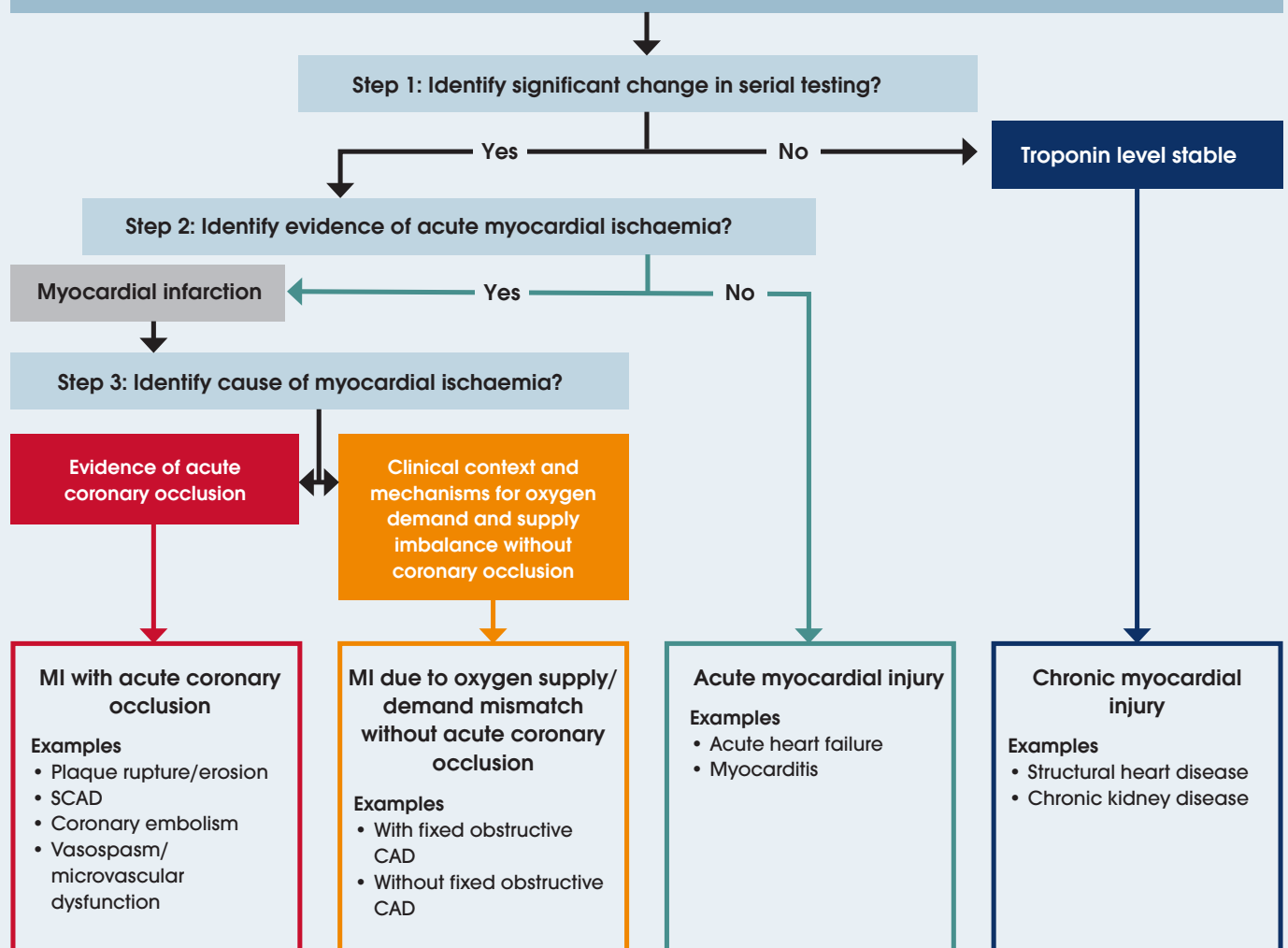


# Clinical interpretation of high-sensitivity cardiac troponin results



## Clinical interpretation of high-sensitivity cardiac troponin Serial testing for suspected ACS

If any elevated troponin value – increased above upper reference limit: >99<sup>th</sup> sex-specific percentile

