



Drug Therapy Protocols: Ticagrelor

Policy code	DTP_TIC_0722
Date	July, 2022
Purpose	To ensure a consistent procedural approach to ticagrelor administration.
Scope	Applies to all Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless specifically mentioned.
Source of funding	Internal – 100%
Author	Clinical Quality & Patient Safety Unit, QAS
Review date	July, 2024
Information security	UNCLASSIFIED – Queensland Government Information Security Classification Framework.
URL	https://ambulance.qld.gov.au/clinical.html

While the QAS has attempted to contact all copyright owners, this has not always been possible. The QAS would welcome notification from any copyright holder who has been omitted or incorrectly acknowledged.

All feedback and suggestions are welcome. Please forward to: Clinical.Guidelines@ambulance.qld.gov.au

Disclaimer

The Digital Clinical Practice Manual is expressly intended for use by appropriately qualified QAS clinicians when performing duties and delivering ambulance services for, and on behalf of, the QAS.

The QAS disclaims, to the maximum extent permitted by law, all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs incurred for any reason associated with the use of this manual, including the materials within or referred to throughout this document being in any way inaccurate, out of context, incomplete or unavailable.

© State of Queensland (Queensland Ambulance Service) 2022.



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives V4.0 International License

You are free to copy and communicate the work in its current form for non-commercial purposes, as long as you attribute the State of Queensland, Queensland Ambulance Service and comply with the licence terms. If you alter the work, you may not share or distribute the modified work. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/deed.en>

For copyright permissions beyond the scope of this license please contact: Clinical.Guidelines@ambulance.qld.gov.au

Ticagrelor

July, 2022

Drug class

Antiplatelet ^[1,2]

Pharmacology

Ticagrelor is a reversibly binding, direct-acting adenosine diphosphate (ADP) receptor antagonist that inhibits platelet activation and aggregation. ^[1,2]

Metabolism

Hepatic. ^[1]

Indications ^[1-4]

- **Patients with STEMI** (as defined by the relevant QAS coronary artery reperfusion checklist) **who have been accepted for pPCI** (as an adjunct medication to aspirin and heparin) **AND the receiving interventional cardiologist is requesting ticagrelor administration**

Contraindications

- Allergy AND/OR Adverse Drug Reaction
- Patient currently taking ticagrelor OR clopidogrel
- Patient less than 18 years of age
- Active bleeding (excluding menses)
- Prior intercranial haemorrhage
- History of hepatic impairment

Precautions

- Concurrent medication known to induce bradycardia (e.g. β blocker, calcium channel blocker, digoxin)
- Symptomatic bradycardia (HR less than 60)

Side effects

- Haemorrhage
- Bradycardia

Presentation

- Tablet, 90 mg *ticagrelor*
- Orally Disintegrating Tablet (ODT), 90 mg *ticagrelor*

Onset	Duration	Half-life
≈ 30 minutes	7 days (antiplatelet)	7 hours

Schedule

- S4 (Restricted drugs)

Routes of administration

Per oral (PO)



Special notes

- Ambulance officers must only administer medications for the listed indications and dosing range. Any consideration for treatment outside the listed scope of practice requires mandatory approval through the *QAS Clinical Consultation and Advice Line*.
- 90 mg ticagrelor ODTs have recently been introduced into QAS as a loading dose alternative to 90 mg ticagrelor tablets. Clinicians should continue to use existing 90 mg ticagrelor tablet stock until all stock is depleted or expired.

Adult dosages^[1-4]

Patients with STEMI (as defined by the relevant QAS coronary artery reperfusion checklist) **who have been accepted for pPCI** (as an adjunct medication to aspirin and heparin) **AND the receiving interventional cardiologist is requesting ticagrelor administration**



PO

≥ 18 years – **180 mg**

Paediatric dosages

Note: QAS officers are **NOT** authorised to administer ticagrelor to paediatric patients.