

Slow-Release Oral Morphine (SROM)

For the Treatment of Opioid Use Disorder (OUD)

Opioid Dependency Treatment (ODT) Intensity Continuum

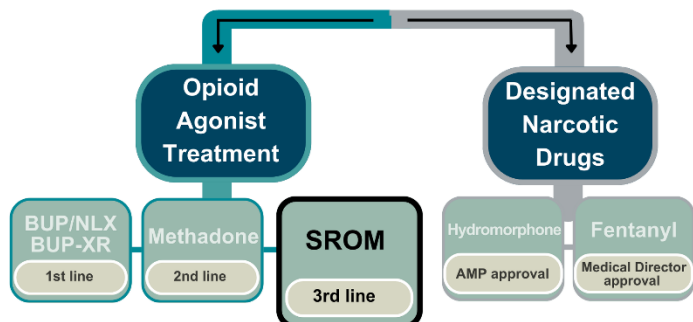
Lower Intensity

Higher Intensity

Withdrawal Management

Opioid Agonist Treatment (OAT)

Designated Narcotic Drugs (DND)



People may use different medications along the treatment continuum at various times depending on their preferences, comorbidities, treatment goals, efficacy of the medications, and life circumstances. Slow-release oral morphine (SROM) is one such treatment that can be used alone or in combination with other ODT medications. Healthcare providers and individuals need to work together to explore the available treatment options and determine the most suitable intervention based on the individual's unique needs. This personalized approach is essential for successful treatment outcomes, reducing the risk of unregulated opioid use, and mitigating any potential harm.

SROM (i.e., KADIAN®) is available for individuals with opioid use disorder (OUD) for whom first-line treatment (i.e., buprenorphine formulations) has been ineffective, contraindicated, and/or refused.

*SROM has shown to have a higher retention rate than methadone and/or BUP- NLX ³

PHARMACODYNAMICS

SROM is an oral formulation of morphine sulfate that provides a controlled-release and acts as a full mu-opioid receptor agonist. Throughout the body, mu-opioid receptors interact with morphine sulfate to produce both its therapeutic and adverse effects. The activation of opioid receptors by morphine sulfate gives rise to a range of pharmacologic effects, such as analgesia, dysphoria, euphoria, somnolence, respiratory depression, diminished gastrointestinal mobility, altered circulatory dynamics, miosis, histamine release, and physical dependence.

KADIAN® is occasionally on back order, requiring a medication switch to M-ESLON®. This formulation change may be destabilizing to some, dose adjustments may be required.

CONTRAINDICATIONS

- Hypersensitivity to morphine sulfate or one of the non-medicinal ingredients
- Acute respiratory depression, asthma with severe bronchospasm, severe chronic obstructive pulmonary disease
- Gastrointestinal obstruction (including paralytic ileus)
- Concomitant use, or use within the last 14 days, of a monoamine oxidase inhibitor (MAOI)
- Significant acute intoxication with a central nervous system depressant (an opioid, alcohol, benzodiazepine, etc.)

ADMINISTRATION

In most cases, SROM is prescribed as a daily witnessed ingestion (DWI), however take-home doses may be provided on a case-by-case basis. KADIAN® is a 24-hour formulation and is typically dosed once per day.

Capsules are opened by a regulated healthcare provider. Then, the pellets are put into a medicine cup and swallowed with a glass of water, or to ensure the complete dosage is ingested. Alternatively, the pellets may be sprinkled into a cup containing apple sauce or yogurt for immediate ingestion.

Crushing, chewing, or dissolving pellets from capsules may result in an uncontrolled and rapid delivery of morphine sulfate and can lead to Opioid Induced Respiratory Depression (OIRD).



Peak plasma concentration is achieved within 8.5 to 10 hours, with a half-life of approximately 11 to 13 hrs.

TIME BETWEEN DOSES

Ideally, SROM doses should be administered at least **18 hours apart**.

