

DRUG CARDS | DAILY



NAME(S): **Generic:** rosuvastatin (roe soo va STAT in) | **Brand:** Crestor, Ezallor Sprinkle

THERAPEUTIC CATEGORY: **Antilipemic Agent** | HMG-CoA Reductase Inhibitor

DOSAGE FORM & STRENGTH: **Tabs:** 5 mg, 10 mg, 20 mg, 40 mg | **Caps (Sprinkle):** 5 mg, 10 mg, 20 mg, 40 mg

INDICATION(S) & DOSING(S): ADULTS

1. **Hypercholesterolemia; Mixed dyslipidemia, Hypertriglyceridemia; Dysbetalipoproteinemia:** General dose range b/t 5-40 mg PO qd. When initiating start b/t 10-20 mg PO qd. Max of 40 mg/day. Dose adjustments every 2-4 weeks. Consider lower initiation dose of 5 mg PO qd in Asian pts due to risk of increased drug levels.
2. **Homozygous familial hypercholesterolemia:** General dose range b/t 20-40 mg PO qd. When initiating start at 20 mg PO qd. Max of 40 mg/day. Dose adjustment may be made every 2-4 weeks. Consider lower initiation dose of 5 mg PO qd in Asian population due to risk of increased drug levels.
3. **Cardiovascular event prevention:** General dosing range b/t 5-40 mg PO qd w/ similar dosing initiation, adjustments, and cautions as previously mentioned.
4. **Atherosclerotic cardiovascular disease (ASCVD):** General dosing range b/t 5-40 mg PO qd w/ similar dosing initiation, adjustments, and cautions as previously mentioned. Best to follow the most current ACC/AHA cholesterol guidelines.
- **OFF LABEL | Transplantation (post heart or post kidney):** Rosuvastatin was found to be effective in reducing cardiac allograft vasculopathy and improve long-term outcomes and reduce cardiovascular events following kidney transplantation.

INDICATION(S) & DOSING(S): PEDIATRICS

1. **Heterozygous familial hypercholesterolemia:** **[8-9 years old]** Dosing begins at 5-10 mg PO qd with a max of 10 mg/day. Dose adjustments made every 4 weeks. Consider starting at lower end of dosing range in Asian patients. **[10-17 years old]** Dosing begins at 5-10 mg PO qd with a max of 20 mg/day. Dose adjustment may be made every 4 weeks. Consider starting at lower end of dosing range in Asian patients.
2. **Homozygous familial hypercholesterolemia:** **[7-17 years old]** Common dose of 20 mg PO qd. Consider 5 mg PO qd in Asian patients.

MECHANISM OF ACTION & PHARMACOLOGY

- **MOA:** Inhibition of cholesterol synthesis by inhibiting HMG-CoA reductase. HMG-CoA reductase is the rate-limiting enzyme of cholesterol synthesis. | 10% of rosuvastatin is **metabolized** hepatically via the CYP2C9 pathway. | 90% is **excreted** unchanged fecally. | **Onset of action** occurs w/in 1 week w/ max effects at 4 weeks. | The **time to peak** in the plasma is between 3- 5 hours. | **Half-Life Elimination** occurs in about 19 hours. | 88% **protein bound**.

SPECIAL POPULATIONS & CONSIDERATIONS

- **Renal Impairment:** If CrCl <30 initiation dosing is at 5 mg qd w/ max of 10 mg qd. If hemodialysis initiation dosing at 2.5 mg qd w/ max of 10 mg qd.
- **Hepatic Impairment:** Contraindicated if active hepatic disease or unexplained LFT elevation.



- **Contraindicated or Exercise Caution:** Pregnancy, myopathy, unexplained LFT elevation, alcohol abuse, 65 years of age or older, Asian patients, females of reproductive age, renally/hepatically impaired, diabetic, and pts w/ hypothyroidism
- **Pregnancy:** Avoid use if possible. D/c use 1-2 months before conceiving.
- **Lactation:** Avoid breastfeeding. Drug excreted into milk. (remember t_{1/2} was 19 hours)
- **Asians:** Increased drug levels, increased risk of toxic effects.
- **Dietary:** Avoid red yeast rice due to similarity to HMG-CoA reductase inhibitor lovastatin.

