

**VANCOUVER ACUTE- PHARMACEUTICAL SCIENCES CSU
DRUG DATA SHEET FOR
SUBLINGUAL SUFENTANIL AND FENTANYL**

Drug Name/Strength/Dosage Form

Fentanyl (Sublimaze®) 50 mcg/mL (2 mL ampoules) } supplied as parenteral form
 Sufentanil (Sufenta®) 50 mcg/mL (1 mL ampoules) } to be administered sublingually

Indications

- sufentanil and fentanyl may be used as a short duration analgesic for incident pain where a procedure such as moving a patient onto a stretcher, dressing changes, debridement, disimpaction, etc. is known to cause pain but needs to be repeated on several occasions as part of normal care

Pharmacology

- fentanyl and sufentanil are potent opioid analgesics. Sufentanil is ~5-10 times more potent than fentanyl and at least 1000 times more potent than morphine. Sufentanil is highly lipid-soluble and rapidly absorbed from mucosal membranes. Fentanyl is slightly less lipid soluble than sufentanil, resulting in longer onset of action and duration of effect.

	Fentanyl Sublingual	Sufentanil Sublingual
Equivalent Dose	50 to 100 mcg	10 mcg
Dose for Incident Pain	10 to 50 mcg (0.2 to 1 mL) sublingual pre-procedure.	5 to 25 mcg (0.1 to 0.5 mL) sublingual pre-procedure. Maximum dose is 50 mcg (1 mL)
Onset	5 to 15 minutes (peak effect: 20 minutes)	2 to 3 minutes
When to Administer	10 minutes prior to procedure	3 to 5 minutes prior to procedure
Duration	30 to 45 minutes	10 to 25 minutes

Dosage and Administration

- because of incomplete and variable cross-tolerance along with significant individual variation, there is no known consistent equivalent dose ratio to calculate when using these agents for incident pain. Therefore, incremental titration is required for each patient.
- due to the lower potency of fentanyl, it is recommended over sufentanil for initial treatment of incident pain in opioid-naïve patients
- see above chart for dosage of both agents
- instruct patient not to swallow for 2 minutes for sufentanil and 5 minutes for fentanyl.

Side Effects

- drowsiness, sedation, nausea, vomiting, hypotension, dizziness
- < 1% incidence : tachycardia, chills, pruritus, respiratory depression, bronchospasm
- OVERDOSAGE: respiratory depression (unlikely in doses used sublingually); if serious respiratory depression occurs (less than 6/min or 8 -10/min and patient not able to be roused):
 - 1) STAT call to MD
 - 2) O2 at 4 L/minute
 - 3) give naloxone (Narcan) 0.1 to 0.2 mg IV/SC STAT, then 0.1 to 0.2 mg increments every 10 minutes until respirations above 10/minute

Monitoring

- Fentanyl: sedation scale and respiratory rate Q5 to 10 minutes for 30 minutes after each dose
- Sufentanil: sedation scale and respiratory rate Q5 to 10 minutes for 25 minutes after each dose