

MARAVIROC (MVC)* (Updated May 2010)	
Trade Name	Selzentry
Classification	CCR5 Co-receptor Antagonist
Form	150-, 300-mg film-coated tablets
Dosing Recommendations	<p>300 mg twice daily</p> <p>Indicated in combination with other antiretroviral agents in adult patients infected with CCR5-tropic HIV-1</p> <p>With other drugs that are not strong CYP3A inhibitors or CYP3A inducers, including tipranavir/ritonavir, nevirapine, all NRTIs, and enfuvirtide – 300 mg twice daily</p>
Hepatic Impairment Dosing	Dose adjustment necessary with severe hepatic impairment; no dose adjustment likely with mild to moderate hepatic impairment. Use with caution in patients receiving a concomitant/potent CYP3A4 inhibitor
Renal Impairment Dosing	<p>Do not use in patients with severe renal impairment or ESRD (CrCl <30 mL/min) who are receiving potent CYP3A inhibitors or CYP3A inducers.</p> <p>For patients with severe renal impairment or ESRD not receiving potent CYP3A inhibitors or inducers who experience any symptoms of postural hypotension, reduce maraviroc dose to 150 mg twice daily. No studies have been performed in subjects with severe renal impairment or ESRD co-treated with potent CYP3A inhibitors or inducers. Therefore, no dose for maraviroc can be recommended in this setting.</p> <p>No dose adjustment likely with mild to moderate renal impairment (CrCl ≥30 mL/min).</p>
Food Effect	Can be taken with or without food
Oral Bioavailability	23-33%
Serum Half-life	14-18 hours
Route of Metabolism	<p>Hepatic metabolism via cytochrome P450 3A4</p> <p>20% of metabolite and parent drug excreted in the urine</p> <p>P-gp substrate</p>
Storage	Room temperature
Adverse Events	<p>More cardiovascular events including myocardial ischemia and/or infarction were observed in treatment-experienced patients who received maraviroc compared to placebo (1.3% vs. 0%), but clinical significance unclear. Use with caution in patients at increased risk of cardiovascular events.</p> <p>More treatment-naïve patients experienced virologic failure and developed lamivudine resistance compared to efavirenz-based regimen; however, this was likely due to the less sensitive trophile assay used during the study period.</p> <p>Postural hypotension at higher doses.</p>

	<p>Use with caution in patients with mild or moderate renal impairment. If postural hypotension occurs in patients with severe renal impairment or ESRD, decrease MVC dose to 150 mg twice daily.</p> <p>Risk of immune reconstitution syndrome, potential theoretical risk of malignancy.</p> <p>Cough, pyrexia, upper respiratory tract infections, rash, musculoskeletal symptoms, abdominal pain, and dizziness.</p>
FDA Pregnancy Category	B
Long-Term Animal Carcinogenicity Studies	Negative in mice Positive in rats – exposures were 11 times higher than in humans
Animal Teratogen Studies	Negative
Black Box Warnings	Hepatotoxicity has been reported which may be preceded by evidence of a systemic allergic reaction (e.g., pruritic rash, eosinophilia, or elevated IgE). Consider discontinuing maraviroc in patients with signs or symptoms of hepatitis, or with increased liver transaminases combined with rash or other systemic symptoms. Use with caution in patients with preexisting liver dysfunction or co-infected with viral hepatitis B or C
Drugs to Avoid	St. John's wort
Cautious Use or Dose Adjustment	
With CYP3A inhibitors (with or without a CYP3A inducer)	<p>Increased MVC serum concentrations with co-administration. ↓ MVC to 150 mg twice daily when used in combination with PIs (except tipranavir/ritonavir), delavirdine, ketoconazole, itraconazole, clarithromycin, and other strong CYP3A inhibitors (e.g., nefazodone, telithromycin)</p> <p>150 mg twice daily in combination with lopinavir/ritonavir plus efavirenz <i>or</i> saquinavir/ritonavir plus efavirenz</p>
With all NRTIs, enfuvirtide, tipranavir/ritonavir, nevirapine, raltegravir, and other drugs that are not potent CYP3A inhibitors or CYP3A inducers	<p>300 mg twice daily</p> <p>150 mg twice daily if patient with severe renal impairment or ESRD experiences postural hypotension</p>
With CYP3A inducers (without a strong CYP3A inhibitor)	600 mg twice daily with efavirenz, rifampin, carbamazepine, phenobarbital, and phenytoin. Some experts recommend closely monitoring for postural hypotension during the first 10-14 days.
* A viral tropism assay (Trofile, Monogram Biosciences) is required before initiating therapy with maraviroc.	