Prescribing Protocol SESLHDPR/575

Ticagrelor in Acute Coronary Syndromes

Health
South Eastern Sydney
Local Health District

Areas where applicable	Emergency and Cardiology
Areas where not applicable	Other clinical services
Authorised Prescribers	Medical staff in Emergency and Cardiology departments
Indication for use	Patients presenting with acute coronary syndrome (Unstable Angina, Non-ST elevation myocardial infarction, ST elevation myocardial infarction)
Clinical condition	Patients presenting with 2 out of 3 of 1. Chest pain 2. Dynamic ECG changes consistent with ischaemia 3. Evidence of myocardial ischaemia on cardiac enzymes; i.e. a rise and/or fall in troponin levels
Contra-indications	• Active bleeding • History of intracranial bleed • Hypersensitivity to ticagrelor or any of the excipients • Moderate to severe hepatic impairment. • Co-administration of ticagrelor with strong CYP3A4 inhibitors
Precautions	• Significant cardiac conduction disease • Patients with concomitant administration of drugs that may increase the risk of bleeding • Asthma/ chronic obstructive pulmonary disorder • Weight < 60 kg • Hyperuricaemia
Place in Therapy	In conjunction with aspirin as part of STEMI/ACS pathway protocol at the discretion of treating cardiologist.
Part of combination therapy, other drugs:	Aspirin and IV heparin bolus
Dosage	Initiate therapy with a single 180 mg loading dose (2 x 90mg tablets) and then continue at 90 mg twice daily.
Duration of therapy	For duration of inpatient admission, and following discharge for up to 12 months.
Important Drug Interactions	Ticagrelor is a cytochrome P450 3A4 substrate and mild inhibitor of CYP3A4. Strong CYP3A4 inhibitors are contraindicated and include ketoconazole, clarithromycin, nefazadone, ritonavir and atazanavir. Moderate CYP3A4 inhibitors may increase exposure to ticagrelor and include diltiazem, amprenavir, aprepitant, erythromycin, fluconazole and verapamil. CYP3A4 inducers reduce efficacy of ticagrelor and include rifampicin, dexamethasone, phenytoin, carbamazepine and phenobarbitone. Concentrations of simvastatin, atorvastatin, digoxin and cyclosporin are increased by ticagrelor. Monitor cautiously for toxicity.

Administration instructions	**Loading dose**: for rapid onset of action use oro-dispersible tablets (2 x 90mg). Tablets should be placed on the tongue and allowed to dissolve. Oro-dispersible tablets can be administered with or without water. Film-coated tablets may also be used to administer the loading dose. **Maintenance dosing**: Film-coated tablets should be used for ongoing dosing and at discharge. Tablets should be swallowed whole and can be administered with or without food. Note: Oro-dispersible tablets are not available in the community on the PBS
Monitoring requirements	Major bleeding If necessary, monitor concentrations of digoxin and ciclosporin, and monitor for adverse effects of simvastatin or atorvastatin
Management of complications	Symptomatically managed on a case by case basis and assessment of risk of drug cessation
Basis of Protocol/Guideline:	TGA AUSPAR report Australian Clinical Guidelines on the Management of Acute Coronary Syndromes 2016 Heart Lung Circ 2016;25 895-951 Steg etal. Circulation 2010; 122:2131 -2141 European Society of Cardiology. Acute Myocardial Infarction in patients presenting with ST-segment elevation (Management of) Joint ACC/AHA Guidelines for the Management of Patients with STEMI Prescribing Information (TGA) last updated 28/07/2015
Groups consulted in development of this guideline	Department of Cardiology, Cardiothoracic Surgery, Emergency and Cardiac Anaesthetics at the POWH

AUTHORISATION	
Author (Name)	Original Author: Dr Sze-Yuan Michael Ooi Reviewed 2015 : Dr Mark Sader & Cardiology Clinical Stream Reviewed 2018: Dr Mark Sader Amended November 2018: Dr Alastair Carlyle Amended March 2021: K. Hargreaves, A. Carlyle
Position	Staff Specialist
Department	Cardiology
Department Contact	Dr Ooi,Level 3 Campus Centre, Prince of Wales Hospital, Barker Street, Randwick 2031 Phone 9382 0700 szeyuan.ooi@ehc.com.au Dr Alastair Carlyle, Cardiology Department, The Sutherland Hospital Phone 9540 7111, Alastair.Carlyle@health.nsw.gov.au Dr Sader, Cardiology St George Hospital Phone 91133164 Mark.Sader@HEALTH.NSW.GOV.AU

GOVERNANCE	
Enactment date	March 2020
Expiry date:	**March 2023**
Ratification date by SESLHD Drug &QUM Committee	5th March 2020
Chair, Drug and Quality Use of Medicines Committee	Dr Jo Karnaghan
Version Number	5