megestrol acetate, THC , combination

75% megestrol v 49% THC

- Cannabis did **not** add to megestrol



Jatoi, (2002). [J Clin Oncol](#)

# Anorexia

- Cannabis-In-Cachexia Group
- RCT: 3-arm, placebo, THC, THC/CBD
- Results- No improvement in appetite, nausea, wt, QOL



Cannabis In Cachexia Study, (2006). [J Clin Oncol](#)

# Dysgeusia

- D-RCT: 2-arm placebo v dronabinol 2.5mg bid
- Dronabinol improved taste, pre-meal appetite, increased calories from protein



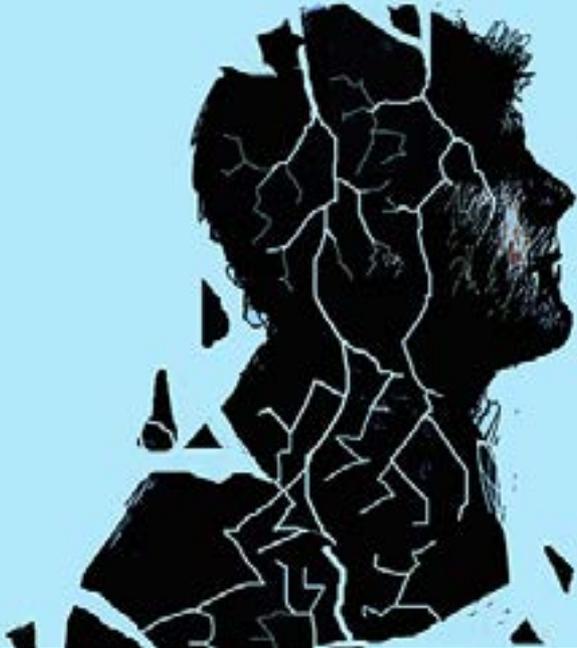
# Survey Medical Cannabis: Appetite in Cancer



- **Prospective survey in 8 adult outpatient and/or cancer services**
- **204 patients**
- **Results**
  - **13% use cannabis**
  - **71% preferred tablets or capsules**
  - **42% would use spray**
  - **41% would used vaporized**
  - **6% believed cannabis will cure cancer**