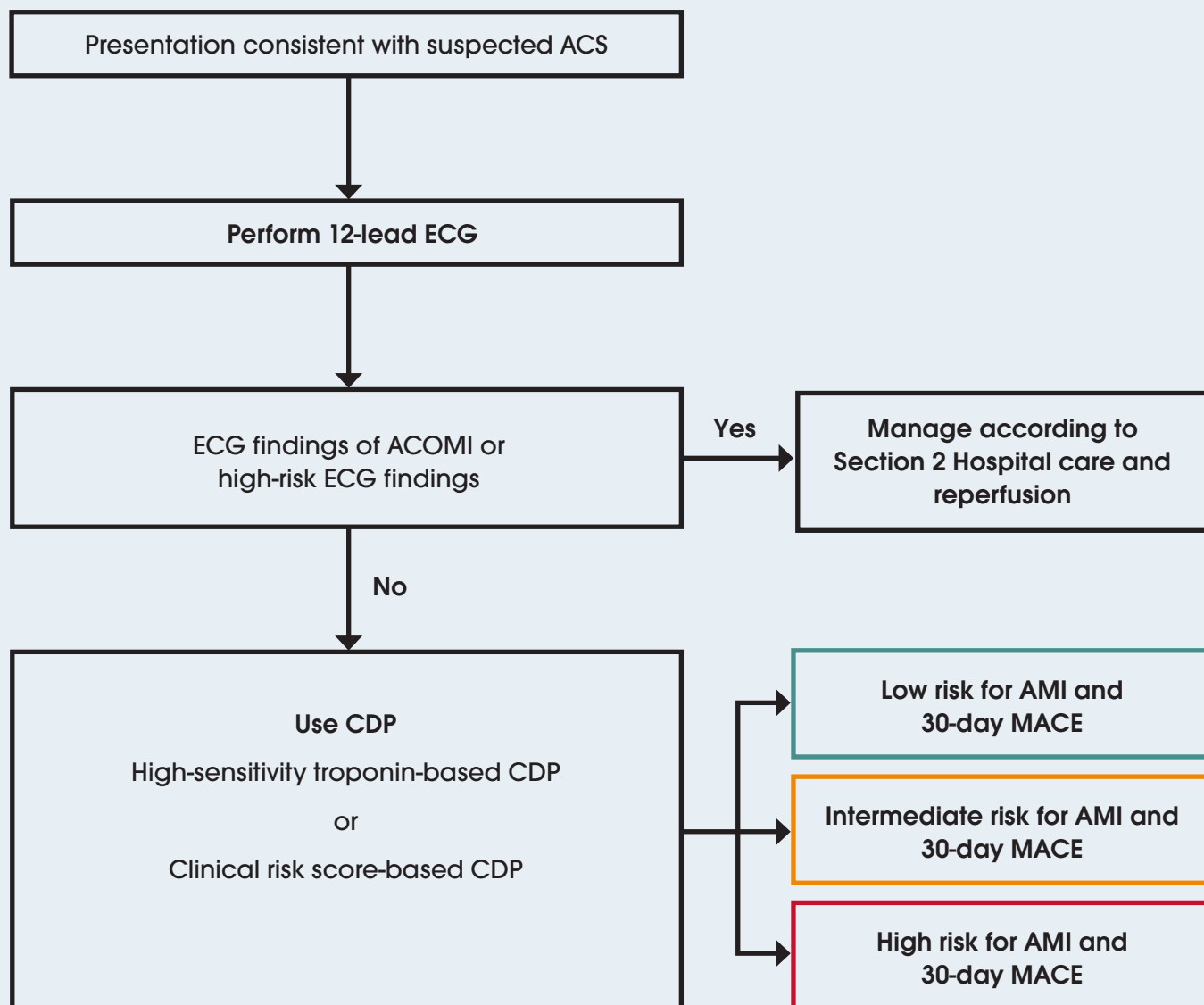


**Note:** Adapted with permission from the [Accelerated Chest Pain Risk Evaluation \(ACRE\) Project](#), Clinical Excellence Queensland, Queensland Health. For guidance on identifying evidence for acute myocardial ischaemia, refer to High-risk ECG findings and Other signs of myocardial ischaemia on ECG in the guideline.

