

Síndromes Coronárias Agudas

2023 *ESC Guidelines*

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ESC

European Society
of Cardiology




















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ESC GUIDELINES

2023 ESC Guidelines for the management of acute coronary syndromes

Developed by the task force on the management of acute coronary syndromes of the European Society of Cardiology (ESC)

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ACS encompasses a spectrum



Unstable angina

NSTEMI

STEMI

1 Think 'A.C.S.' at initial assessment

A Abnormal ECG?

C Clinical context?

S Stable patient?



2 Think invasive management

STEMI: Primary PCI OR Fibrinolysis (if timely primary PCI not feasible)

Very high-risk NSTEMI-ACS: Immediate angiography ± PCI

High-risk NSTEMI-ACS: Early (<24 h) angiography should be considered



3 Think antithrombotic therapy

Antiplatelet therapy: Aspirin + P2Y₁₂ inhibitor

AND

Anticoagulant therapy: UFH OR LMWH OR Bivalirudin OR Fondaparinux



4 Think revascularization

Based on clinical status, co-morbidities, and disease complexity: PCI OR CABG

Aim for complete revascularization

Consider adjunctive tests to guide revascularization: Intravascular imaging OR Intravascular physiology



5 Think secondary prevention

Antithrombotic therapy

Lipid lowering therapy

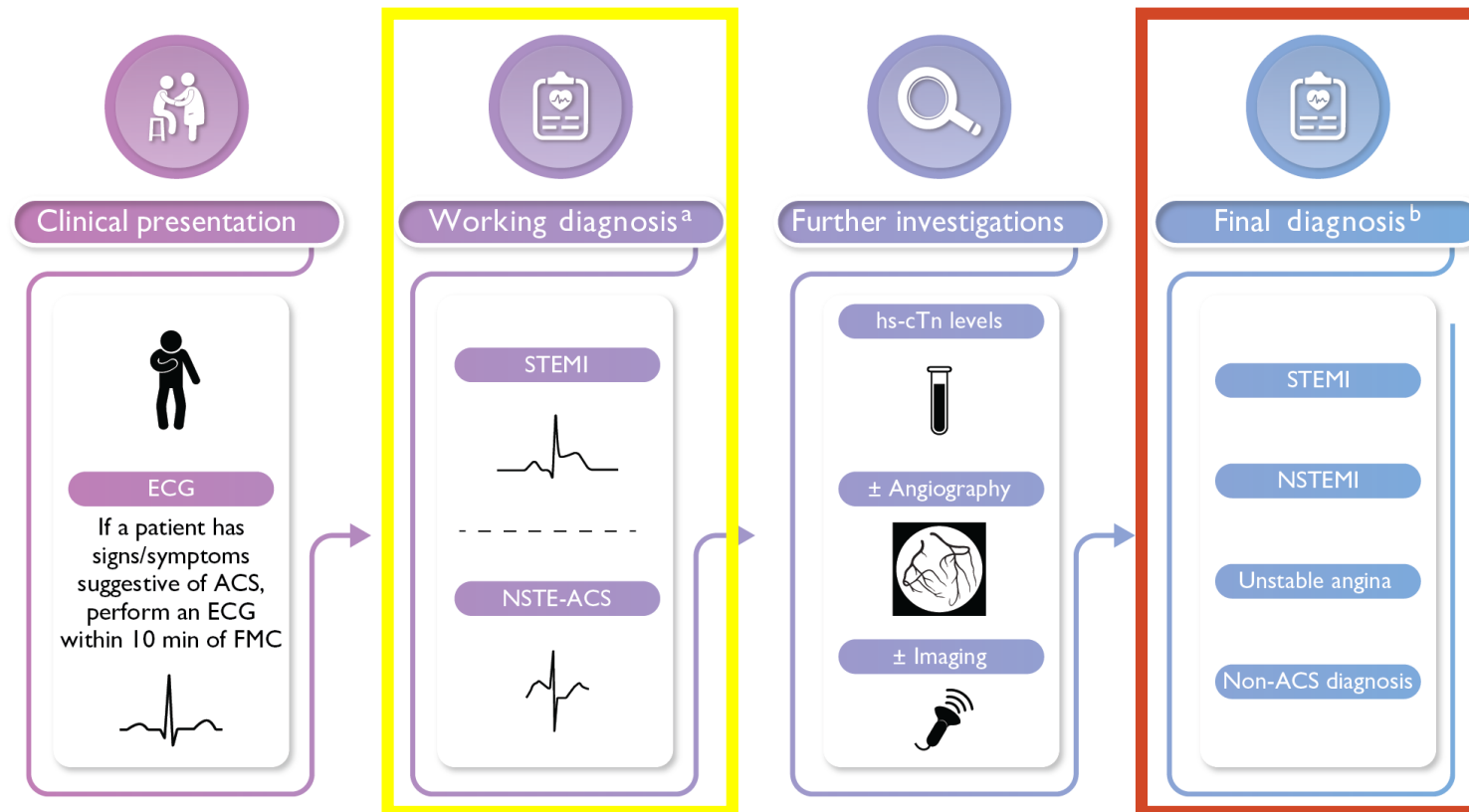
Smoking cessation

Cardiac rehabilitation

Risk factor management

Psychosocial considerations

Diagnóstico

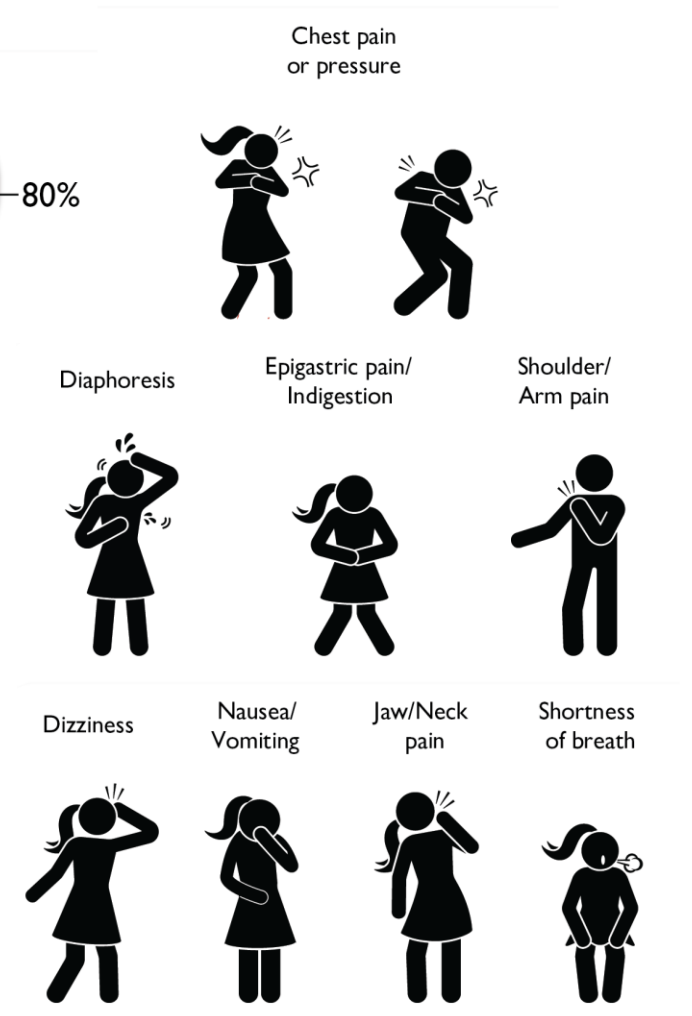
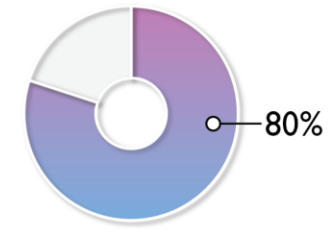
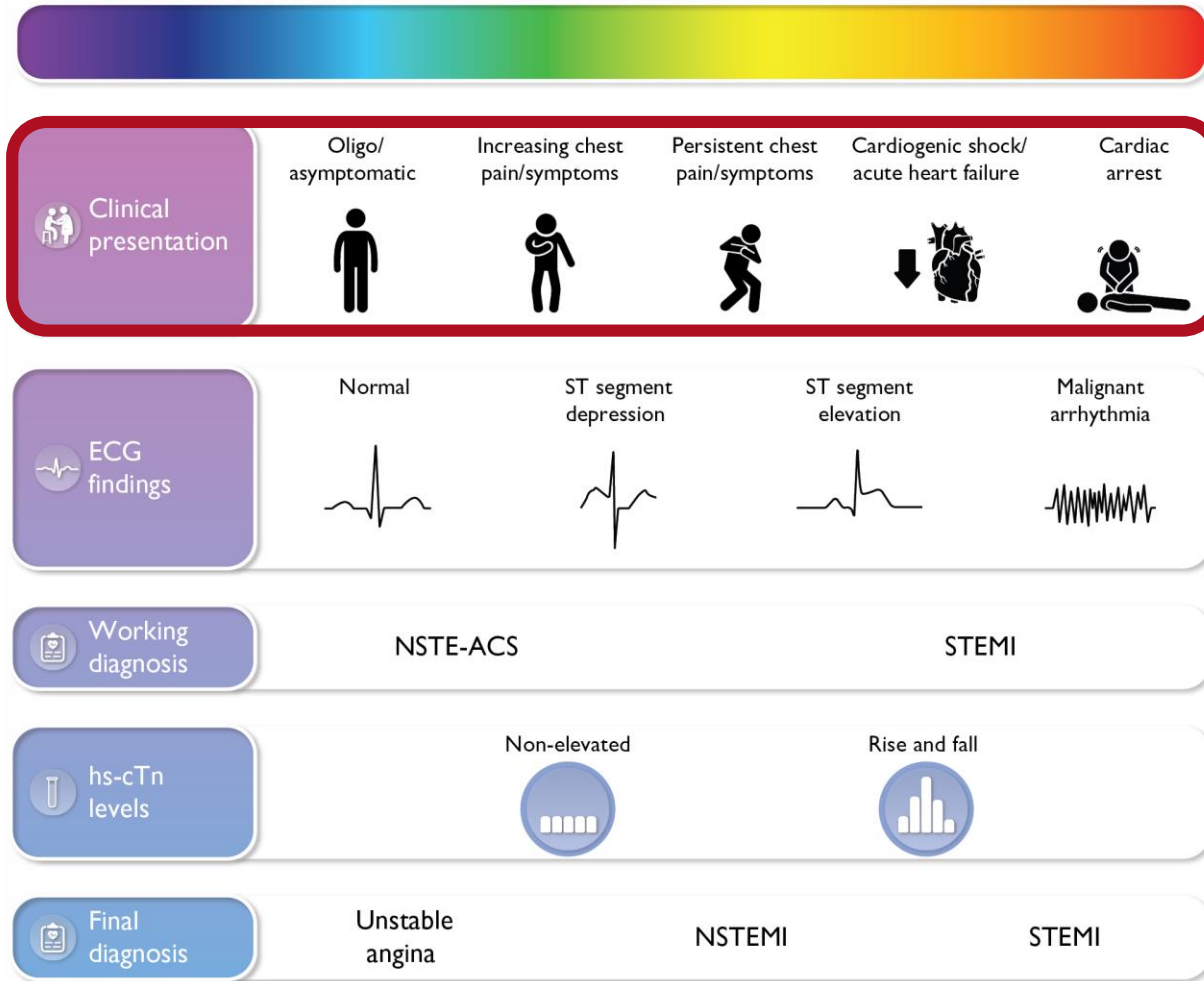


