

## PRESENTATION, ASSESSMENT AND DIAGNOSIS

**R** In patients with suspected acute coronary syndrome, measurement of cardiac troponin at presentation and at three hours after presentation with a high-sensitivity assay should be considered as an alternative to serial measurement over 10–12 hours with a standard troponin assay to rule out myocardial infarction.

## INITIAL MANAGEMENT

**R** In the presence of ischaemic electrocardiographic changes or elevation of cardiac troponin, patients with an acute coronary syndrome should be treated immediately with both aspirin (300 mg loading dose) and ticagrelor (180 mg loading dose).

## REPERFUSION THERAPY FOR ST-SEGMENT-ELEVATION ACUTE CORONARY SYNDROME

**R** Patients with an ST-segment-elevation acute coronary syndrome should be treated immediately with primary percutaneous coronary intervention.

**R** When primary percutaneous coronary intervention cannot be provided within 120 minutes of ECG diagnosis, patients with an ST-segment-elevation acute coronary syndrome should receive immediate (prehospital or admission) thrombolytic therapy.

## EARLY PHARMACOLOGICAL INTERVENTION

**R** Patients with acute coronary syndrome should receive dual antiplatelet therapy for six months. Longer durations may be used where the risks of atherothrombotic events outweigh the risk of bleeding. Shorter durations may be used where the risks of bleeding outweigh the risk of atherothrombotic events.

## SOURCES OF FURTHER INFORMATION

### NHS inform

Caledonia House, Fifty Pitches Road, Cardonald Park, Glasgow, G51 4EB  
Tel: 0800 22 44 88 (8am–10pm)  
www.nhsinform.co.uk • Email: nhs.inform@nhs24.scot.nhs.uk

NHS Inform provides national health and care information service for Scotland.

NHS inform A-Z articles: [www.nhsinform.co.uk/health-library/subjects/heart-and-circulation-disorders](http://www.nhsinform.co.uk/health-library/subjects/heart-and-circulation-disorders)

### The Heart Zone

[www.nhsinform.co.uk/heart](http://www.nhsinform.co.uk/heart)

The Heart Zone, which has been developed on Scotland's national health information website, NHS inform, provides a range of information and resources to support the self management of short- and long-term heart disease, as well as on a range of inherited and congenital heart conditions.

### British Heart Foundation

Ocean Point 1, 94 Ocean Drive, Edinburgh, EH6 6JH  
Tel: 020 7554 0000 • Heart Helpline: 0300 330 3311  
www.bhf.org.uk • Email: bhfhi@bhf.org.uk

The BHF is a national heart charity and the largest independent funder of cardiovascular research in the UK. It provides vital support, information and care for patients and their carers and provides forums to listen to, engage and influence both patients and key stakeholders.

### Chest Heart & Stroke Scotland

Third Floor, Rosebery House, 9 Haymarket Terrace, Edinburgh, EH12  
Tel: 0131 225 6963 • Advice Line Nurses: 0808 801 0899 (9.30am–4pm, Mon–Fri)  
www.chss.org.uk • Email: admin@chss.org.uk

The Scottish health charity set up to improve the quality of life for people in Scotland affected by chest, heart and stroke illness, through medical research, influencing public policy, advice and information and support in the community.

## LOCAL SUPPORT GROUPS AND TELEPHONE HELPLINES

Tel: 0800 22 44 88 (8am–10pm)  
[www.nhsinform.co.uk/support-services](http://www.nhsinform.co.uk/support-services)

Local groups can be found by visiting the Support Service Directory on the NHS inform website.

This Quick Reference Guide provides a summary of the main recommendations in **SIGN 148 Acute coronary syndrome**.

Recommendations **R** are worded to indicate the strength of the supporting evidence. Good practice points ✓ are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: [www.sign.ac.uk](http://www.sign.ac.uk). This QRG is also available as part of the SIGN Guidelines app.



- 1 Consider prasugrel 60 mg po in patients undergoing PCI who have specific contraindications or cautions to Ticagrelor
- 2 Killip class I in the absence of bradycardia (heart rate <65/min) or hypotension (systolic blood pressure <105 mmHg)
- 3 In presence of ischaemic electrocardiographic changes or elevated troponin concentration
- 4 Within 120 minutes of diagnosis
- 5 In patients presenting within six hours of symptom onset
- 6 Or ARB therapy if ACE inhibitors are not tolerated

Immediate clinical assessment  
 Electrocardiogram  
 Serial or high-sensitivity troponin assay

Cardiac rhythm monitoring  
 Aspirin 300 mg po and ticagrelor 180 mg po, 1  
 Metoprolol 5-15 mg iv/50-100 mg po 2  
 Transfer to a specialist cardiology unit

ST-segment-elevation ACS

Presenting <12 h from symptom onset?

Fondaparinux or LMW heparin sc 3  
 Consider nitrate iv

Calculate GRACE Score:  
**6-month Death or MI**  
 Low Risk <5%  
 Medium Risk 5-10%  
 High Risk >10%

Reperfusion therapy

Rapid primary PCI available? 4

Eligible for thrombolysis?

Primary PCI available?

Emergency PCI

Thrombolysis iv + fondaparinux

Failed reperfusion? 5

Early in-hospital coronary angiography

Medium-to high-risk ACS?

Recurrent symptoms?

Maintenance in-hospital medication  
 aspirin, ticagrelor (or prasugrel),  
 statin, beta-blocker and ACE-inhibitor therapy 6

