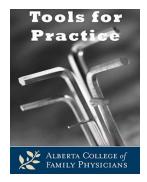
**Tools for Practice** is proudly sponsored by the Alberta College of Family Physicians (ACFP). ACFP is a provincial, professional voluntary organization, representing more than 4,800 family physicians, family medicine residents, and medical students in Alberta. Established over sixty years ago, the ACFP strives for excellence in family practice through advocacy, continuing medical education and primary care research. <a href="https://www.acfp.ca">www.acfp.ca</a>

**November 5, 2018** 



# 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).<sup>1</sup>
  - 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.<sup>1</sup>
  - 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);<sup>2</sup>
- Four deaths (placebo) versus zero (buprenorphine) after one year (one RCT, 40 patients).<sup>2,3</sup>
- Versus methadone: No difference in mortality (one RCT, secondary analysis).<sup>4</sup>

## **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.<sup>5</sup>
- In Ontario, 33% of people with opioid-related death had active opioid prescriptions.<sup>6</sup>
  58% of those had only prescribed opioids on post-mortem toxicology.<sup>6</sup>
- Observational studies (included heroin users and multiple confounders) report:
  - o Decreased mortality with opioid agonist therapy.<sup>7,8</sup>
  - o Lower mortality with buprenorphine/naloxone compared to methadone.<sup>9</sup>
- In heroin users, methadone results in more treatment retention than buprenorphine, NNT=4-10 at 12-24 weeks.<sup>2,10</sup>
- Buprenorphine/naloxone dosing information available online.<sup>11</sup>

### **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:

- 1. Neilsen S, Larance B, Degenhardt L. *et al.* Cochrane Database Syst Rev. 2016; 5:CD011117.
- 2. Mattick RP, Breen C, Kimber J, et al. Cochrane Database Syst Rev. 2014; 3:CD002209.
- 3. Kakko J, Svanborg KD, Kreek MJ, et al. Lancet. 2003; 361:662-8.
- 4. Hser YI, Evans E, Huang D, et al. Addiction. 2016; 111(4):695-705.
- 5. Kahan M, Srivastava A, Ordean A, et al. Can Fam Physician. 2011 Mar; 57(3):281-9.
- 6. Gomes T, Khuu W, Martins D, et al. BMJ. 2018; 362:k3207.
- 7. Ma J, Bao YP, Wang RJ, et al. Mol Psychiatry. 2018 Jun 22. [Epub ahead of print].
- 8. Sordo L, Barrio G, Bravo MJ, et al. BMJ. 2017; 357:i1550.
- Hickman M, Steer C, Tilling K, et al. Addiction. 2018 Aug; 113(8):1461-76.
- 10. Woody G, Bruce D, Korthuis PT, et al. J Acquir immune Defic Syndr. 2014; 66:288-93.
- 11. British Columbia Centre on Substance Use and BC Ministry of Health. A guideline for the clinical management of opioid use disorder. Published June 5, 2017. Available at: <a href="http://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines">http://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines June2017.pdf</a>. Last Accessed: September 19, 2018.

**Tools for Practice** is a biweekly article summarizing medical evidence with a focus on topical issues and practice modifying information. It is coordinated by G. Michael Allan, MD, CCFP and the content is written by practising family physicians who are joined occasionally by a health professional from another medical specialty or health discipline. Each article is peer-reviewed, ensuring it maintains a high standard of quality, accuracy, and academic integrity. If you are not a member of the ACFP and would like to receive the TFP emails, please sign up for the distribution list at <a href="http://bit.ly/signupfortfps">http://bit.ly/signupfortfps</a>. Archived articles are available on the ACFP website.

This communication reflects the opinion of the authors and does not necessarily mirror the perspective and policy of the Alberta College of Family Physicians.