**Abbreviations:** ACS, acute coronary syndromes; CAD, coronary artery disease; MI, myocardial infarction; SCAD, spontaneous coronary artery dissection.



# Assessment process for people with suspected ACS

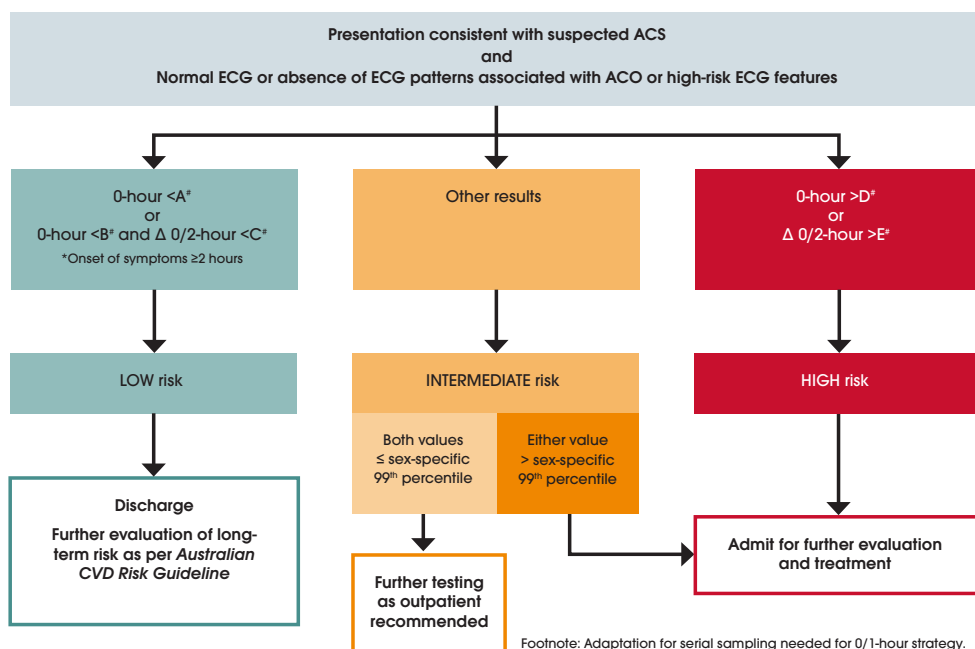


**Note:** For further information, refer to Initial ECG assessment, High-sensitivity troponin-based clinical decision pathways and Clinical score-based clinical decision pathways in the guideline.

**Abbreviations:** ACOMI, acute coronary occlusion myocardial infarction; ACS, acute coronary syndromes; AMI, acute myocardial infarction; CDP, clinical decision pathway; ECG, electrocardiogram; MACE, major adverse cardiovascular events.



# 0/2-hour high-sensitivity cardiac troponin testing recommendations



Footnote: Adaptation for serial sampling needed for 0/1-hour strategy.

**Note:** the 0/2-hour time points are shown in this figure. If using a 0/1-hour strategy, change timeframes accordingly. \*Refer to the following table for interpretation of cTn assay-specific values and sex-specific 99<sup>th</sup> percentiles. \*All people with symptom onset <2 hours need serial testing. People with ongoing symptoms should be assessed according to high-risk criteria.