Recommendations

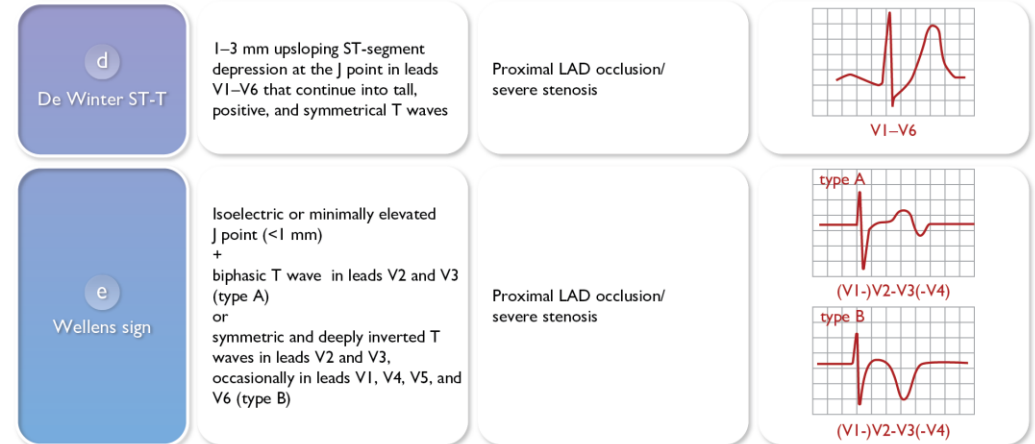
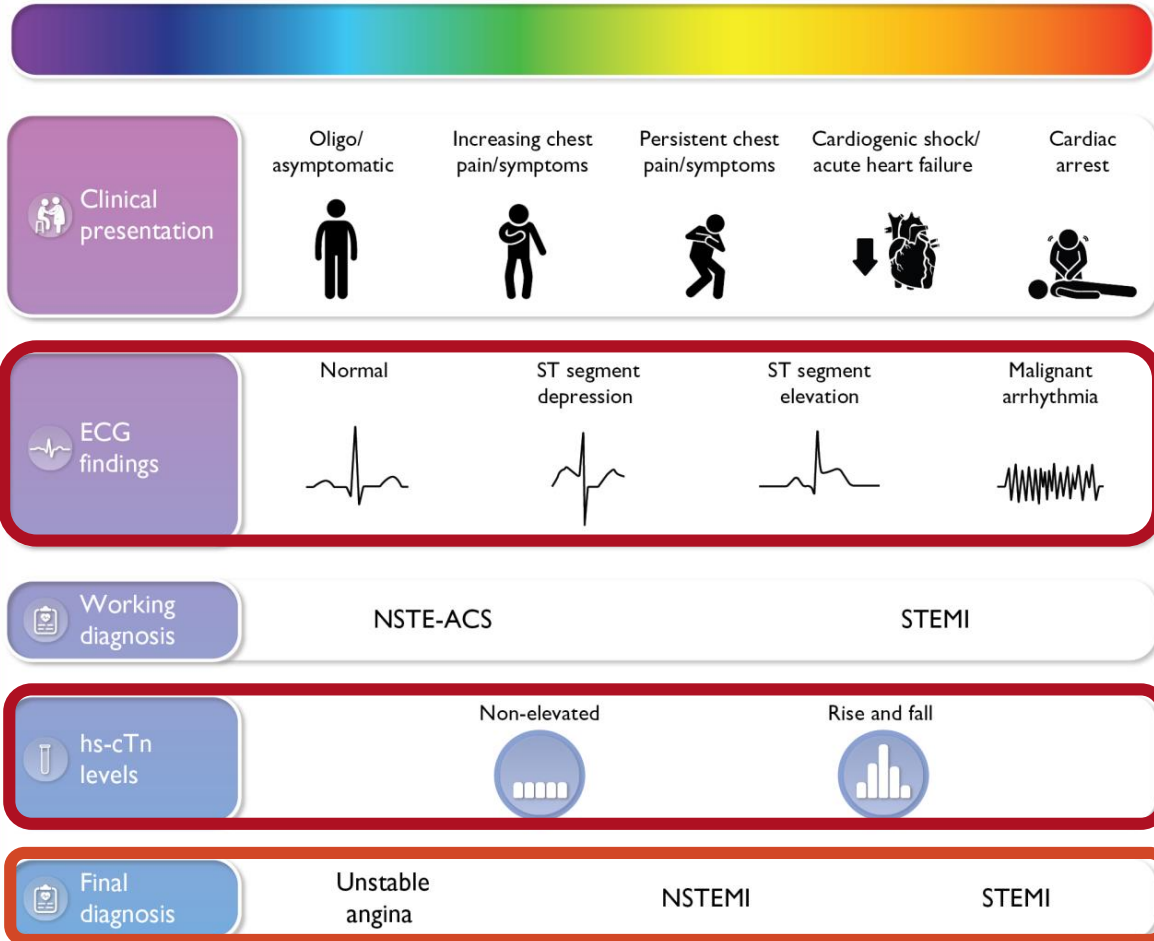
It is recommended to base the diagnosis and initial short-term risk stratification of ACS on a combination of clinical history, symptoms, vital signs, other physical findings, ECG, and hs-cTn.

