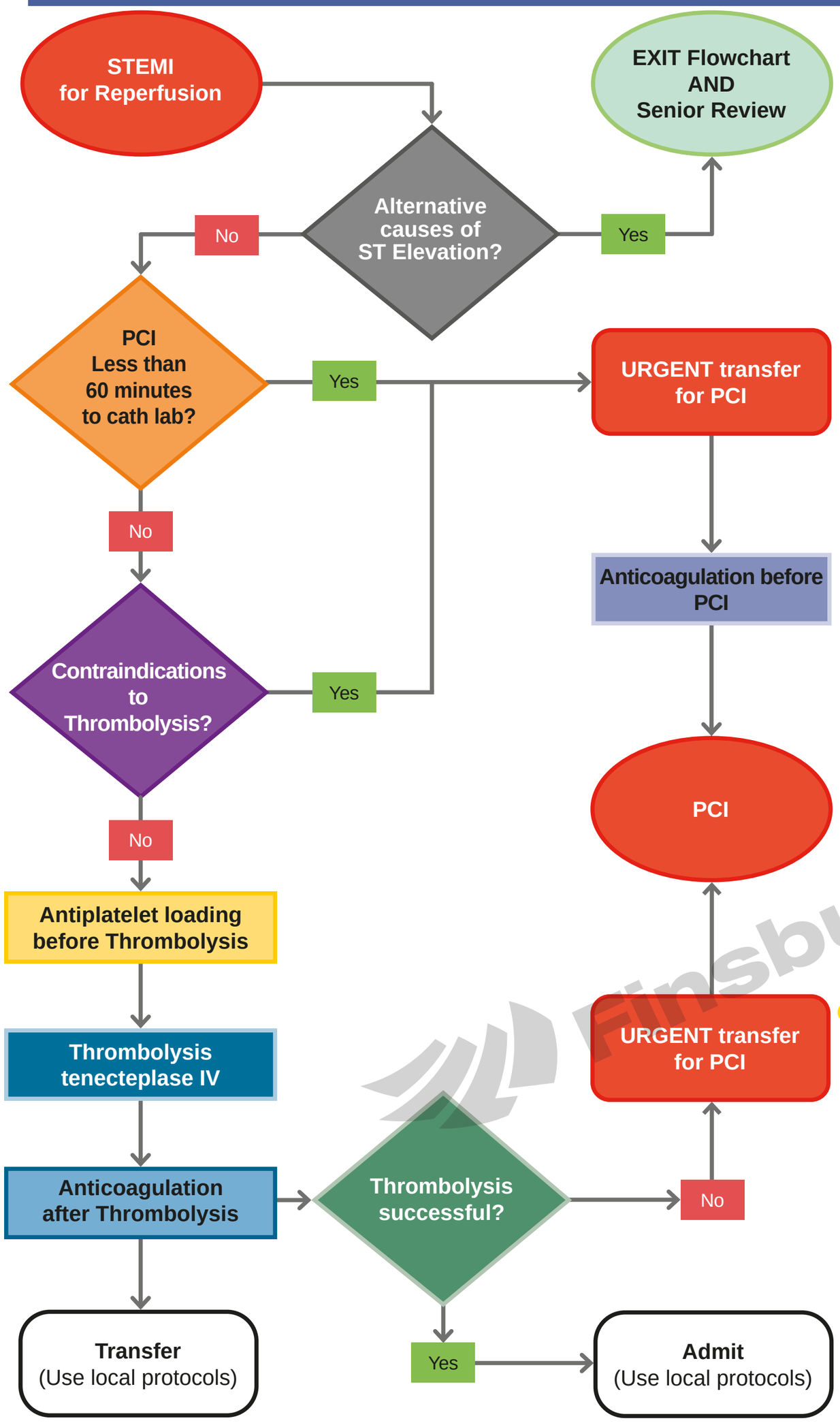
NSW GOVERNMENT | AGENCY FOR CLINICAL INNOVATION

Use this Flowchart in conjunction with
Pathway for Acute Coronary Syndrome Assessment (PACSA) STEMI Reperfusion Checklist NH700421

September 2025: Half dose thrombolysis is now recommended for patients >70 years of age, replacing previous guidance of >75 years

PACSA STEMI Reperfusion Flowchart



ECG STEMI Equivalents: for Reperfusion

Diagnosis of STEMI in Left bundle branch block (LBBB) using modified Sgarbossa criteria

1. Any lead with > 1mm concordant ST elevation (QRS and ST in same direction)

OR 2. Any lead in V_1 - V_3 with > 1mm concordant ST depression (QRS and ST in same direction)

OR 3. Any lead with ST elevation more than 25% of a preceding S wave

New onset LBBB in a stable patient with chest pain is no longer an indication for reperfusion. Urgent reperfusion is indicated if LBBB **AND** a strong clinical suspicion of ongoing ischaemia.