**Abbreviations:** ACO, acute coronary occlusion; ACS, acute coronary syndromes; ECG, electrocardiogram.

Troponin assay and metrics for use in 0/1- and 0/2-hour high-sensitivity cardiac troponin sampling strategies

Assay	Sampling timepoints	A	B	C	D	E	F Female 99 <sup>th</sup> percentile	G Male 99 <sup>th</sup> percentile
Hs-cTnI (Architect; Abbott)	0/1h	<4	<5	<2	≥64	≥6	16	34
	0/2h	<4	<6	<2	≥64	≥15	16	34
Hs-cTnI (Access; Beckman Coulter)	0/1h	<4	<5	<4	≥50	≥15	11	20
	0/2h	<4	<5	<5	≥50	≥20	11	20
Hs-cTnI (Centaur; Siemens)	0/1h	<3	<6	<3	≥120	≥12	40	58
	0/2h	<3	<8	<7	≥120	≥20	40	58
Hs-cTnI (Atellica; Siemens)	0/1h	<4	<6	<3	≥120	≥12	39	54
	0/2h	NA	NA	NA	NA	NA	NA	NA
Hs-cTnI (Vitros; Clinical Diagnostics)	0/1h	<1	<2	<1	≥40	≥4	9	12
	0/2h	<1	<2	<3	≥40	≥5	9	12
Hs-cTnT (Elecsys; Roche)	0/1h	<5	<12	<3	≥52	≥5	9	17
	0/2h	<5	<14	<4	≥52	≥10	9	17
Hs-cTnI (Pathfast; LSI Medience)*	0/1h	<3	<4	<3	≥90	≥20	20	30
	0/2h	<3	TBD	TBD	≥90	TBD	20	30
Hs-cTnI (Triage True; Quidel)*	0/1h	<4	<5	<3	≥60	≥8	14	26
	0/2h	<4	TBD	TBD	≥60	TBD	14	26
Hs-cTnI (VTI; Siemens)*	0/1h	<4	TBD	TBD	TBD	TBD	18	27
	0/2h	<4	<6	<5	≥60	≥15	18	27

\*Point of care assay. 99<sup>th</sup> percentiles presented in column F/G are as per the International Federation of Clinical Chemistry tables rounded to the nearest whole number. Abbreviations: hs-cTnI, high-sensitivity cardiac troponin I; hs-cTnT, high-sensitivity cardiac troponin T; NA, not available; TBD, to be determined.



