

APPENDIX 3. OVERVIEW for MANAGEMENT ACUTE CORONARY SYNDROME

STEMI Patients	LOE
NITROGLYCERIN (if no contraindications), similar for UA/non-STEMI Sublingual: Patients with ongoing ischemic discomfort IV: Patients with ongoing ischemic discomfort, hypertension, or pulmonary congestion	I-2 to II-1
MORPHINE: analgesic of choice for managing STEMI-related pain	I-2
ANTIPLATELETS: <ul style="list-style-type: none"> • ASA for all patients • Thienopyridines (e.g. Clopidogrel®): add to ASA, continue for at least 14 days. Withhold if urgent invasive therapy planned. Optimal regimen in elderly not defined. • Glycoprotein IIb/IIIa Inhibitors (e.g. Abciximab®): prior to primary PCI 	I-1 to II-1
ANTITHROMBOTICS*: UFH: patients >75 years, patients in whom early invasive therapy anticipated (CABG/PCI) OR Synthetic Pentasaccharides (e.g. Fondaparinux®): not for use alone if urgent PCI planned OR LMWH (e.g. Enoxaprin®): patients <75 years, avoid in those with renal impairment, not use if urgent PCI planned, increased bleeding risk compared to fondaparinux.	I-2 to II-1
BETA BLOCKERS: IV: Give promptly to patients without contraindications*, particularly if tachyarrhythmia or hypertension present. *Contraindications: severe heart failure and ↑ risk cardiogenic shock Oral: initiate in first 24 hours to patients without contraindications*.	I-1 to II-1
ACE INHIBITORS (oral): All patients, particularly those with anterior infarction, pulmonary congestion <u>or</u> LVEF < 0.40 ARBs: Can be considered for patients intolerant of ACE inhibitors	I-1
STATIN: initiation of lipid lowering medication indicated before discharge, similar for UA/non-STEMI	I-1
REPERFUSION: Percutaneous Coronary Intervention (PCI): If prompt primary PCI not available within 90 minutes of first medical contact, patients should be considered for fibrinolysis, within 30 mins of hospital presentation (unless contraindicated). Fibrinolysis/Thrombolysis — Risk/Benefit Calculation: the benefits of thrombolysis (reduction in mortality risk) must outweigh the risk of major stroke (risk increases with age, BP, and previous stroke) and hemorrhage.	I-1
UA/non-STEMI: High Risk Patients	LOE
MORPHINE: if symptomatic despite nitroglycerin, and no contraindications	II
ANTIPLATELETS: [dependent on management strategy to be followed (e.g conservative vs. invasive)] <ul style="list-style-type: none"> • ASA for all patients • Thienopyridines (e.g. Clopidogrel®): consideration if ASA intolerant; 1 month to 1 year following ACS event if low risk; add to ASA prior to angiography. • Glycoprotein IIb/IIIa Inhibitors – treat high risk patients “upstream”, especially prior to diagnostic angiography and PCI 	I to II
ANTITHROMBOTICS*: ≥ 48 hours and up to 8 days; dependent on management strategy to be followed (e.g conservative vs. invasive) UFH: for patients managed with early invasive strategy. OR Synthetic Pentasaccharides (e.g. Fondaparinux®) shown to have best safety and efficacy profile. OR LMWH (e.g. Enoxaparin®) higher risk of bleeding as compared to fondaparinux.	I-1
BETA BLOCKERS: at presentation, unless contraindications	I-1
ACE INHIBITORS: within first 24hrs, patients with pulmonary congestion or left ventricular dysfunction (ejection fraction <40%), in the absence of hypotension or other known contraindications to class of medications. ARBs: considered for patients intolerant of ACE inhibitors	I-1
REVASCUARIZATION: invasive strategy based on angiography [e.g. PCI or Coronary artery bypass graft surgery (CABG)]	I to III

NOTES: * = many centres have moved away from the use of low-molecular weight heparin (LMWH) in favour of Synthetic Pentasaccharides (e.g. Fondaparinux®) due to a more favourable risk profile (decreased risk of bleeding) and reduced mortality associated with this medication; LMWH = low-molecular weight heparin; FH = unfractionated heparin; LOE = Level of Evidence. For more *specific* management strategies for acute events refer to the sources listed below.

Sources: (1) Antman EM et al. 2007 Focused update of the ACC/AHA 2004 Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction. A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation* 2008;117(2):296-329. (2) Anderson JL et al. ACC/AHA 2007 Guidelines for the Management of Patients with Unstable Angina/Non-ST-Elevation Myocardial Infarction. *JACC* 2007;50(7)e1-157. (3) The Scottish Intercollegiate Guidelines Network. Acute Coronary Syndromes. Guideline 93. Feb 2007. Available at: www.sign.ac.uk. All websites accessed April 2008.

