

DRUG CARDS | DAILY



NAME(S): **Generic:** memantine (me MAN teen) | **Brand:** Namenda

PHARMACOLOGIC & THERAPEUTIC CLASS: N-Methyl-D-Aspartate (NMDA) Receptor Antagonist

DOSAGE FORM & STRENGTH: **ER Caps:** 7 mg, 14 mg, 21 mg, 28 mg | **Soln:** 2 mg/mL, 10 mg/5 mL | **Tabs:** 5 mg, 10 mg

INDICATION(S) & DOSING(S): ADULTS

1. **Moderate to Severe Alzheimer's Disease:** Tx Dose of 10 mg PO bid. Initiate 5 mg PO qd w/ 5 mg/day increases every week up to a max of 20 mg/day. Doses greater than 5 mg/days should be administered twice daily.
- **OFF LABEL | Dementia** (i.e. Parkinson Disease-Related Dementia, Lewy Body Dementia, or Vascular Dementia): Dosing is similar to when treating Alzheimer's Disease.

INDICATION(S) & DOSING(S): PEDIATRICS (No applicable indications at this time)

MECHANISM OF ACTION & PHARMACOLOGY

- **MOA:** It is purposed that the overstimulation of glutamate receptors lead to excitotoxicity and neuronal cell death causing Alzheimer's disease. Memantine is an uncompetitive antagonist of glutamate receptors located throughout the brain; specifically the N-methyl-D-aspartate (NMDA) glutamate receptor. Memantine blocks receptor function affecting magnesium binding and suppresses excessive stimulation without affecting regular neurotransmission. | The drug is well **absorbed**. | Partially **metabolized** hepatically with 3 metabolites formed that have minimal activity. | ~74% **excreted** in the urine w/ pH-dependent tubular reabsorption in which alkaline urine reduces excretion. | **Half-life elimination** is ~60-80 hours. | Memantine is ~45% **protein bound**.

SPECIAL POPULATIONS & CONSIDERATIONS

- **Renally Impaired:** AUC increased by 4-115% and half-life increased by 18-95% based on mild-severe impairment. | **Hepatically Impaired:** Half-life elimination increases by ~16% in moderate impairment. | **Women** have ~45% greater exposure of the medication compared to men. | **IR to ER dose Conversions:** 10 mg/day IR comparable to 14 mg/day ER. 20 mg/day IR comparable to 28 mg/day ER.

SIDE EFFECTS

- **Common:** Aggression, fatigue, back pain, cough, dizziness, headache, constipation, anxiety, and depression.
- **Serious:** Stevens-Johnson Syndrome.

DRUG INTERACTIONS

- **Considerations for DI:** MATE1 substrate, OCT2 substrate, OCT1&2 inhibitor, and urine pH sensitive.
- **Some contraindicated and drug(s) of note:** Avoid the use of dofetilide. Monitor with procainamide. Cautions with cimetidine, amantadine, entecavir, ondansetron, verapamil, and pramipexole.

MONITORING PARAMETERS

- Cr at baseline and periodic test of: Cognitive function, Activities of daily living (ADLs), and Instrumental Activities of Daily Living (IADLs)



PATIENT COUNSELING INFORMATION

- Memantine is **approved** for use in **Alzheimer's Disease**.
- It also has **off label** uses in the treatment of various forms of **Dementia**.
- Very important to note that memantine **does not cure** Alzheimer's Disease.
- Memantine **may only improve** functions such as memory, awareness, and the ability to perform daily functions.
- Taken **with or without food**.
- **ER caps** may be **taken whole or opened** with the contents taken in entirety.

REFERENCE(S) & RESOURCE(S)

1. <https://online.epocrates.com/drugs/356710/Namenda/Monograph>
2. <https://www.drugs.com/ppa/memantine.html>
3. <https://www.webmd.com/drugs/2/drug-77932-377/memantine-oral/memantine-oral/details>

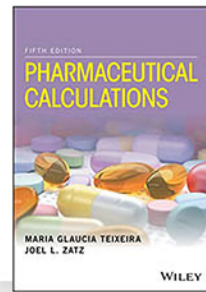


PREPARE FOR SUCCESS!

Comprehensive (NAPLEX)



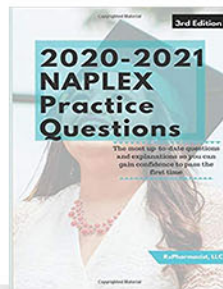
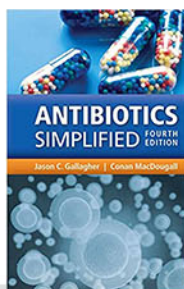
Calculations (NAPLEX)



Pharmacy Law (MPJE)



Supplemental



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DRUG CARDS DAILY

Monday at 7 am EST
(6 am CST, 4 am PST)

HEY NEW GRAD!

So you landed that perfect job offer or got the perfect match for your PGY1 and now the **ONLY** thing standing in your way is passing the NAPLEX and MPJE.

Here are some NAPLEX & MPJE prep recommendations to help you do everything you can to **pass the first time!**

HEY STUDENT!

When I was P1 one of the best pieces of advice I got from those before me was to use a NAPLEX Prep book while learning each topic.

This helps focus your learning and the repetition helps to retain info and indirectly prepare you for the NAPLEX



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