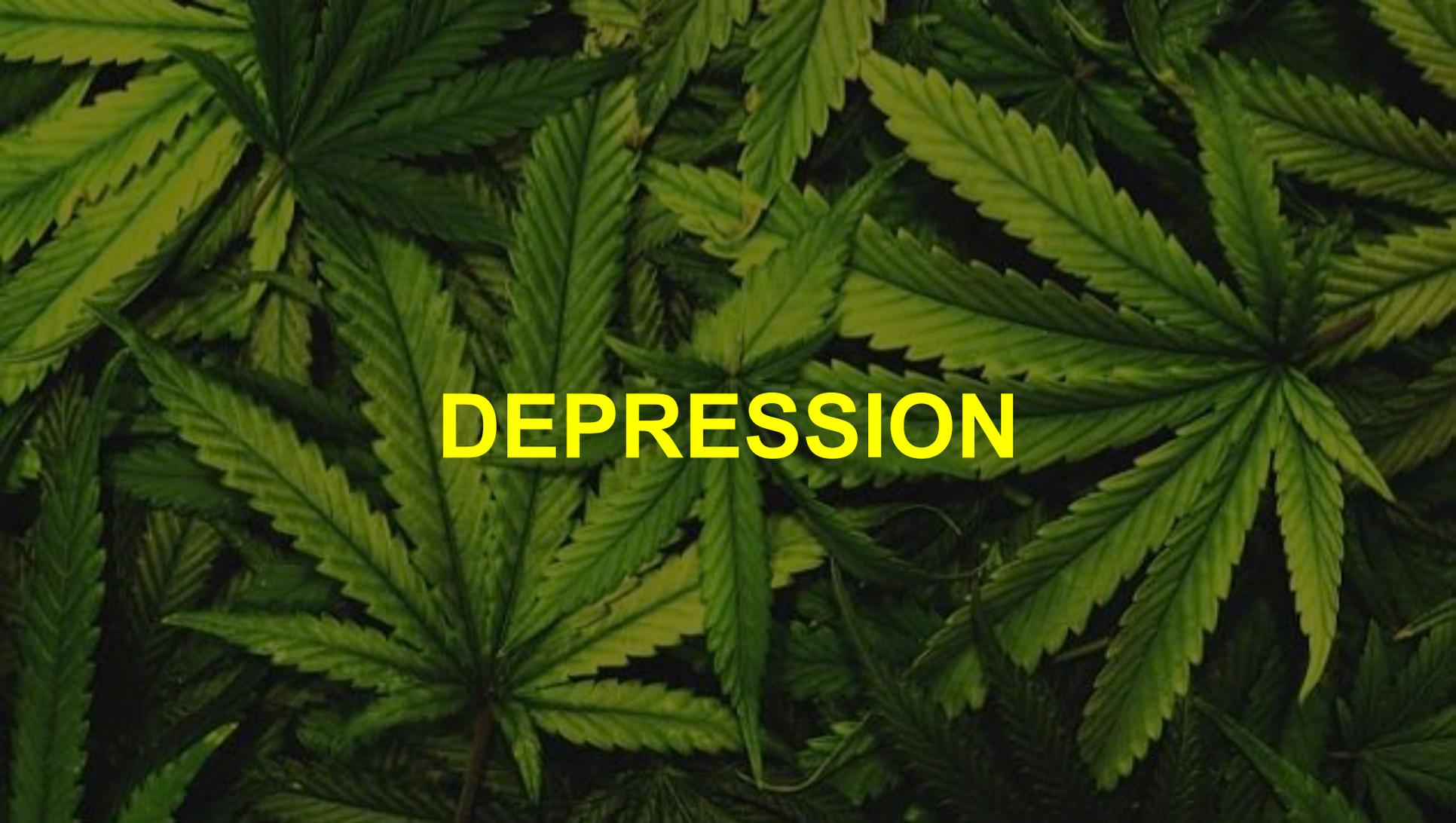
**ANXIETY**



# Anxiety

- Meta-analysis - 5 RCT, 38 patients and 44 healthy individuals
- Nabilone 1mg bid reduced anxiety
- Cannabidiol reduced anxiety from THC
- Cannabidiol 600mg (relative to placebo) reduced social anxiety disorders

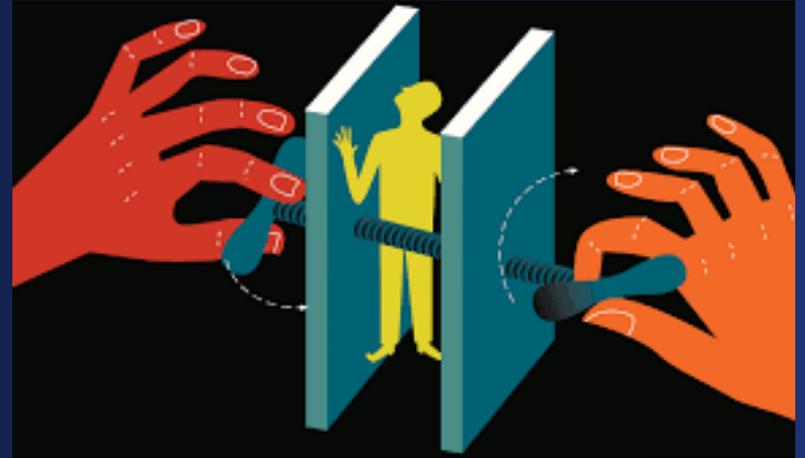
Bergamaschi. (2011) [Neuropsychopharmacology](#)  
Zuardi (1982). [Psychopharmacology \(Berl\)](#)



**DEPRESSION**

# Depression

- Meta-analysis
- 5 RCT in patients without cancer found cannabis “no better than placebo”



Whiting, (2015) [JAMA](#)

# Psychotic Symptoms

---



# Psychotic Symptoms

- RCT: cannabidiol 200-800mg/d v amisulpride
- Brief Psychotic Rating Scale
- Results - equal efficacy
  - fewer side effects with cannabidiol
  - smaller weight gain
  - less prolactin elevation
  - fewer e/p side effects





# Sleep and Insomnia |

# Sleep and Insomnia



- Cannabis reduces sleep latency; increases slow wave sleep
- Habituation & tolerance develop
- Cannabis withdrawal: vivid dreams, insomnia
- Often leads to relapse in cannabis use disorder



## Sleep and Insomnia

- **Meta-analysis 19 studies with sleep one outcome + 2 with sleep as the primary outcome**
- **Results: Sleep improved in most trials**
- **In pain trials improved sleep may be the indirect analgesic effect**

Whiting, (2015), JAMA



# Insomnia and Sleep

- Cannabidiol improves REM behavior disorders
- Nabilone improves PTSD-related nightmares
- Nabiximols improves sleep in chronic pain

Jetly, (2015). [Psychoneuroendocrinology](#).

Babson, (2017) [Curr Psychiatry Rep](#).

# Insomnia and Sleep

- Association between multiple medical conditions, psychiatric illness, narcolepsy. obstructive sleep apnea
- Individuals on THC more likely to have narcolepsy
- Cannabidiol counteracts THC somnolence and may counter daytime somnolence



# Insomnia and Sleep

- THC blocks serotonin induced obstructive sleep apnea animals
- Dronabinol 2.5 - 5mg reduces apnea in adults with obstructive sleep apnea

Prasad, (2013) [Front Psychiatry](#)  
Farabi, (2014) [J Clin Sleep Med](#)



# Sleep, Pain, Cannabis Use

- Sleep problems in patients with pain commonly associated with cannabis use
- 59% in chronic pain meet criteria for a sleep disorder
- 86% attribute sleep disorder to pain
- 80% in pain who use cannabis use it for sleep disturbances
- 65% who abstain will develop sleep-related cannabis withdrawal symptoms





**SEIZURES**



## Seizures

- High quality randomized trials of cannabidiol
- Reduces seizures
- Direct effect or indirect by increasing clobazam metabolite n-desmethyloclobazam
- Will cannabidiol become a antiseizure medication for acquired seizure disorders?

# SUMMARY

- **Widespread “Medical” Use**
- **CINV**
- **Anorexia**
- **Dysgeusia**
- **Anxiety**
- **Depression**
- **Psychosis**
- **Sleep**
- **Seizures**