
ESZOPICLONE (Lunesta) Fact Sheet [G]

Bottom Line:

Like other Z-drugs, eszopiclone is an effective hypnotic with less potential for dependence than the benzodiazepines. Dosing is simple and, apart from the bitter aftertaste, its rapid onset and long duration of action make it well accepted among patients. As with all sedatives/hypnotics, nightly use should be discouraged.

FDA Indications:

Insomnia (sleep onset and sleep maintenance).

Dosage Forms:

Tablets (G): 1 mg, 2 mg, 3 mg.

Dosage Guidance:

Start 1 mg QHS; may ↑ to max 3 mg QHS. Use lower doses in elderly (max 2 mg QHS). Take immediately before falling asleep and at least seven to eight hours before planned awakening time. Avoid administering with a high-fat meal (delays onset of effect).

Monitoring: No routine monitoring recommended unless clinical picture warrants.

Cost: \$

Side Effects:

- Most common: Somnolence, headache, unpleasant taste, dizziness, dry mouth.
- Serious but rare: Anaphylaxis, complex sleep-related behavior (sleep driving, cooking, eating, phone calls).
- Pregnancy/breastfeeding: Limited data suggest relative safety in pregnancy and breastfeeding.

Mechanism, Pharmacokinetics, and Drug Interactions:

- Selective GABA_A alpha-1 subunit agonist.
- Metabolized primarily through CYP3A4 and CYP2E1; t_{1/2}: 6 hours (9 hours in elderly).
- Avoid concomitant use with other CNS depressants, including alcohol (additive effects). Potent CYP3A4 inhibitors (eg, fluvoxamine, erythromycin) may increase effects of eszopiclone significantly, whereas CYP3A4 inducers (eg, carbamazepine) may decrease eszopiclone levels; adjust eszopiclone dosing.

Clinical Pearls:

- Schedule IV controlled substance.
- Non-benzodiazepine in structure, but binds to the GABA-benzodiazepine receptor complex like benzodiazepines do; selective for the alpha receptor subtype (causing hypnotic effects but none of the other pharmacologic effects of benzodiazepines); one of the Z-drugs. Eszopiclone is the s-enantiomer of zopiclone (a hypnotic agent available in other countries).
- Unlike benzodiazepines, eszopiclone does not disrupt sleep architecture (stages).
- Taking after a large, high-fat meal will delay its onset of action (by about an hour). Because of its rapid onset of action, eszopiclone should be taken immediately before bedtime or once difficulty falling asleep has occurred.
- Higher doses increase next-day impairment of driving and alertness.

Fun Fact:

Sepracor, the manufacturer, tried to get Lunesta approved in Europe under the brand name Lunivia, but the European agency determined that eszopiclone was too similar to the already-marketed zopiclone to qualify as a patentable product. Sepracor, realizing that it might encounter future generic competition, withdrew its application.