
DEXTROAMPHETAMINE TRANSDERMAL (Xelstrym) Fact Sheet

BOTTOM LINE:

A patch option in the amphetamine class of stimulants for kids who cannot use the wide array of oral stimulants available today. Minimal data and less experience than with methylphenidate transdermal (Daytrana), but similar to Daytrana in terms of high cost, lag time for onset of effect, and side effects.

PEDIATRIC FDA INDICATIONS:

ADHD (6–17 years).

ADULT FDA INDICATIONS:

ADHD.

DOSAGE FORMS:

Transdermal patch: 4.5 mg, 9 mg, 13.5 mg, 18 mg/9 hour.

PEDIATRIC DOSAGE GUIDANCE:

Start 4.5 mg/9 hour patch QAM (for initial therapy or for patients switching from other amphetamine preparations, regardless of dose). Apply to hip, upper arm, chest, upper back, or flank two hours before an effect is needed and remove nine hours after application (drug effects may persist for five hours after removal). Increase dose at weekly intervals by using next-higher-dose system. May be removed in <9 hours if shorter duration is desired or if late-day side effects occur. Rotate application sites. Max 18 mg QD.

MONITORING: Weight, height, BP/P; ECG.

COST: \$\$\$\$

SIDE EFFECTS:

- Most common: Decreased appetite, headache, insomnia, tic, abdominal pain, vomiting, nausea, irritability, increased BP and pulse. Application site reactions and sensitization may occur.
- Serious but rare: See class warnings in chapter introduction.

MECHANISM, PHARMACOKINETICS, AND DRUG INTERACTIONS:

- Stimulant that inhibits reuptake of dopamine and norepinephrine.
- Metabolized primarily through CYP450 2D6 (minor) and glucuronidation; $t_{1/2}$: 6.4 hours (11.5 hours in adults).
- Avoid use with MAOIs, antacids.

EVIDENCE AND CLINICAL PEARLS:

- Approval was based on a two-week, randomized, double-blind, placebo-controlled, crossover, modified-analog classroom study in 110 pediatric patients with ADHD ages 6–17. Efficacy measure assessed was the Swanson, Kotkin, Angler, M. Flynn, and Pelham (SKAMP) score, a scale specific to the classroom setting.
- Dextroamphetamine is the more potent d-isomer of amphetamine; it has potentially less peripheral effects (eg, motor tics) than racemic mix (eg, mixed amphetamine salts like Adderall, amphetamine, or methamphetamine).
- The manufacturer, Noven Pharmaceuticals, Inc. recommends against cutting the patch (eg to adjust the dosage).

FUN FACT:

While Daytrana is approved for pediatric use only, Xelstrym is also approved for use in adults.