

Memantine N-methyl-d-aspartic acid (NMDA) Receptor Antagonist

Medication*	Initial Oral Dose (mg)	Dosing Frequency	Formulation	Titration Dose and Schedule	Average Total per day (mg)	Common Side Effects	Medication Administration
memantine (Ebixa)	5	initially once daily then bid	tablet	<ul style="list-style-type: none"> • 5mg qam; • 5mg bid; • 5mg qam and 10 mg at 1700 hours; • 10mg bid. <p>1 week between dosage increases as per above</p>	20 Use lower doses in patients with renal impairment	<ul style="list-style-type: none"> • headache • dizziness • confusion • constipation 	<ul style="list-style-type: none"> • nil

*Please consult with the product monograph for more detailed information.

1. Key Messages/Considerations:

- Memantine is indicated for moderate to severe Alzheimer’s dementia, alone or often in combination with cholinesterase inhibitors. Pharmacare special authority approval may be possible by exception;
- CCCDTD4 (2012):
 - “The combination of cholinesterase inhibitors and memantine is logical, but an additive benefit has not been conclusively demonstrated”;
 - “There is insufficient evidence for or against cholinesterase inhibitors, memantine, SSRIs, or trazodone as first-line therapy for neuropsychiatric symptoms”
- Sodium bicarbonate and carbonic anhydrase inhibitors (e.g. acetazolamide) decrease memantine clearance by 80%;
- Concurrent use with compounds chemically related to NMDA antagonists (e.g. amantadine, ketamine or dextromethorphan) is not recommended – consult pharmacist for individual use;
- Reassess the need for continued therapy in late stage illness.

2. References and other medication information:

- Canadian Consensus Conference on Diagnosis and Treatment of Dementia (CCCDTD4), 2012, retrieved July 30th, 2013 online from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3516356/> .
- Clinical Handbook of Psychotropic Drugs, 18th Edition. (2009) Hogrefe and Huber.
- CPS - Compendium of Pharmaceutical and Specialities (2013).
- Lexicomp online drug information (www.online.lexi.com).
- P.I.E.C.E.S. Psychotropic Template (2009), retrieved online June 14th, 2013 from http://www.piecescanada.com/pdf/Psychotropic_Template_Jan09.pdf
- Stahl, Steven M (2007) Essential Psychopharmacology: The Prescriber's Guide. Cambridge University Press.
- Tool on Pharmacological Treatment of Behavioral Symptoms of Dementia in Long Term Care Facilities for Older Adults, based on: Canadian Coalition for Seniors' Mental Health (CCSMH) National Guidelines: The Assessment and Treatment of Mental Health Issues in Long Term Care Homes, retrieved online May 30th, 2013 from: http://www.ccsmh.ca/pdf/ccsmh_ltc_meds_front.pdf.