Buprenorphine-Naloxone (Suboxone®) for Pharmaceutical Opioid Use Disorder

Clinical Question: Is buprenorphine (with or without naloxone) effective as maintenance therapy in pharmaceutical opioid use disorder?

Bottom Line: Retention in treatment at 15 weeks was seen in 75% taking buprenorphine compared to 26% in detoxification and/or counselling, with 37% reporting ongoing substance use compared to 60% in control. Outcomes between buprenorphine and methadone in this population are similar. The evidence is at moderate to high risk of bias.

Evidence:

- Systematic review of six randomized controlled trials (RCTs) of 607 patients with "pharmaceutical" opioid dependence (23% female, mean age 32, mean study duration 15 weeks). Source of opioids often not described (example prescribed versus diverted).¹
  - Comparing buprenorphine to detoxification and/or psychological treatment:
    - Retention in treatment (three RCTs, 247 patients): 75% versus 26% control, Number Needed to Treat (NNT)=3.
    - Self-reported substance use (three RCTs, 204 patients): 37% versus 60% control, NNT=5.
    - End of treatment opioid-positive drug screen (three RCTs, 206 patients): 40% versus 61% control, NNT=5.
    - No difference: Days of unsanctioned opioid use or drug-related risk behaviours.
    - Unspecified adverse effects (one RCT, 53 patients): 0% versus 8% control.
  - Comparing buprenorphine to methadone:
    - No difference: Retention in treatment, substance use, risk behaviours, health scales or adverse effects.
  - No data on mortality, quality of life, function, or overdose reported.¹
  - Limitations: All RCTs open-label; high drop-out rates; one study only included illicit buprenorphine users.
- Buprenorphine in mainly heroin users:
  - Systematic review (five RCTs):
- No opioid-related deaths (four RCTs);²
- Four deaths (placebo) versus zero (buprenorphine) after one year (one RCT, 40 patients).²,³
  - Versus methadone: No difference in mortality (one RCT, secondary analysis).⁴

**Context:**
- Adding naloxone (an opioid antagonist) to buprenorphine has little impact orally due to poor absorption but can cause withdrawal if crushed for IV use.⁵
- In Ontario, 33% of people with opioid-related death had active opioid prescriptions.⁶
  - 58% of those had only prescribed opioids on post-mortem toxicology.⁶
- Observational studies (included heroin users and multiple confounders) report:
  - Decreased mortality with opioid agonist therapy.⁷,⁸
  - Lower mortality with buprenorphine/naloxone compared to methadone.⁹
- In heroin users, methadone results in more treatment retention than buprenorphine, NNT=4-10 at 12-24 weeks.²,¹⁰
- Buprenorphine/naloxone dosing information available online.¹¹

**Authors:**
Caitlin Finley BHSc MSc, Christina Korownyk MD CCFP, Adrienne J Lindblad BSP ACPR PharmD

**Disclosure:**
Authors do not have any conflicts of interest to declare.

**References:**