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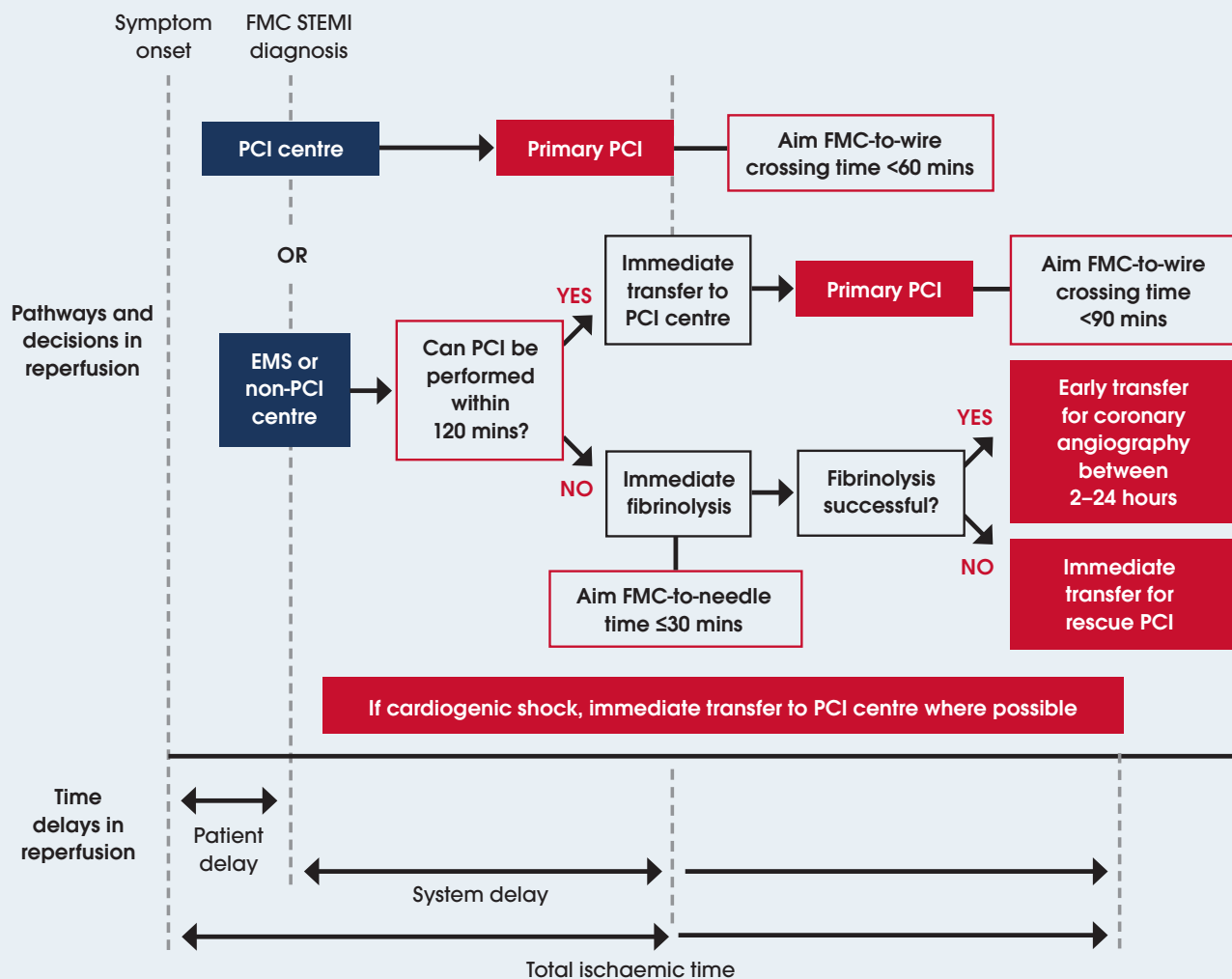
This article was adapted from Heart, Lung and Circulation, 34(4), Brieger D, Cullen L, Briffa T et al., National Heart Foundation of Australia & Cardiac Society of Australia and New Zealand: Australian clinical guideline for diagnosing and managing acute coronary syndromes 2025, 309-397, Copyright Elsevier (2025). <https://doi.org/10.1016/j.hlc.2025.02.102>.

View the Acute coronary syndromes (ACS) guideline





# Decision-making and organisation of reperfusion strategies within first 12 hours of medical contact



**Note:** Adapted from Chew et al.

**Abbreviations:** EMS, emergency medical service; FMC, first medical contact; PCI, percutaneous coronary intervention; STEMI, ST-segment elevation myocardial infarction.

