

Table 9 Recommended doses of antithrombotic agents in the acute care of patients with chronic kidney disease

Agent	Normal renal function and stage 1–3 CKD (eGFR ≥ 30 mL/min/1.73 m ²)	Stage 4 CKD (eGFR 15 to < 30 mL/min/1.73 m ²)	Stage 5 CKD (eGFR < 15 mL/min/1.73 m ²)
Aspirin	Loading dose of 150–300 mg orally followed by a maintenance dose of 75–100 mg/day	No dose adjustment	No dose adjustment
Clopidogrel	Loading dose of 300–600 mg orally followed by 75 mg/day	No dose adjustment	No information available
Ticagrelor	Loading dose of 180 mg orally followed 90 mg twice a day	No dose adjustment	Not recommended
Prasugrel	Loading dose of 60 mg orally followed by 10 mg/day	No dose adjustment	Not recommended
Enoxaparin	1 mg/kg s.c. twice a day, 0.75 mg/kg s.c. twice daily in patients ≥ 75 years old	1 mg/kg s.c. once a day	Not recommended
UFH	Before coronary angiography: Bolus 60–70 IU/kg i.v. (maximum 5000 IU) and infusion (12–15 IU/kg/hour, maximum 1000 IU/hour), target aPTT 1.5–2.5 x control During PCI: 70–100 IU/kg i.v. (50–70 IU/kg if concomitant with GP IIb/IIIa inhibitors)	No dose adjustment	No dose adjustment
Fondaparinux	2.5 mg s.c. once a day	Not recommended if eGFR < 20 mL/min/1.73 m ² or dialysis	Not recommended
Bivalirudin	Bolus 0.75 mg/kg i.v., infusion 1.75 mg/kg/hour If eGFR ≥ 30 and ≤ 60 mL/min/1.73 m ² reduce infusion dose to 1.4 mg/kg/hour	Not recommended	Not recommended
Abciximab	Bolus of 0.25 mg/kg i.v. followed by 0.125 μ g/kg/min infusion (maximum 10 μ g/min)	Careful consideration of bleeding risk	Careful consideration of bleeding risk
Eptifibatide	Bolus ^a of 180 μ g/kg i.v. followed by an infusion of 2.0 μ g/kg/min for up to 18 hours If eGFR < 50 mL/min/1.73 m ² reduce infusion dose to 1.0 μ g/kg/min	Not recommended	Not recommended
Tirofiban	Bolus 25 μ g/kg i.v. followed by 0.15 μ g/kg/min	Reduce infusion rate to 50%	Not recommended

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aPTT = activated partial thromboplastin time; CKD = chronic kidney disease; eGFR = estimated glomerular filtration rate; GP = glycoprotein; IU = international units; i.v. = intravenous; PCI = percutaneous coronary intervention; s.c. = subcutaneous; UFH = unfractionated heparin.

^aDouble bolus if administered during primary PCI.