
LISDEXAMFETAMINE (Vyvanse) Fact Sheet

BOTTOM LINE:

Vyvanse may have a gentler, “smoother” side effect profile than other amphetamines, and probably has a lower risk of diversion or misuse. However, its high cost means insurance companies don’t like to pay for it without prior authorizations.

PEDIATRIC FDA INDICATIONS:

ADHD (6–17 years).

ADULT FDA INDICATIONS:

ADHD; binge eating disorder (BED).

OFF-LABEL USES:

Narcolepsy; obesity; treatment-resistant depression.

DOSAGE FORMS:

- **Capsules:** 10 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg, 70 mg.
- **Chewable tablets:** 10 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg.

PEDIATRIC DOSAGE GUIDANCE:

Start 30 mg QAM, ↑ by 10–20 mg/day at weekly intervals. Target lowest effective dose; max 70 mg/day.

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

COST: \$\$\$\$

SIDE EFFECTS:

- Most common: Insomnia, anorexia, abdominal pain, irritability, agitation, tics, decreased appetite, increased heart rate, jitteriness, anxiety.
- 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 non-CYP-mediated hepatic and/or intestinal metabolism; $t_{1/2}$: lisdexamfetamine (inactive prodrug) <1 hour; dextroamphetamine (active metabolite) 12 hours. Dextroamphetamine metabolized by CYP2D6.
- Avoid use with MAOIs and antacids. Caution with antihypertensives (decreased efficacy of antihypertensive). Caution with 2D6 inhibitors, which may increase stimulant effects.

EVIDENCE AND CLINICAL PEARLS:

- At least five randomized controlled trials and a meta-analysis support efficacy of lisdexamfetamine in children with ADHD.
- Lisdexamfetamine is dextroamphetamine with the chemical lysine bound to it, which renders it inactive. It remains inactive until GI enzymes cleave off lysine and convert it to active dextroamphetamine. This means that people who misuse it can’t get high by snorting it or injecting it.
- Anecdotally, Vyvanse has a more gradual onset and offset than other stimulants, and may cause fewer side effects than other amphetamines.
- Taking with food decreases the effect slightly and delays peak levels by an hour. If patients feel it’s not “kicking in” fast enough, have them take it earlier or on an empty stomach.
- Lisdexamfetamine 70 mg is equivalent to 30 mg of mixed amphetamine salts (Adderall).
- While indicated for BED, it is not approved for use as a weight-loss or anti-obesity agent, nor has it been studied in children.

FUN FACT:

The manufacturer of Vyvanse pursued an indication as an add-on medication for depression, but disappointing results in clinical trials put an end to this effort.