Class	Level
I	B

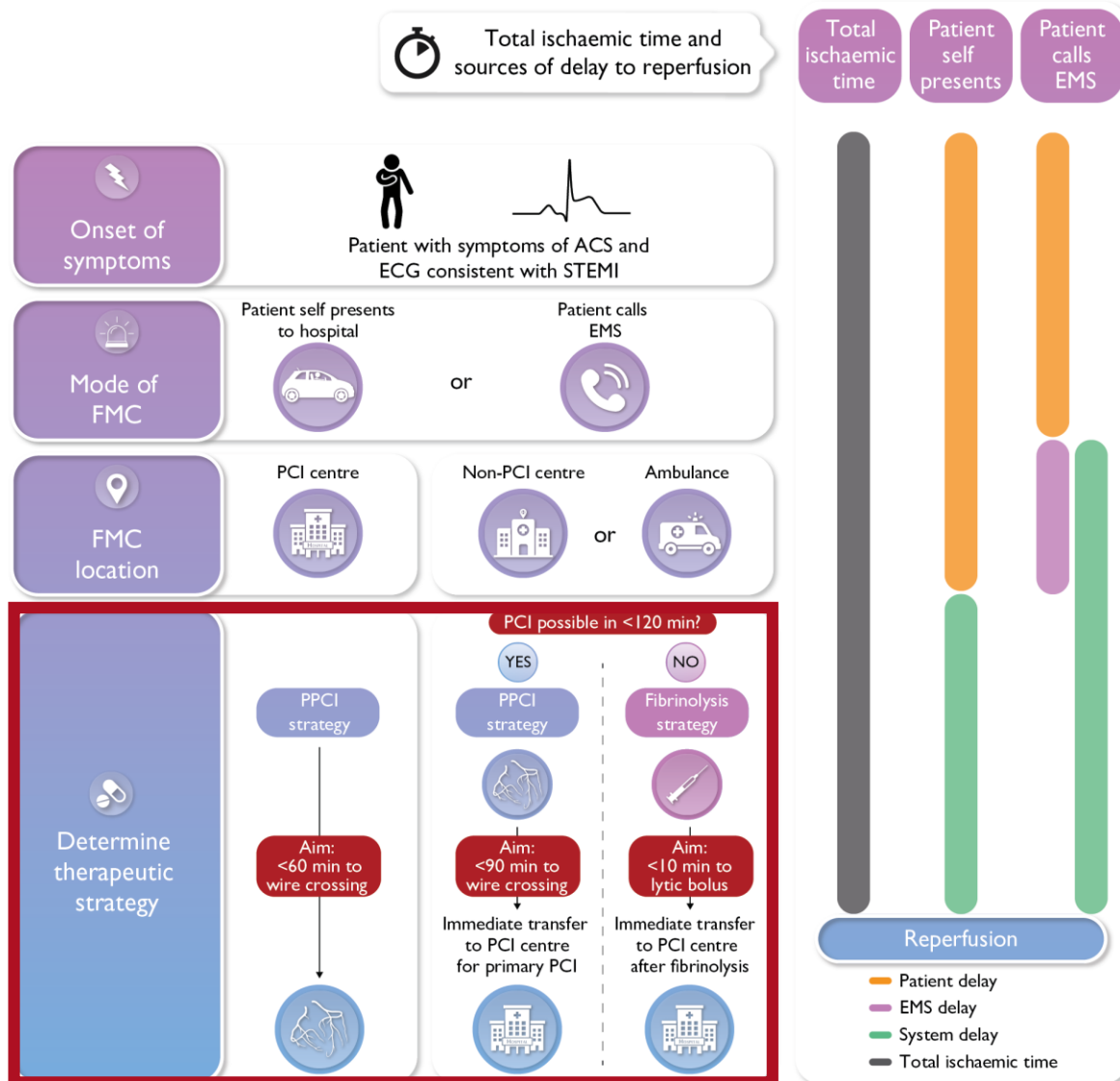
Apresentação Clínica



Apresentação Clínica



Abordagem Inicial