CAUTIONARY POPULATIONS

Renal (non-dialysis): ↓ dose by 25% if GFR 10-50 mL/min, ↓ dose by 50% if GFR < 10 mL/min.

Hepatic: use with caution; use lower doses and longer dosing intervals.

Geriatric: use with caution; use lower doses and longer dosing intervals; 3-day tolerance check for sedation.

Alcohol Use Disorder: use with caution. Co-ingestion of alcohol and SROM can cause a rapid increase in opioid plasma concentrations, because alcohol disrupts the sustained-release capsule.

SROM Induction and Titration

Transition from Methadone (MTD) to SROM

Use a **1:4 (cautious) to 1:8 (established tolerance) ratio of MTD: SROM**. If individuals are currently using unregulated opioids to supplement their current MTD dose, a 1:8 ratio and a more rapid transition schedule is preferable to address their higher opioid tolerance.

Transition from Hydromorphone (HM) PO to SROM

Hydromorphone PO to SROM ratio of **1:4 to 1:5** (max recommended dose of 1200mg/day)

- Dose can be decreased by **25%** to account for cross tolerance when switching between opioids.
- Cross tapering may be utilized due to delayed peak time (i.e., Reduce HM dose by 25% every 24-48h, while concurrently increasing intended SROM dose by 25% x 24-48 hrs.)

Induction for persons without OAT and using an unregulated or unprescribed drug supply

Low Tolerance

Those not currently using opioids but at risk of return to use.

Starting dose of **30-50 mg**

Increase dose by 50mg every 48 hours

Moderate Tolerance

Non-fentanyl opioid use, benzodiazepine use or other sedatives (prescribed or unprescribed), people with alcohol use disorder.

Starting dose of **100-150mg**

Increase dose by 50- 100mg every 24-48 hours.

High Tolerance

Active opioid use, previous SROM experience and current fentanyl use.

Starting dose between **200-400mg**

Increase dose by 100mg every 24 hours.

Stabilization dose

The stabilization dose usually varies between **60 and 1200 mg/day**, depending on clinical presentation. Clinical experience indicates that individuals may require doses above **1,200mg** to manage cravings and withdrawal, due to high tolerance developed by fentanyl within the unregulated drug supply.

Monitoring after SROM Administration

Immediate post ingestion monitoring is unnecessary due to delayed onset. Individuals should be monitored daily for withdrawal, sedation, and other adverse reactions such as dyskinesia, slurred speech, agitation, or decreased respiration rate.

Traditional Missed Dosing Schedule *

Number of Consecutive Missed Doses	Dose Adjustment Schedule
1 Individual presents on day two	No Change in dosing
2 Individual presents on day three	No Change in dosing
3 Individual presents on day four	No Change in dosing
4 Individual presents on day five	Reduction of 50% or to an initiation dose (whichever is higher)
5 Individual presents on day six or later	Initiation dose



Prior to initiating SROM a urine drug screen (UDS) should be performed to confirm the presence of opioids. A UDS is not to be used punitively but to facilitate open communication. Treatment should not be delayed while UDS results are pending.

Each individual should be provided with harm reduction resources and education, including a community based naloxone kit and information on where to access Supervised Consumption Services.



*For more information regarding maintained high tolerance missed dose protocols please contact an Opioid Dependency Program (ODP) licensed to provide Narcotic Transition Services (NTS).

References

- Centre for Addiction & Mental Health. (2021, May). *Opioid Agonist Therapy: A Synthesis of Canadian Guidelines for Treating Opioid Use Disorder*. Retrieved from <https://www.camh.ca/-/media/files/professionals/canadian-opioid-use-disorder-guideline2021-pdf.pdf>
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- British Columbia Centre on Substance Use and BC Ministry of Health. (2023, November). *A Guideline for Clinical Management of Opioid Use Disorder*. Retrieved from British Columbia Centre on Substance Use: Opioid Use Disorder: https://www.bccsu.ca/wp-content/uploads/2023/11/BC-OUD-Treatment-Guideline_2023-Update.pdf
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