MEMANTINE (Namenda, Namenda XR) Fact Sheet [G]

Bottom Line:
Memantine's indication (moderate to severe dementia only) may limit its use, but it does boast a unique mechanism of action and has some data to support its usefulness as an augmenter of donepezil. Many prescribers put the majority of their dementia patients on a combination of one of the cholinesterase inhibitors and memantine; we recommend adding memantine when dementia has progressed to the moderate or severe level, possibly earlier. There's no clinical benefit to using the more expensive XR version.

FDA Indications:
Moderate to severe Alzheimer's dementia.

Off-Label Uses:
Mild to moderate Alzheimer's dementia; other memory disorders; mild cognitive impairment; chronic pain.

Dosage Forms:
- **Tablets (G):** 5 mg, 10 mg.
- **Oral solution (G):** 2 mg/1 mL.
- **ER capsules (Namenda XR, [G]):** 7 mg, 14 mg, 21 mg, 28 mg.

Dosage Guidance:
- IR: 5 mg QD week one; 5 mg BID week two; 10 mg QAM and 5 mg QHS week three; 10 mg BID week four and beyond.
- XR: Start 7 mg QD; ↑ by 7 mg/day in increments of at least one week to max dose 28 mg/day (10 mg BID equivalent to 28 mg XR QD). Can be opened and sprinkled on food.

Monitoring: No routine monitoring recommended unless clinical picture warrants.

Cost: IR/ER: $; liquid: $$$

Side Effects:
Most common: Dizziness (XR), transient confusion (IR), headache (XR), diarrhea (XR), constipation, sedation.

Mechanism, Pharmacokinetics, and Drug Interactions:
- N-methyl-D-aspartate (NMDA) receptor antagonist.
- Metabolism primarily hepatic, but not CYP450; t ½: 60–80 hours.
- Pharmacokinetic interactions unlikely.

Clinical Pearls:
- FDA approved for moderate to severe Alzheimer's dementia only; may also be effective as augmentation added to donepezil in patients with moderate to severe Alzheimer's dementia (see memantine ER/donepezil fact sheet in this chapter).
- Data comparing 10 mg BID and 20 mg QD of IR formulation, as well as pharmacokinetic profile, support use of once-daily IR dosing; IR is used QD in Europe.

Fun Fact:
Forest Pharmaceuticals had announced it was discontinuing sales of the IR formulation as of August 15, 2014, in order to "focus on" the XR formulation—just ahead of the IR patent expiration. However, the New York attorney general filed an antitrust lawsuit, claiming this was an anticompetitive move, and Forest was forced to continue offering both Namenda IR and Namenda XR.