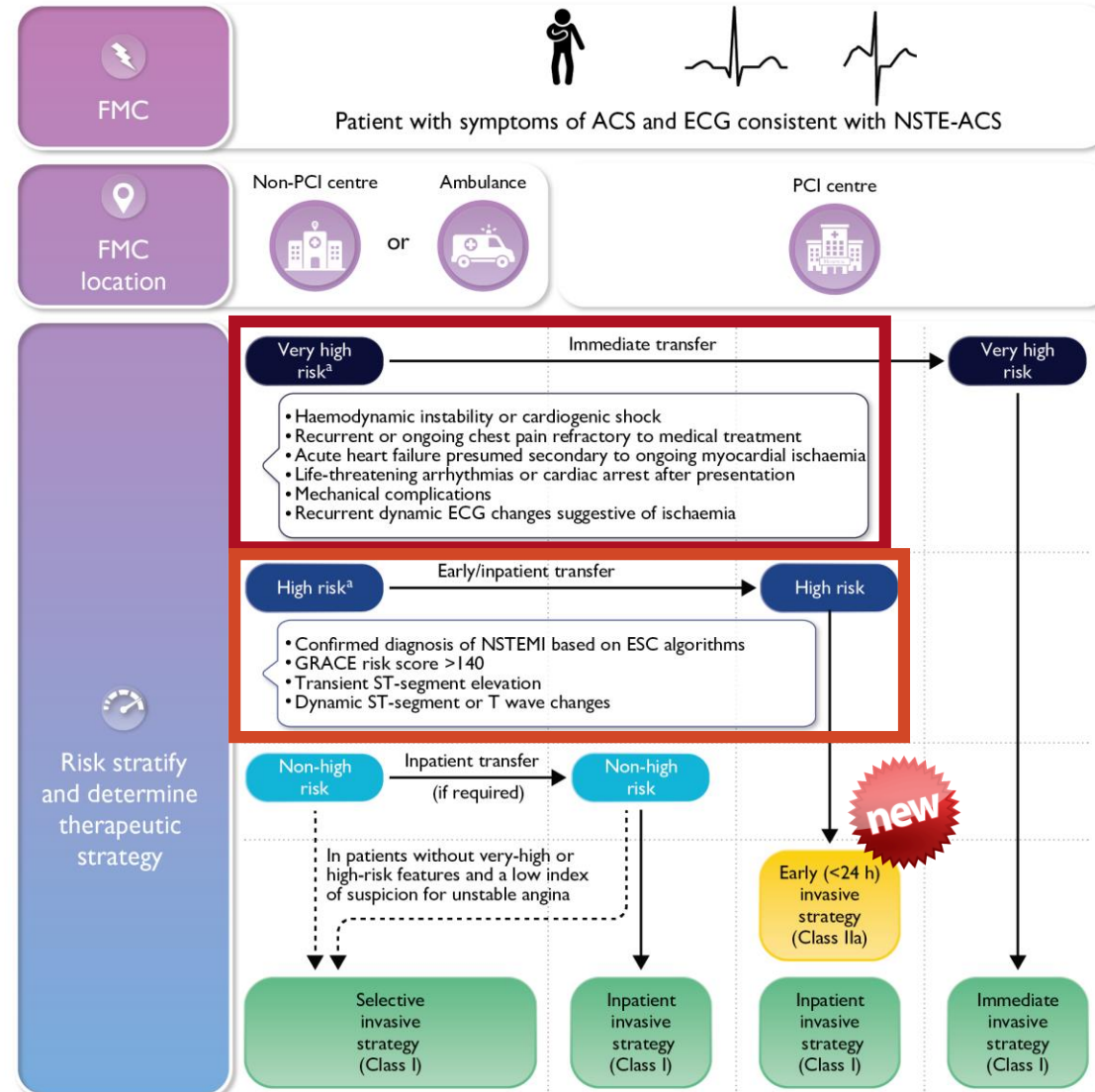
Pre-treatment with a P2Y₁₂ receptor inhibitor may be considered in patients undergoing a primary PCI strategy.

