



# Drug Therapy Protocols: Ticagrelor

<b>Policy code</b>	DTP_TIC_0924
<b>Date</b>	September, 2024
<b>Purpose</b>	To ensure a consistent procedural approach to ticagrelor administration.
<b>Scope</b>	Applies to all Queensland Ambulance Service (QAS) clinical staff.
<b>Health care setting</b>	Pre-hospital assessment and treatment.
<b>Population</b>	Applies to all ages unless specifically mentioned.
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<b>Author</b>	Clinical Quality & Patient Safety Unit, QAS
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# Ticagrelor

September, 2024

## 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 CPP) **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
- Patients aged less than 18 years
- Modified Rankin Scale equal to or greater than 4
- Ischaemic chest pain greater than 12 hours
- History of terminal illness, or under the care of a palliative care service
- Symptoms suggestive of an acute aortic dissection
- Patient currently taking ticagrelor OR clopidogrel

### Contraindications (cont.)

- Prior intracranial haemorrhage
- Active bleeding (excluding menstruation)

### Precautions

- Concurrent medication known to induce bradycardia (e.g.  $\beta$  blocker, calcium channel blocker, digoxin)
- Symptomatic bradycardia (HR less than 60)
- Hepatic impairment

### Side effects

- Haemorrhage

### 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<sup>[1-4]</sup>

**Patients with STEMI** (as defined by the relevant QAS CPP) **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.