

AMPHETAMINE (Adzenys XR-ODT, Dyanavel XR, Evekeo) Fact Sheet [G]

BOTTOM LINE:

Newer formulations of an old drug come with a high price tag. Stick to the usual amphetamine products like mixed amphetamine salts unless liquid or ODT dosing is absolutely necessary.

PEDIATRIC FDA INDICATIONS:

ADHD (Adzenys XR-ODT and Dyanavel XR: children >6; Evekeo: children >3).

ADULT FDA INDICATIONS:

ADHD (Adzenys XR-ODT); narcolepsy (Evekeo); obesity (Evekeo).

OFF-LABEL USES:

Treatment-resistant depression.

DOSAGE FORMS:

- **Tablets (Evekeo, [G]):** 5 mg, 10 mg (scored); **(Evekeo ODT):** 2.5 mg, 5 mg, 10 mg, 15 mg, 20 mg.
- **ER tablets (Dyanavel XR):** 5 mg (scored), 10 mg, 15 mg, 20 mg.
- **ER orally disintegrating tablets (Adzenys XR-ODT):** 3.1 mg, 6.3 mg, 9.4 mg, 12.5 mg, 15.7 mg, 18.8 mg.
- **ER oral suspension (Dyanavel XR):** 2.5 mg/mL; **(Adzenys ER):** 1.25 mg/mL.

PEDIATRIC DOSAGE GUIDANCE:

- Tablets (Evekeo, [G]):
 - Children 3–5: Start 2.5 mg QAM, increase in 2.5 mg/day increments weekly to maximum of 40 mg/day in divided doses.
 - Children 6–17: Start 5 mg QAM, increase in 5 mg/day increments weekly to maximum of 40 mg/day in divided doses.
- ER ODT (Adzenys XR-ODT) or Adzenys ER oral suspension:
 - Start 6.3 mg QAM, increase in 3.1 mg (2.5 mL)/day–6.3 mg (5 mL)/day increments weekly. Maximum of 18.8 mg (15 mL)/day (ages 6–12) or 12.5 mg (10 mL)/day (ages 13–17).
- ER oral suspension (Dyanavel XR):
 - Start 2.5–5 mg QAM, increase in 2.5–10 mg/day increments every four to seven days. Maximum 20 mg/day.

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

COST: [G]: \$\$\$; others: \$\$\$\$

SIDE EFFECTS:

- Most common: Abdominal pain, decreased appetite, weight loss, insomnia, headache, nervousness.
- Serious but rare: See class warnings in chapter introduction.

MECHANISM, PHARMACOKINETICS, AND DRUG INTERACTIONS:

- Stimulant that inhibits reuptake of dopamine and norepinephrine.
- Metabolized primarily via CYP2D6; $t_{1/2}$: 11 hours.
- Avoid use with MAOIs, antacids.

EVIDENCE AND CLINICAL PEARLS:

- FDA approved, many studies, history of clinical efficacy and safety, and larger effect size than non-stimulants.
- Racemic l-isomer is more potent than d-isomer in peripheral activity (more cardiovascular effects, tics).
- There may be less appetite suppressant effects with racemic mixture compared to dextroamphetamine.
- Divide IR (Evekeo) doses by intervals of four to six hours.
- Approximate equivalence doses of Adzenys XR-ODT and mixed amphetamine salts XR (Adderall XR) are: 3.1 mg = 5 mg, 6.3 mg = 10 mg, 9.4 mg = 15 mg, 12.5 mg = 20 mg, 15.7 mg = 25 mg, 18.8 mg = 30 mg.
- Shake Dyanavel XR oral suspension for extended release. 2.5 mg/mL = 4 mg of mixed amphetamine salts.
- Amphetamines are not interchangeable on a mg:mg basis. When switching, use a lowered dose and adjust.

FUN FACT:

The term “amphetamine” is the contracted form of the chemical “alpha-methylphenethylamine.” Its first pharmacologic use was when pharmaceutical company Smith, Kline and French sold amphetamine under the trade name Benzedrine as a decongestant inhaler.