



**UW PACC**

Psychiatry and Addictions Case Conference

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# USE OF BUPRENORPHINE FOR CHRONIC PAIN

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# GENERAL DISCLOSURES

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# SPEAKER DISCLOSURES

- ✓ Grant/Research Support from Pfizer, Purdue

# AGENDA

- FDA- approved buprenorphine formulations
- Evidence of buprenorphine efficacy for pain
- Buprenorphine for opioid taper
- Buprenorphine for high-risk opioid patients

# DON'T FORGET YOUR PETS!



## 24 HOURS OF CONTINUOUS PAIN CONTROL FOR CATS

SIMBADOL now has an extended shelf life, lasting twice as long as before and allowing vets to treat more cats and reduce waste



ONE INJECTION

ADMINISTERED IN-CLINIC

100% COMPLIANCE

COST COMPETITIVE

# FDA-APPROVED BUPRENORPHINE

- **Buprenorphine-naloxone**
- FDA indication: Opioid dependence, Maintenance therapy
- Generic Sublingual Tablet: (Buprenorphine - Naloxone) 2 MG-0.5 MG, 8 MG-2 MG
- Bunavail Buccal Film: (Buprenorphine - Naloxone) 2.1 MG-0.3 MG, 4.2 MG-0.7 MG, 6.3 MG-1 MG
- Suboxone Sublingual Film: (Buprenorphine - Naloxone) 2 MG-0.5 MG, 4 MG-1 MG, 8 MG-2 MG, 12 MG-3 MG
- Sublingual Tablet: (Buprenorphine - Naloxone) 8 MG-2 MG
- Zubsolv Sublingual Tablet: (Buprenorphine - Naloxone) 0.7 MG-0.18 MG, 1.4 MG-0.36 MG, 2.9 MG-0.71 MG, 5.7 MG-1.4 MG, 8.6 MG-2.1 MG, 11.4 MG-2.9 MG
- [Probuphine Intradermal Implant: 74.2 MG]

# FDA-APPROVED BUPRENORPHINE

- **Buprenorphine**
- FDA indication: Pain, chronic (Severe), in patients requiring long-term daily around-the-clock opioid
- Generic Transdermal Patch, Extended Release: 5 MCG/1 HR, 7.5 MCG/1 HR, 10 MCG/1 HR, 15 MCG/1 HR, 20 MCG/1 HR
- Belbuca Buccal Film: 75 MCG, 150 MCG, 300 MCG, 450 MCG, 600 MCG, 750 MCG, 900 MCG
- Butrans Transdermal Patch, Extended Release: 5 MCG/1 HR, 7.5 MCG/1 HR, 10 MCG/1 HR, 15 MCG/1 HR, 20 MCG/1 HR

# EVIDENCE OF BUPRENORPHINE EFFICACY FOR PAIN

- Canadian Agency for Drugs and Tech Health 18 pubs, incl. 4 systematic reviews, 9 RCTs
  - 6 RCTs double blind, 3 open label; 7/9 pharma
  - 2 non-inferiority design, 4 enriched enrollment (excluded non-responsive or intolerant to bup)
  - Some studies had high dropout rates (45%)
  - OA, CLBP, MSK pain, AIDS/neuropathic, chronic



# EVIDENCE OF BUPRENORPHINE EFFICACY FOR PAIN

- Buprenorphine vs tramadol
  - Transdermal, one 12-wk open label RCT, OA
  - Similar pain reductions, poor quality study
- Buprenorphine vs fentanyl (both transdermal)
  - 2 small, poor quality RCTs, AIDS, non-malig. Pain
  - Similar pain reduction, no clear conclusions
- Buprenorphine vs codeine
  - One mod quality non-inferiority RCT in OA
  - No clear advantage of either for pain or sleep

# EVIDENCE OF BUPRENORPHINE EFFICACY FOR PAIN

- Buprenorphine vs oxycodone
  - DB RCT: Bup 5mcg/hr vs. 20mcg/hr vs. oxycodone
  - 5mcg/hr < 20mcg/hr ~ oxycodone
- Buprenorphine vs morphine
  - 3 trials back pain, morphine > bup.
- Buprenorphine vs placebo
  - 4 trials transdermal, buccal buprenorphine
  - Bup improved pain more over 12 weeks
  - ? Disability, sleep, adverse events

# EVIDENCE OF BUPRENORPHINE EFFICACY FOR PAIN

- No evidence for bup doses >24mg vs less
- No evidence on bup for opioid tapering
  - 10 poor quality studies (noted in Frank et al Annals)
- Evidence unclear on whether risk of adverse events (constipation, cog. Impairment, respiratory depression) is less on bup.

# BUPRENORPHINE FOR HIGH-RISK PATIENTS ON OPIOID THERAPY

- Patients on high-dose (>90mgMED) opioids, concurrent sedatives, or aberrant behavior, and who cannot or will not taper off opioids
- Rationale for this use:
  - Lowers risk of overdose, misuse, other adverse ev.
  - Kappa antagonism often stabilizes patients psychologically
  - Appears to provide adequate analgesia
    - No ceiling effect reported in clinical studies
    - May help reduce opioid-induced hyperalgesia

# BUPRENORPHINE FOR HIGH-RISK PATIENTS ON OPIOID THERAPY

- Barriers to use of bup for chronic pain
  - Cost of Butrans, Belbuca, other brand name bup.
  - Insurance will not cover bup-nal for chronic pain, so patients need to be given OUD diagnosis
    - Many high-dose opioid therapy patients will qualify for DSMV mild OUD (2 criteria)
    - But may have undesired consequences in clinical and non-clinical domains: ED visits, custody battles, employment, disability applications

# SUMMARY: BUP FOR PAIN

- Evidence for efficacy compared to other opioids unclear
- Evidence for efficacy compared to placebo unclear over the long term
- Bup does appear to provide adequate analgesia for many patients switched from full opioid agonists
- Bup is clearly safer than high-dose full agonist