new

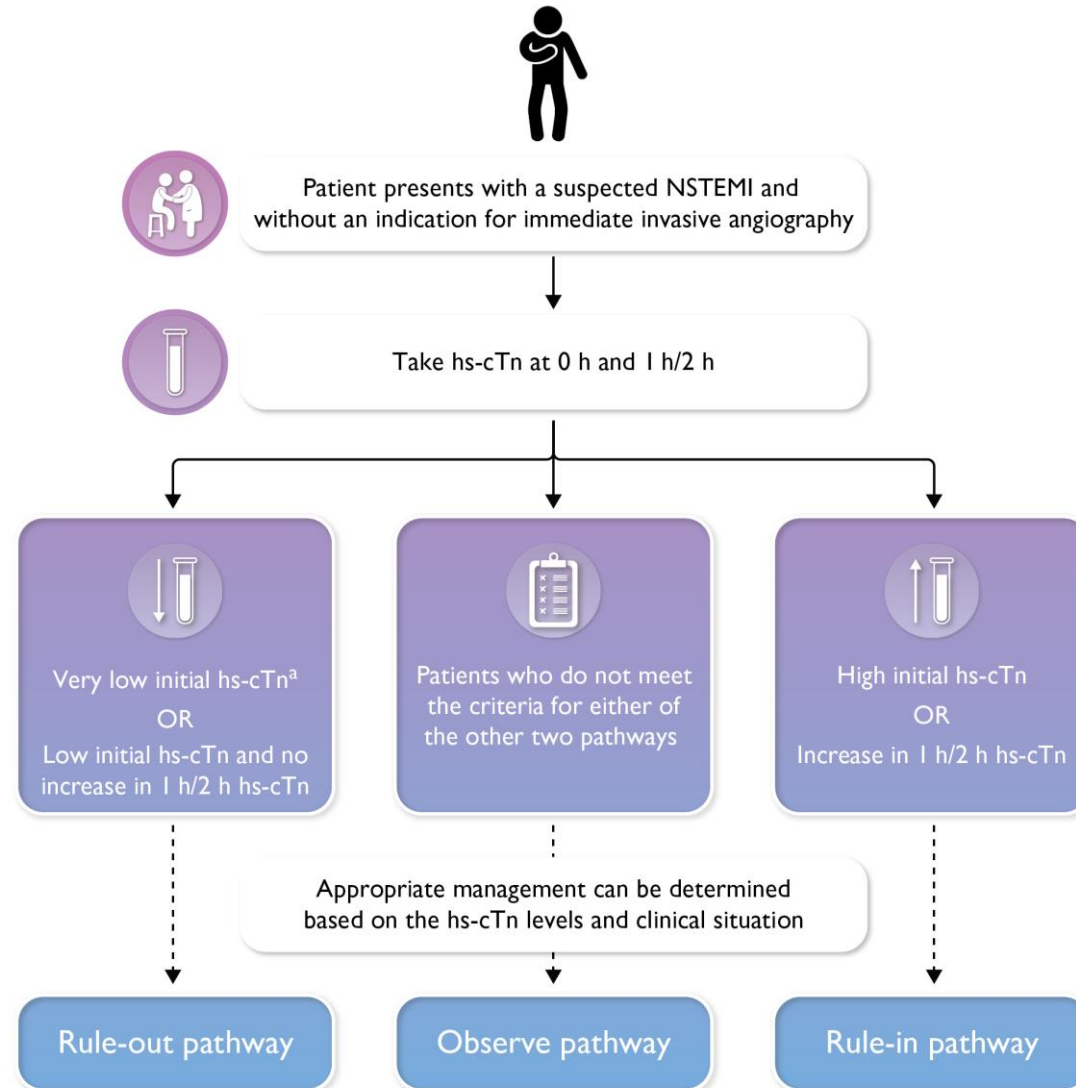
IIb

B

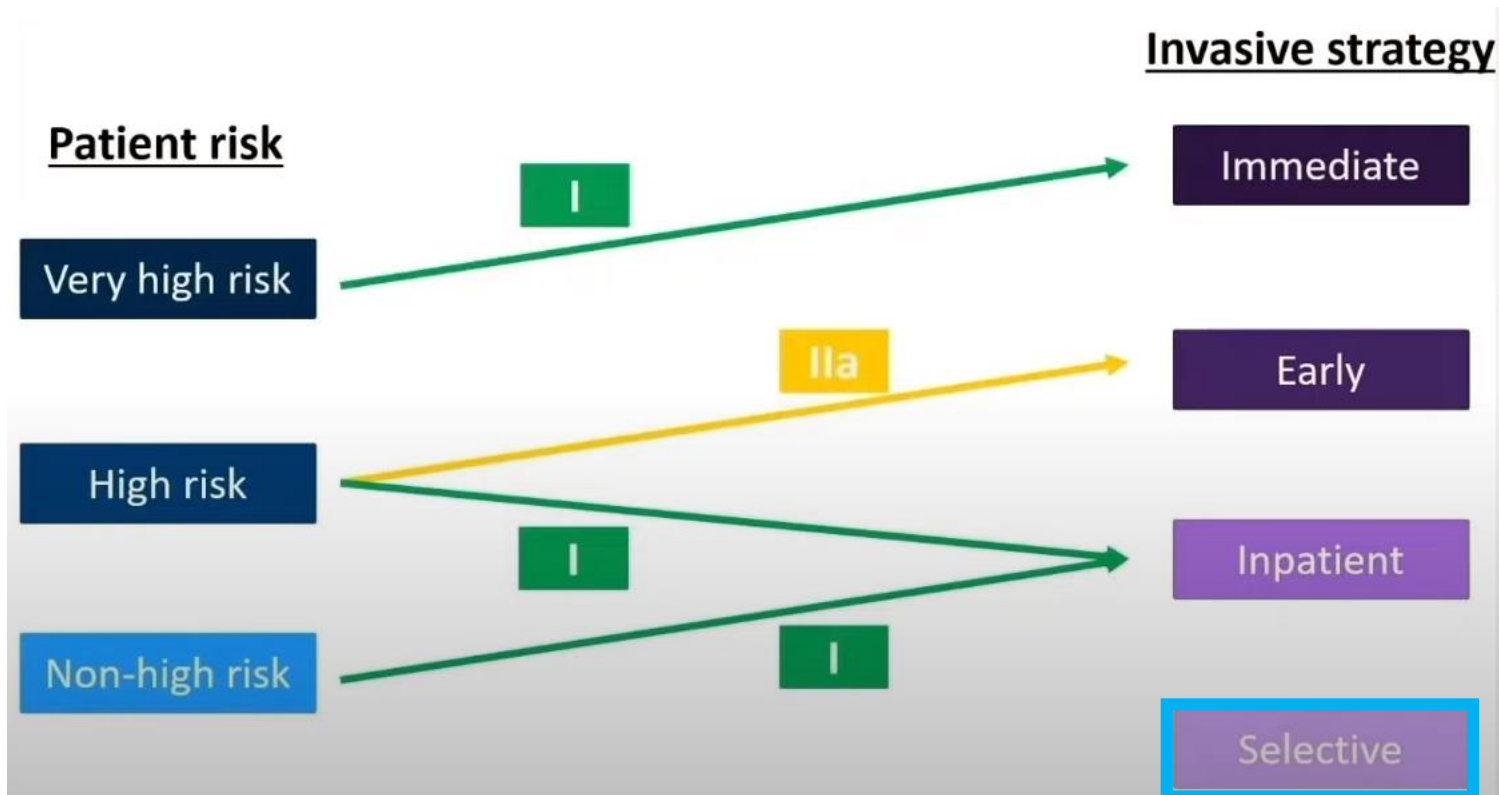
Estratégia de Reperusão



Biomarcadores



Estratégia de Reperusão

