

# Characteristics, treatment patterns, and retention with extended-release subcutaneous buprenorphine for opioid use disorder

## A population-based cohort study in Ontario, Canada

### Background

#### Why is this important?

- While opioid agonist treatment (OAT) has been shown to reduce the risk of death among individuals with opioid use disorder (OUD), adoption of novel treatment options and retention remain low.
- Extended-release subcutaneous buprenorphine (BUP-ER; brand name: Sublocade®), a new type of OAT approved by Health Canada on February 3, 2020, may improve treatment accessibility by reducing the frequency of healthcare visits required.
  - The product monograph suggests individuals receive a BUP-ER injection of 300mg/month for 2 months, followed by a reduction to 100mg/month thereafter.

#### What did we investigate?

- The uptake, characteristics, treatment patterns, and retention of individuals initiating BUP-ER.

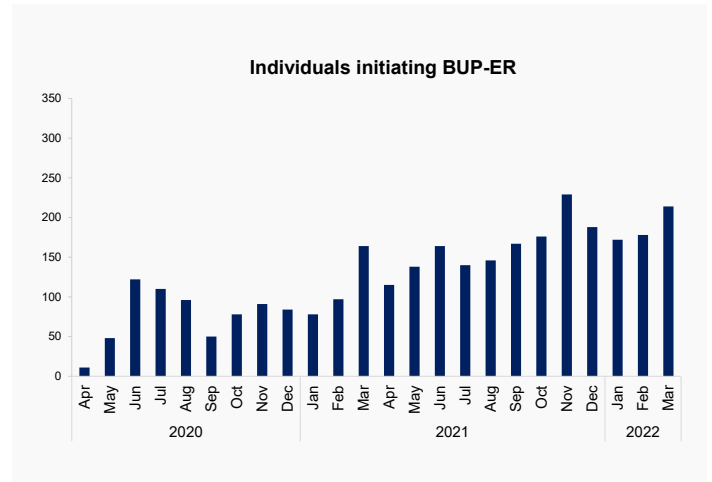
### Key Points

- Uptake of BUP-ER increased steadily since Health Canada's approval in February 2020.
- After one year, 29.5% of people starting BUP-ER remained on treatment.
- The median time to BUP-ER discontinuation was 183 days, with no significant differences according to location of residence (urban/rural or Northern/Southern).
- Long-term use of 300mg doses and/or increasing dose back to 300mg after a dose reduction was relatively common.

### Study Details

#### How was the study conducted?

- *Design:* Population-based cohort study.
- *Population:* Adults aged 18+ initiated on BUP-ER in Ontario, Canada.
- *Study period:* Between February 3<sup>rd</sup>, 2020 and March 31<sup>st</sup>, 2022.
- *Primary outcome:* Treatment patterns of individuals initiating BUP-ER
- *Secondary outcome:* Demographic and clinical characteristics among new BUP-ER recipients and characteristics of BUP-ER prescribers.



#### What did we find?

- 2,366 individuals initiated BUP-ER over the study period.
- There was a steady increase in monthly BUP-ER initiation, with BUP-ER representing 5.8% of all new OAT use by March 2022 in Ontario (N=214 BUP-ER initiations).
- After one year, 29.5% of people starting BUP-ER remained on treatment.
- The median time to BUP-ER discontinuation was 183 days, with no significant differences according to location of residence (urban/rural or Northern/Southern).
- 52.0% of individuals initiated on BUP-ER had a claim for buprenorphine/naloxone after their BUP-ER initiation date, with most having claims more than 14 days after initiation (67.2%).
- Among individuals who initiated on a dose of 300mg BUP-ER and had three or more injections, 18.8% continued to receive only 300mg doses.
  - Among those whose dose was reduced to 100mg, 28.6% had a subsequent dose increase to 300mg.
- Among the 448 BUP-ER prescribers, 80.4% were physicians (68.1% family physicians).
- The median time between doses was 28 days (IQR: 28-33 days).

### Recommendations

- Ongoing engagement with clinicians, policymakers, researchers, and people with OUD should explore strategies to expand accessibility of BUP-ER across the province and reduce BUP-ER discontinuation.

### For more information

Iacono, A., Wang, T., Tadrous, M., Campbell, T., Kolla, G., Leece, P., Sproule, B., Kleinman, R., Besharah, J., Munro, C., Doolittle, M., Gomes, T. (2023). Characteristics, treatment patterns and retention with extended-release subcutaneous buprenorphine for opioid use disorder: a population-based cohort study in Ontario, Canada. [Drug and Alcohol Dependence](#).