Intermountain® Healthcare

Clinical Guideline — October 2016

Abciximab (ReoPro®)

For Acute Coronary Syndrome (ACS) with Percutaneous Coronary Intervention (PCI)

➢ INDICATIONS (See sidebar for contraindications)

Abciximab (ReoPro) – used in combination with aspirin and unfractionated heparin (UFH) or low molecular weight heparin (LMWH) – is indicated as an adjunct to **percutaneous coronary intervention (PCI)** for the prevention of cardiac ischemic complications with **acute coronary syndrome (ACS)**.

➢ DOSAGE AND ADMINISTRATION FOR ACS WITH PCI

(Please see page 2 for elective and rescue administration)

1. **Start with weight adjusted bolus** (see **Table 1** below). To administer the bolus, withdraw appropriate amount from undiluted vial and give IV push.
2. **Follow bolus with continuous infusion.** To mix the maintenance infusion, place appropriate amount of abciximab (ml) in 250 ml of diluent (D5W or NS.) Mix well. See infusion rate based on patient weight in **Table 1**.
3. **Obtain a platelet count 3 hours after starting infusion.**

Table 1. Abciximab dosing for ACS with PCI

Patient Weight (kg)	BOLUS		INFUSION	
	Amount of abciximab for BOLUS *(0.25 mg/kg)* mg	Amount of abciximab for BOLUS ml	Amount of abciximab for INFUSION ml	INFUSION RATE mcg/kg/min
49-52 kg	13 mg	6.5 ml	2.2 ml = 4.4 mg	0.125 mcg/kg/min
53-56 kg	14 mg	7.0 ml	2.4 ml = 4.8 mg	0.125 mcg/kg/min
57-61 kg	15 mg	7.5 ml	2.6 ml = 5.2 mg	0.125 mcg/kg/min
62-65 kg	16 mg	8.0 ml	2.8 ml = 5.6 mg	0.125 mcg/kg/min
66-70 kg	17 mg	8.5 ml	3.0 ml = 6.0 mg	0.125 mcg/kg/min
71-74 kg	18 mg	9.0 ml	3.2 ml = 6.4 mg	0.125 mcg/kg/min
75-79 kg	19 mg	9.5 ml	3.4 ml = 6.8 mg	0.125 mcg/kg/min
				mcg/min
80-83 kg	20 mg	10.0 ml	3.6 ml = 7.2 mg	10 mcg/min
84-87 kg	21 mg	10.5 ml	3.6 ml = 7.2 mg	10 mcg/min
88-91 kg	22 mg	11.0 ml	3.6 ml = 7.2 mg	10 mcg/min
92-95 kg	23 mg	11.5 ml	3.6 ml = 7.2 mg	10 mcg/min
96-99 kg	24 mg	12.0 ml	3.6 ml = 7.2 mg	10 mcg/min
100-103 kg	25 mg	12.5 ml	3.6 ml = 7.2 mg	10 mcg/min
104-107 kg	26 mg	13.0 ml	3.6 ml = 7.2 mg	10 mcg/min
108-111 kg	27 mg	13.5 ml	3.6 ml = 7.2 mg	10 mcg/min
112-115 kg	28 mg	14.0 ml	3.6 ml = 7.2 mg	10 mcg/min
116-119 kg	29 mg	14.5 ml	3.6 ml = 7.2 mg	10 mcg/min
120-123 kg	30 mg	15.0 ml	3.6 ml = 7.2 mg	10 mcg/min
124-127 kg	31 mg	15.5 ml	3.6 ml = 7.2 mg	10 mcg/min
128-131 kg	32 mg	16.0 ml	3.6 ml = 7.2 mg	10 mcg/min
132-135 kg	33 mg	16.5 ml	3.6 ml = 7.2 mg	10 mcg/min
136-139 kg	34 mg	17.0 ml	3.6 ml = 7.2 mg	10 mcg/min
140-143 kg	35 mg	17.5 ml	3.6 ml = 7.2 mg	10 mcg/min

Can be infused in the same line as heparin, nitroglycerin, dobutamine, dopamine, epinephrine, norepinephrine, lidocaine, and nitroprusside.

