

MWLCEMS SYSTEM
Continuing Education Packet

Eptifibatide

Brand Name: Integrilin

High Alert Medication:

The Institute for Safe Medication Practice includes this medication among its list of drugs which have a heightened risk of causing significant patient harm when used in error.

Mechanism of Action:

Eptifibatide is a platelet glycoprotein antagonist. This agent reversibly prevents fibrinogen, von Willebrand's factor from binding to the glycoprotein IIb/IIIa receptor, inhibiting platelet aggregation and prevents thrombosis.

Pharmacokinetics:

Onset of action: Within 1 hour

Duration: Platelet function restored approximately 4 hours following discontinuation of Eptifibatide.

Half-life: 2.5 hours

Excretion: Primarily urine; significant renal impairment may alter disposition of the components

Indications:

Treatment of patients with acute coronary syndrome (unstable angina/non-ST-segment elevation myocardial infarction [UA/NSTEMI]), including patients who are to be managed medically and those undergoing percutaneous coronary intervention (PCI including angioplasty, intracoronary stenting).

Contraindications:

Hypersensitivity to Eptifibatide or any component of the product; active abnormal bleeding within the previous 30 days or a history of bleeding disorders; history of stroke within 30 days or a history of hemorrhagic stroke; severe hypertension (systolic blood pressure greater than 200 mm HG or diastolic blood pressure greater than 100 mm HG) not adequately controlled on antihypertensive therapy; major surgery within the preceding 6 weeks; current or planned administration of another parenteral GPIIb/IIIa inhibitor; dependency on hemodialysis.

Warnings/Precautions:

Concerns related to adverse effects:

- **Bleeding:** the most common complication is bleeding, including retroperitoneal, pulmonary and spontaneous GI and/or bleeding GU bleeding; monitor closely for bleeding, especially the arterial access site for the cardiac catheterization. Patients < 70 kg may be at greater risk for major and minor bleeding. Use with extreme caution in patients with previous history of GI

disease, recent thrombolytic therapy and chronic renal insufficiency. Minimize invasive procedures, including venous punctures and IM injections.

Disease related concerns:

- Renal impairment: Should be used with extreme caution in patients with renal dysfunction, dosage adjustment is required. Use is contraindicated in patients dependent on hemodialysis.

Adverse Reactions:

Bleeding is the major drug-related adverse effect. The cardiac catheterization arterial access site is often the primary source of bleeding complications, so the site needs to be monitored carefully.

Common adverse effects listed by frequency:

Seen in greater than 10% of patients – Bleeding (major: 1 – 11%; minor: 3 – 14%; transfusion required 2 – 13%)

Seen in 1 – 10% of patients: Hypotension, thrombocytopenia, injections site reaction

Seen in less than 1%: (Limited to important or life-threatening complications): Acute profound thrombocytopenia, fatal bleeding events, GI hemorrhage, pulmonary hemorrhage

Dosage:

After the initial bolus of 180mcg/kg a maintenance infusion is run at 2mcg/kg/min for 72 – 96 hours.

Special Considerations:

- Observe patient for mental status changes, hemorrhage, assess nose and mouth mucous membranes, puncture sites for oozing, ecchymosis and hematoma formation, and examine urine, stool and emesis for presence of blood; gentle care should be used when removing any dressings.
- Limit venipuncture, avoid noncompressible IV sites.
- Avoid automatic BP cuffs.

MWLCEMS System
Eptifibatide
Post Test

Name: _____

Date: _____

Department: _____

1. The brand name for Eptifibatide is
 - A. Reopro
 - B. Aggrastat
 - C. Plavix
 - D. Integrilin

2. Eptifibatide works by
 - A. Inhibiting platelet aggregation
 - B. Blocking the conversion of prothrombin to thrombin
 - C. Depressing Vitamin K dependent coagulation factors
 - D. Stimulation the body's own clot-dissolving mechanisms

3. List the indications for Eptifibatide.

4. List 4 contraindications for the use of Eptifibatide.
 - A. _____
 - B. _____
 - C. _____
 - D. _____

5. The half-life of Eptifibatide is _____.

6. Eptifibatide is contraindicated for patients dependent on hemodialysis.
 - A. True
 - B. False

7. The most frequent complication seen with Eptifibatide is bleeding. The site that is often the source of bleeding complications is
 - A. Stomach
 - B. Lungs
 - C. Cardiac catheterization access site

D. Brain

8. Platelet function restored approximately _____ following discontinuation of Eptifibatide.

9. An automatic blood pressure cuff is the best way to monitor BP for a patient on Eptifibatide.

A. True

B. False

10. The maintenance infusion rate of Eptifibatide is:

A. 2mcg/kg/hr

B. 2mcg/kg/min

C. 2ml/min

D. 2m/kg/hr