
BUPRENORPHINE/NALOXONE (Bunavail, Suboxone, Zubsolv) Fact Sheet [G]

BOTTOM LINE:

The combination product is preferred over buprenorphine alone for maintenance because the addition of naloxone affords it a lower potential for injection misuse. The SL film formulation is priced a little higher than the SL tablets, yet provides very little (if any) meaningful benefits; generic SL tablets should be used as a cost-saving measure.

PEDIATRIC FDA INDICATIONS:

None.

ADULT FDA INDICATIONS (16+ YEARS):

Opioid dependence (induction and maintenance); approved for adolescents aged 16+.

OFF-LABEL USES:

None.

DOSAGE FORMS:

- **SL tablets (G):** 2/0.5 mg, 8/2 mg (scored).
- **SL film strips (Suboxone, [G]):** 2/0.5 mg, 4/1 mg, 8/2 mg, 12/3 mg.
- **SL tablets (Zubsolv):** 0.7/0.18 mg, 1.4/0.36 mg, 2.9/0.71 mg, 5.7/1.4 mg, 8.6/2.1 mg, 11.4/2.9 mg.
- **Buccal film (Bunavail):** 2.1/0.3 mg, 4.2/0.7 mg, 6.3/1 mg.

DOSAGE GUIDANCE (16+ YEARS):

- For induction, use strategy described in buprenorphine fact sheet. For maintenance, give combination product (Suboxone or [G]) daily in the equivalent buprenorphine dose on last day of induction; adjust dose in increments of 2 mg or 4 mg to a level that maintains treatment and suppresses opioid withdrawal symptoms (usually 4–24 mg/day); max 32 mg/day.
- Zubsolv 5.7/1.4 mg SL tablet provides equivalent buprenorphine to a Suboxone 8/2 mg SL tablet.
- Bunavail 4.2/0.7 mg buccal film provides equivalent buprenorphine to a Suboxone 8/2 mg SL tablet.

MONITORING: LFTs.

COST: SL tablet, film, Bunavail: \$–\$\$ depending on dose; Zubsolv: \$\$\$\$

SIDE EFFECTS:

- Most common: Headache, pain, vomiting, sweating.
- Serious but rare: Hepatitis reported rarely, ranging from transient, asymptomatic transaminase elevations to hepatic failure; in many cases, patients had preexisting hepatic dysfunction.

MECHANISM, PHARMACOKINETICS, AND DRUG INTERACTIONS:

- Buprenorphine: opioid agonist (delta and mu receptors) and antagonist (kappa receptors); naloxone: opioid antagonist.
- Metabolized primarily through CYP3A4; t_{1/2}: 24–48 hours (naloxone: 2–12 hours).
- Avoid concomitant use with opiate analgesics: diminished pain control. Additive effects with CNS depressants. CYP3A4 inhibitors and inducers may affect levels of buprenorphine.

EVIDENCE AND CLINICAL PEARLS:

- Two randomized controlled trials in adolescents and young adults, with some kids as young as 13, found buprenorphine to be safe and effective.
- C-III controlled substance. Prescribing of SL tablets for opioid dependence will no longer be limited to prescribers with a DEA X-waiver. Moving forward, all prescribers renewing or applying for their DEA number will be required to take an eight-hour substance use treatment course and will be able to prescribe buprenorphine.
- Previously, there were limits to the number of patients an X-waivered provider could treat with buprenorphine. As of this book's publishing date, such limits are no longer expected.
- Naloxone is an opioid antagonist that is active only when injected; it is added to buprenorphine in order to reduce misuse via intravenous injection of a dissolved tablet.
- The SL film formulation's manufacturer claims it dissolves faster and tastes better than SL tablets. Actually, it is more likely a way for the manufacturer to switch users to a "new" product (with patent protection until 2025) rather than lose patients to generics.
- SL film should be placed at base of tongue to the side of midline; this allows patient to use two films at the same time if dose dictates.
- Zubsolv and Bunavail formulations have better bioavailability, hence the dose equivalencies noted above.
- Prescribers should be aware of the high risk for diversion and sale of buprenorphine films and tablets. Some regular opioid users periodically buy buprenorphine "off the street" and use it to combat cravings and withdrawal symptoms if their drug of choice is not readily available.

FUN FACT:

The manufacturer of Suboxone, Reckitt Benckiser, generates most of its revenue from selling home and personal care products like Lysol cleaners and Durex condoms.