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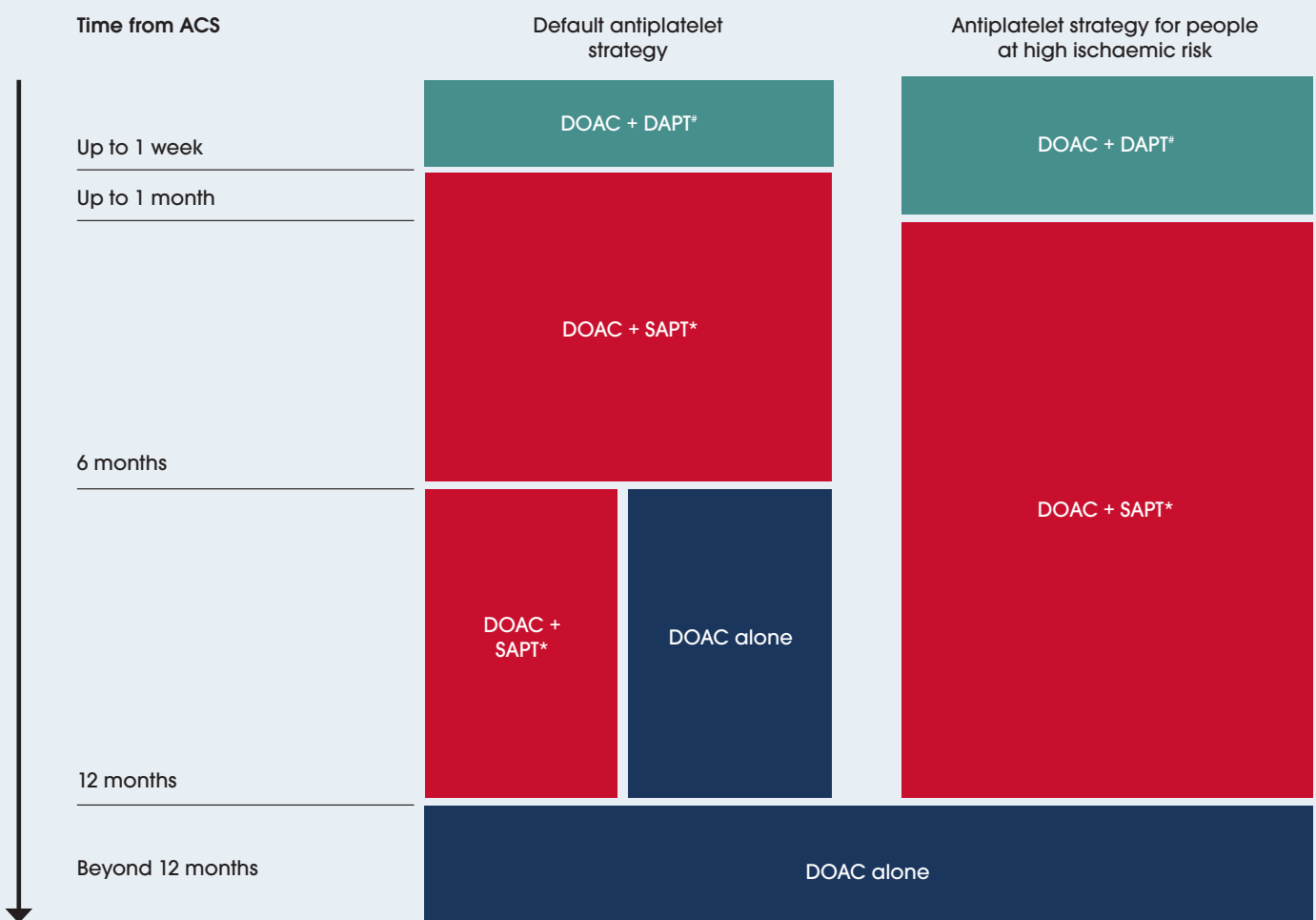
This article was adapted from Heart, Lung and Circulation, 34(4), Brieger D, Cullen L, Briffa T et al., National Heart Foundation of Australia & Cardiac Society of Australia and New Zealand: Australian clinical guideline for diagnosing and managing acute coronary syndromes 2025, 309-397, Copyright Elsevier (2025). <https://doi.org/10.1016/j.hlc.2025.02.102>.

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# Recommended antiplatelet treatment strategies for people with ACS requiring long-term direct oral anticoagulant for atrial fibrillation