SIDE EFFECTS

- **General:** Headache, myalgia, abdominal pain, nausea, dizziness, constipation, insomnia, gynecomastia, cognitive impairment, development or worsening of diabetes
- **Caution:** Mild memory issues and confusion
- **Serious:** Foamy urine (serious kidney issues); Muscle pain/tenderness/weakness w/ fever (rhabdomyolysis and autoimmune myopathy)

DRUG INTERACTIONS

- **Characteristics for drug interactions:** BCRP substrate, NTCP substrate, OATP1B1/1B3/2B1, gastric pH sensitive, and rhabdomyolysis.
- **Drugs to avoid:** Cyclosporine, fenofibrate, and gemfibrozil
- **Drugs to monitor and modify treatment on:** Atenolol, betaxolol, clopidogrel, daptomycin, ezetimibe, and warfarin, among others.

MONITORING PARAMETERS

- Baseline **Creatine (Cr)**, **LFTs**, **CPK** (creatin phosphokinase) if myopathy risk, and then periodically prn.

PATIENT COUNSELING INFORMATION

- Rosuvastatin is used to **lower bad cholesterol (LDL) and triglycerides** and **increase good cholesterol (HDL)**.
- It is also used to **slow the progress of heart disease** and to **lower the chance of heart attack and stroke**.
- If a dose is missed take it as soon as you can but if it is >12 hours then skip the dose.
- Common side effects are **headache**, abdominal pain, nausea, **joint pain**, and weakness.
- **Stop for a short period of time** if you have uncontrolled seizures, electrolyte imbalances, severely low blood pressure, severe infection, or surgery or medical emergencies.

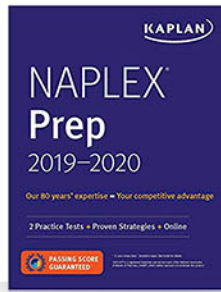
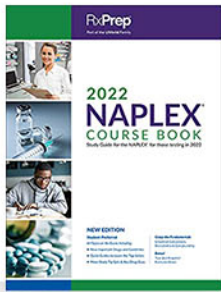
REFERENCE(S) & RESOURCES(S)

1. <https://online.epocrates.com/drugs/347510/rosuvastatin/Monograph>
2. <https://www.drugs.com/ppa/rosuvastatin.html>
3. <https://www.webmd.com/drugs/2/drug-76701/rosuvastatin-oral/details>
4. 2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease: Executive Summary. <https://www.ahajournals.org/doi/pdf/10.1161/CIR.0000000000000677>
5. Review of ACC/AHA lipid guidelines by ccjm.org. <https://www.ccjm.org/content/ccjom/87/4/231.full.pdf>

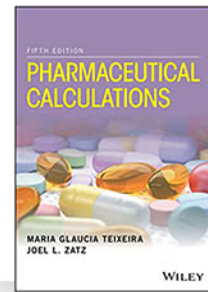
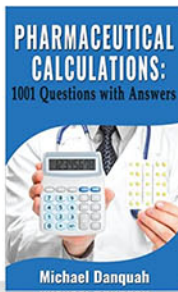
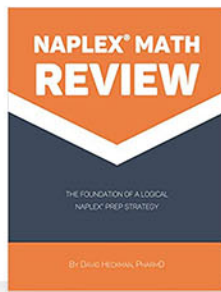
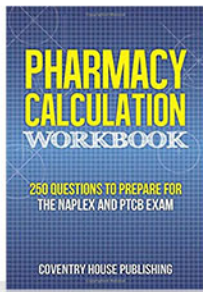


PREPARE FOR SUCCESS!

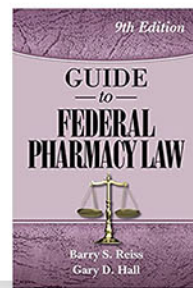
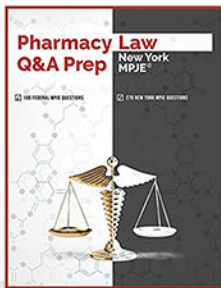
Comprehensive (NAPLEX)



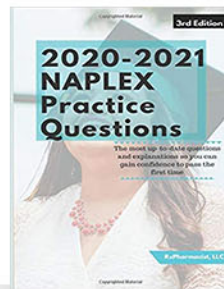
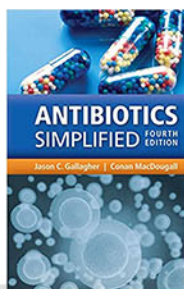
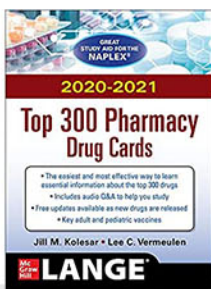
Calculations (NAPLEX)



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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