## Lisdexamfetamine (Vyvanse®)

Mechanism of action: dopamine and norepinephrine reuptake inhibitor and releaser

**FDA-approved uses**: ADHD (ages 6 and older) and binge-eating disorder (in adults) **Off-label uses**: narcolepsy, treatment-resistant depression, amotivational states in dementia

<u>Dosing</u> and formulation: 30-70mg/day, start at 20-30mg/day and increase by 10-20mg each week. Available as capsules (which may be sprinkled if consumed immediately) and chewable tablets. A weak base that is renally eliminated: reduce doses with renal impairment, acidifying agents increase clearance, alkalinizing agents decrease clearance. Minor CYP2D6 substrate: lower dose or discontinue with inhibitor. Contraindicated with hypersensitivity to amphetamines or concurrent MAOI.

**Time to peak**: 1 hour for lisdexamfetamine, 3.5 hours for dextroamphetamine **Duration of clinical action**: 10-13 hours

## Side effects:

Frequent or bothersome: insomnia, headache, exacerbation of tics, anxiety, irritability, dizziness, tachycardia, hypertension, decreased appetite, weight loss, nausea, vomiting, diarrhea, upper abdominal pain, dry mouth, emotional lability

Rare but serious: psychosis (especially with parenteral abuse), mania or suicidal ideation, seizures, serotonin syndrome, hypertensive crisis, peripheral vasculopathy, cardiovascular adverse effects including sudden death in patients with pre-existing cardiac structural abnormalities often associated with a family history of cardiac disease (consider ECG with such history)

Monitoring: height, weight, blood pressure, heart rate (have lower threshold for cardiac evaluation)

## Special considerations:

- **Sedation** is possible from the medication keeping them up at night or not getting enough calories. **Insomnia** is not always due to the medication but may result from relapse, rebound, or withdrawal effects which improve with additional late-day small dose of a short-acting stimulant.
- For **appetite/weight loss**, consider giving medication after breakfast, supplementing with <u>high</u> <u>calorie</u> meals and snacks, stopping the medication temporarily, or adding cyproheptadine.
- Has less abuse potential compared to other stimulants due to the delayed time to peak and a longer duration of action.