Posterior Infarct

a. R wave greater than S wave in V_1 - V_2
b. ST depression V_1 - V_3 on standard ECG
c. ST elevation V_7 - V_9 on posterior ECG

de Winter T waves

a. Up-sloping ST depression in V_2 - V_5
b. Tall T waves in chest leads: V_2 - V_5
c. Slight ST elevation aVR > 0.5mm

Alternative causes of ST Elevation

Intracranial bleed	Ventricular paced rhythm	Early repolarisation
Previous AMI	Left bundle branch block	Cardiomyopathy
Pericarditis	Coronary vasospasm	Brugada syndrome
Myocarditis	Left ventricular hypertrophy	Wellens syndrome
Ventricular aneurysm	Takotsubo cardiomyopathy	Hyperkalaemia

Contraindications to Thrombolysis

Symptoms present more than 12 hours
BP more than 180/110mmHg: treat BP and reassess
Major trauma **OR** surgery **OR** internal bleeding within one month
Ischaemic stroke within 3 months **OR** Intracerebral bleed at any time
Allergy to tenecteplase

Relative Contraindications to Thrombolysis

Senior Review if any Relative Contraindication: Ischaemic stroke >3 months **OR** INR >1.8 **OR** anticoagulation **OR** bleeding disorder

Anticoagulation before PCI

Aspirin 300mg (soluble) unless already given or contraindicated

AND Heparin 5,000 units IV **OR** Use local protocol

	Agent	18 – 74 years	75 years and over
PLUS	Ticagrelor	180mg	180mg
OR	Clopidogrel	300 – 600mg	300 – 600mg

Antiplatelet loading before Thrombolysis

Aspirin 300mg (soluble) unless already given or contraindicated

	Agent	18 – 74 years	75 years and over
AND	Clopidogrel	300mg	75mg

Thrombolysis: tenecteplase 5mg/mL (IV bolus over 10 sec)

Weight	18 – 69 years	70 years and over
Less than 60kg	30mg = 6mL	15mg = 3mL
60 – 69kg	35mg = 7mL	17.5mg = 3.5mL
70 – 79kg	40mg = 8mL	20mg = 4mL
80 – 89kg	45mg = 9mL	22.5mg = 4.5mL
90kg and above	50mg = 10mL	25mg = 5mL

Anticoagulation after Thrombolysis

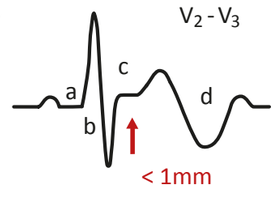
	Enoxaparin	18 – 74 years	75 years and over
EITHER	**IV** At 15 minutes	30mg **IV** bolus	**No** IV dose
	AND SC At 30 minutes	1mg/kg **SC** (max 100mg)	0.75mg/kg **SC** (max 75mg)
OR	Heparin	At 15 minutes: bolus 60 units/kg (max 4,000 units) then 12 units/kg/hour (max 1,000 units/hour) **OR** Use local protocol	

ECG > 50% reduction in ST elevation	Thrombolysis successful if ALL three features present at 60 minutes
Symptoms largely resolved	
Haemodynamically stable	

ECG STEMI Mimics: **NOT** for Thrombolysis

Wellens syndrome Critical LAD stenosis: for urgent Cardiology review

a. No precordial Q waves
b. Normal precordial R wave progression
c. Minimally elevated ST segment (< 1mm)
d. Inverted or biphasic T waves V_1 - V_6 (mainly V_2 - V_3)



Brugada syndrome Critical arrythmia: for urgent Cardiology review

a. Broad P wave with PQ prolongation
b. J point elevation
c. Rounded ST elevation
d. Inverted or biphasic T waves