CONTRAINDICATIONS

- Active internal bleeding
- Recent (within 6 weeks) gastrointestinal (GI) or genitourinary (GU) bleeding of clinical significance
- History of CVA within two years, or CVA with a significant residual neurological deficit
- Bleeding diathesis
- Administration of oral anticoagulants within seven days unless prothrombin time is ≤ 1.2 times control
- Thrombocytopenia (<100,000 cells/μL)
- Recent (within 6 weeks) major surgery or trauma
- Intracranial neoplasm, arteriovenous malformation, or aneurysm
- Severe uncontrolled hypertension
- Presumed or documented history of vasculitis
- Use of or intention to use intravenous Dextran prior to or during the procedure

These guidelines apply to common clinical circumstances, and may not be appropriate for certain patients and situations. The treating clinician must use judgement in applying guidelines to the care of individual patients.

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➢ ELECTIVE AND RESCUE ADMINISTRATION

Table 2. Elective and rescue administration of abciximab

SITUATION	ABCIXIMAB DOSING	HEPARIN DOSING	MANAGEMENT OF THE PATIENT POST-PROCEDURE
Elective (prophylactic) administration	• Administer at start of procedure, immediately after obtaining vascular access. • Give initial IV bolus of 0.25 mg/kg (about 17 mg). • Begin IV infusion at 0.125 mcg/kg/min (max = 10 mcg/min) to last for 12 hours. • Start aspirin.	• Give initial bolus of IV heparin of 70 units/kg (about 5000 units), check the ACT for a target of 200-230 seconds, and give additional heparin as needed to reach target ACT. • If patient is already on heparin, check ACT before the initial bolus and after abciximab is administered. Adjust heparin dosing to an ACT of 200-230 seconds. • Monitor ACTs every 90 minutes during procedure to maintain target ACT of 200-230 seconds. • DO NOT place patient on continuous heparin drip.	• DO NOT place patient on immediate post-procedural IV heparin. • Remove sheaths when ACT <150 seconds while still on abciximab. • Only if necessary, restart IV heparin or enoxaparin (Lovenox) > 4 hours after sheath removal. • Continue abciximab for 12 hours after procedure. • Obtain platelet count 3 hours after initial abciximab. • Continue aspirin (and P2Y12 inhibitor if coronary stent).
Rescue administration	Mid-procedure, after full dose heparin to ACT > 300 seconds was already given: • Give initial IV bolus of 0.25 mg/kg. • Begin IV infusion at 0.125 mcg/kg/min (max = 10 mcg/min) to last for 12 hours.	• Give no more heparin boluses and discontinue any heparin infusion. • Proceed to complete angioplasty procedure. • Check ACT at end of procedure. Give protamine in 10 mg boluses; repeat ACT after each bolus until ACT is 200-230 seconds. • Use caution in administering protamine to diabetic patients on NPH insulin.	• DO NOT place patient on immediate post-procedural IV heparin. • Remove sheaths when ACT <150 seconds while still on abciximab. • Only if necessary, restart IV heparin or enoxaparin (Lovenox) > 4 hours after sheath removal. • Continue abciximab for 12 hours after procedure. • Obtain platelet count 3 hours after initial abciximab bolus. • Start aspirin (and P2Y12 inhibitor if coronary stent).

➢ MANAGEMENT OF SPECIAL CIRCUMSTANCES

Table 3. Management of special circumstances with abciximab

SITUATION	MANAGEMENT GUIDELINES	
If major bleeding complication occurs	1. Immediately discontinue abciximab. Perform platelet transfusions as required to control bleeding. 2. Immediately discontinue IV heparin. Administer protamine as required to control bleeding.	
If cardiac surgery is required *(Duration of platelet inhibition is 24-48 hours)*	1. Discontinue abciximab 48 hours before surgery if possible. 2. If surgery is required sooner: - Before heparinizing for CP bypass, draw ACT and give a titrated dose of heparin to obtain ACT of 400-500 seconds. - Transfuse two 8-packs of platelets as the patient is coming off pump. - Administer further platelet transfusions only as required to control bleeding after surgery	
If post-abciximab thrombocytopenia occurs	Platelet count	Action
	> 100,000	• Do not alter treatment.
	40,000 to 100,000	• Redraw stat platelet count in a citrate preserved tube. If similar count of < 100,000, immediately discontinue abciximab. • Perform platelet transfusions only as required to control bleeding. • Repeat platelet count every 12 hours until > 100,000.
	< 40,000	• Immediately discontinue abciximab. • Perform platelet transfusion as required to control bleeding or consider administering to maintain platelet count > 40,000. • Repeat platelet count every 12 hours until >100,000. • Consider stopping heparin.