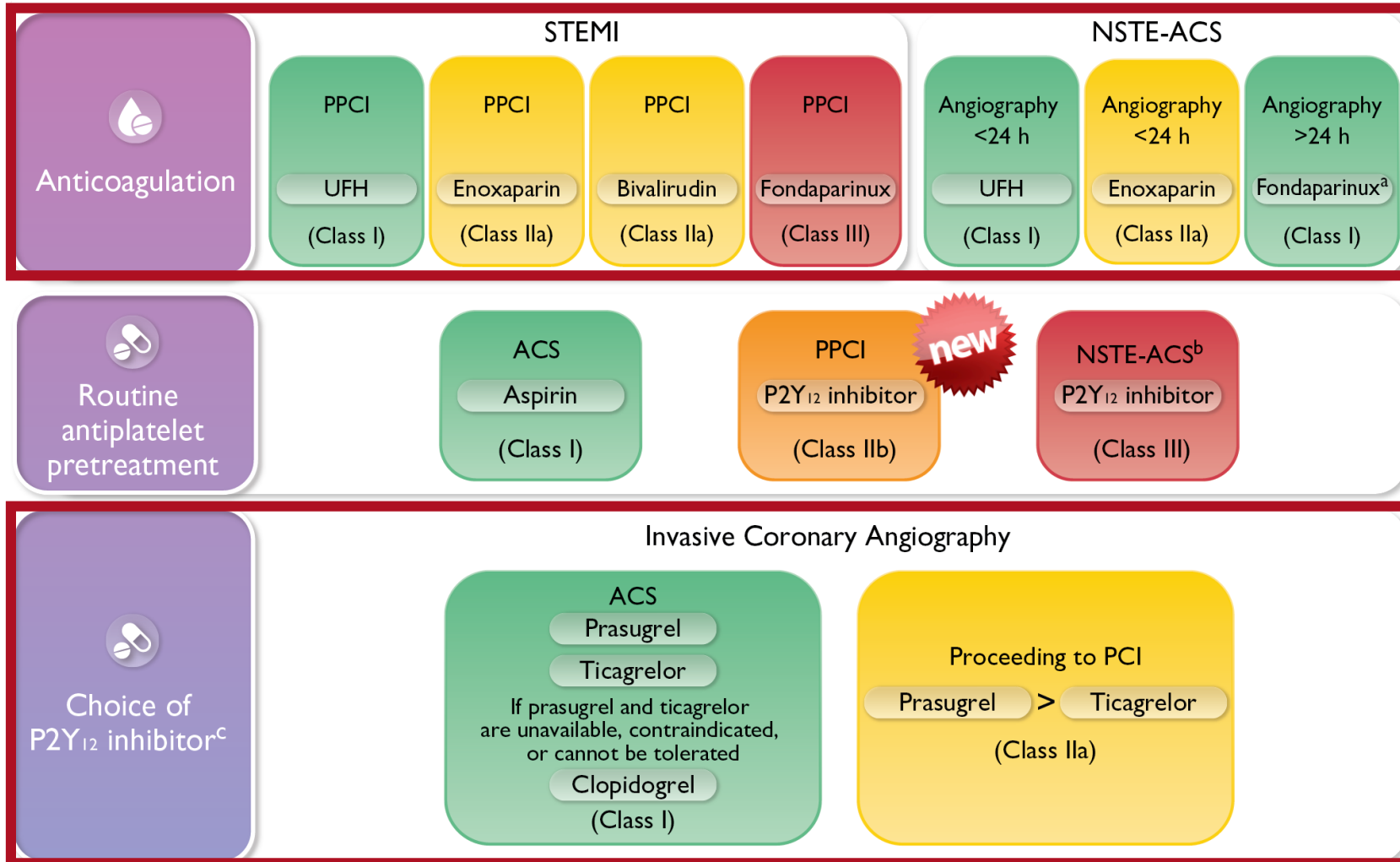


In patients with suspected ACS, non-elevated (or uncertain) hs-cTn, no ECG changes and no recurrence of