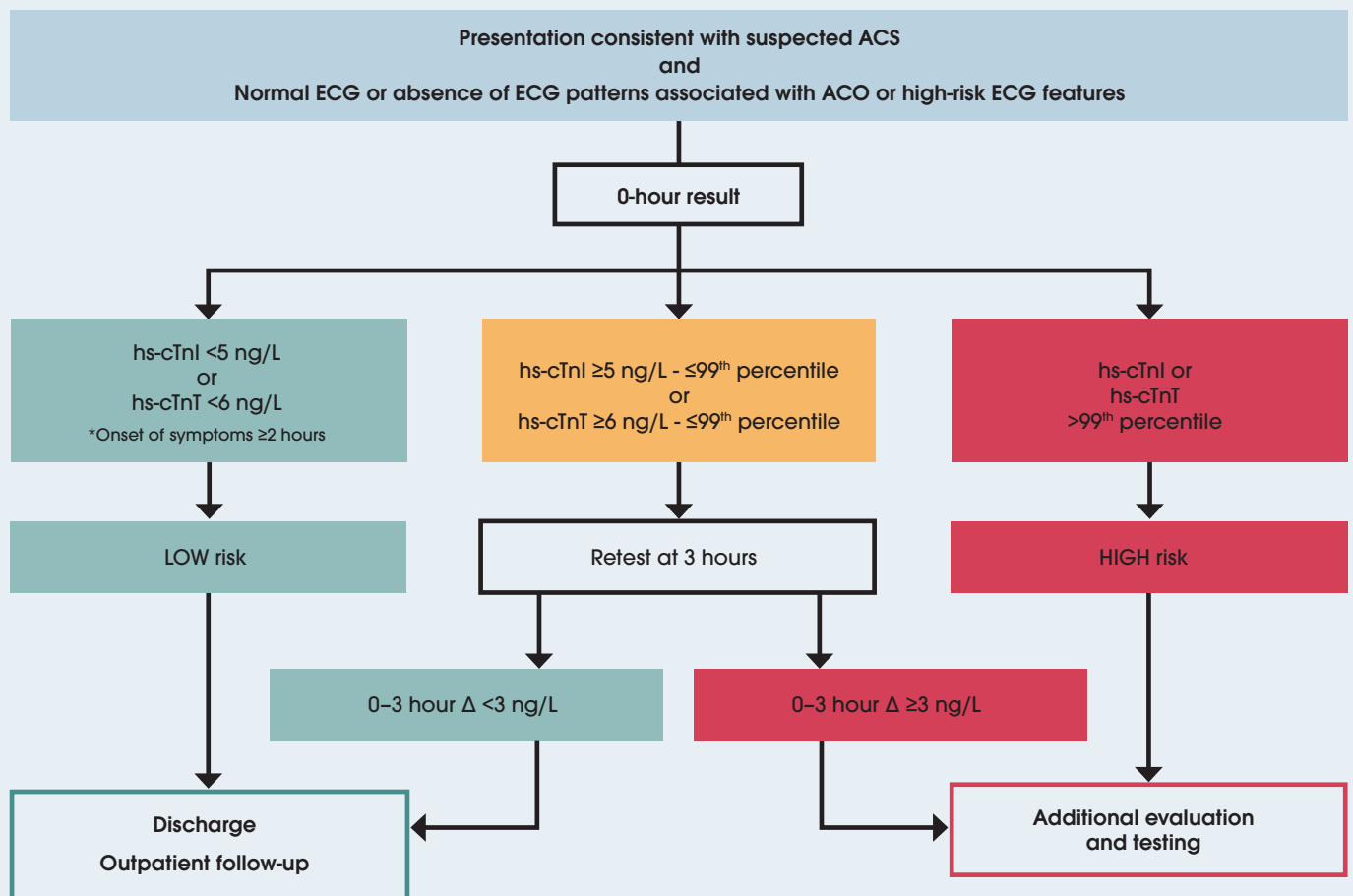
\*DAPT: aspirin plus clopidogrel preferred. \*SAPT: clopidogrel preferred.

**Note:** People receiving triple therapy should be given a proton pump inhibitor.

**Abbreviations:** ACS, acute coronary syndromes; DAPT, dual antiplatelet therapy; DOAC, direct oral anticoagulant; SAPT, single antiplatelet therapy.



# High-sensitivity troponin in the evaluation of patients with acute coronary syndrome (High-STEACS) algorithm



**Note:** The 99<sup>th</sup> sex-specific percentile is assay-specific. Hs-cTnI assay metrics for risk evaluation have been evaluated on selected assays.

**Abbreviations:** ACO, acute coronary occlusion; ACS, acute coronary syndromes; ECG, electrocardiogram; hs-cTnI, high-sensitivity cardiac troponin I; hs-cTnT, high-sensitivity cardiac troponin T.

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