pain, incorporating CCTA or a non-invasive stress imaging test as part of the initial workup should be considered.

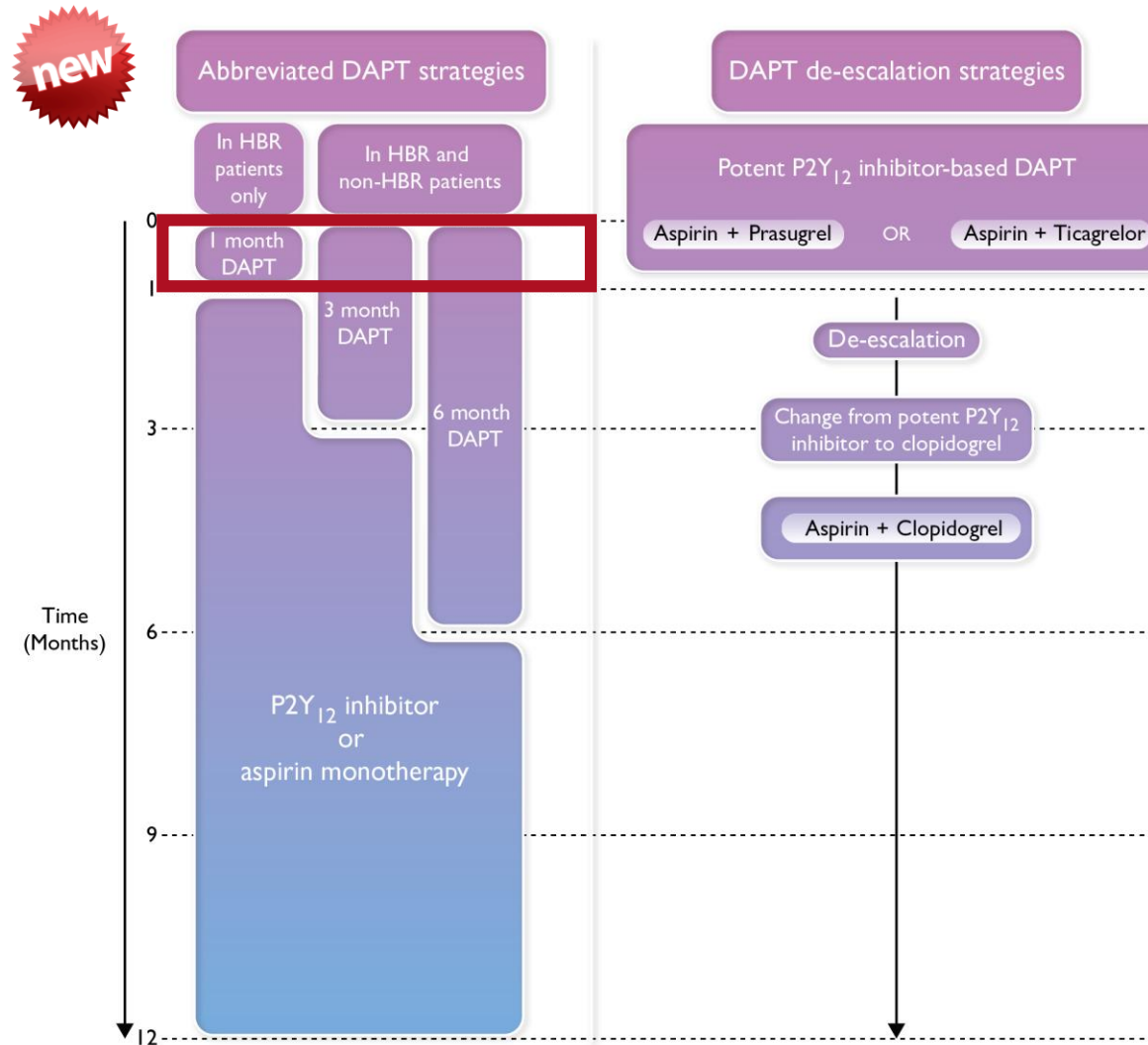
IIa

A

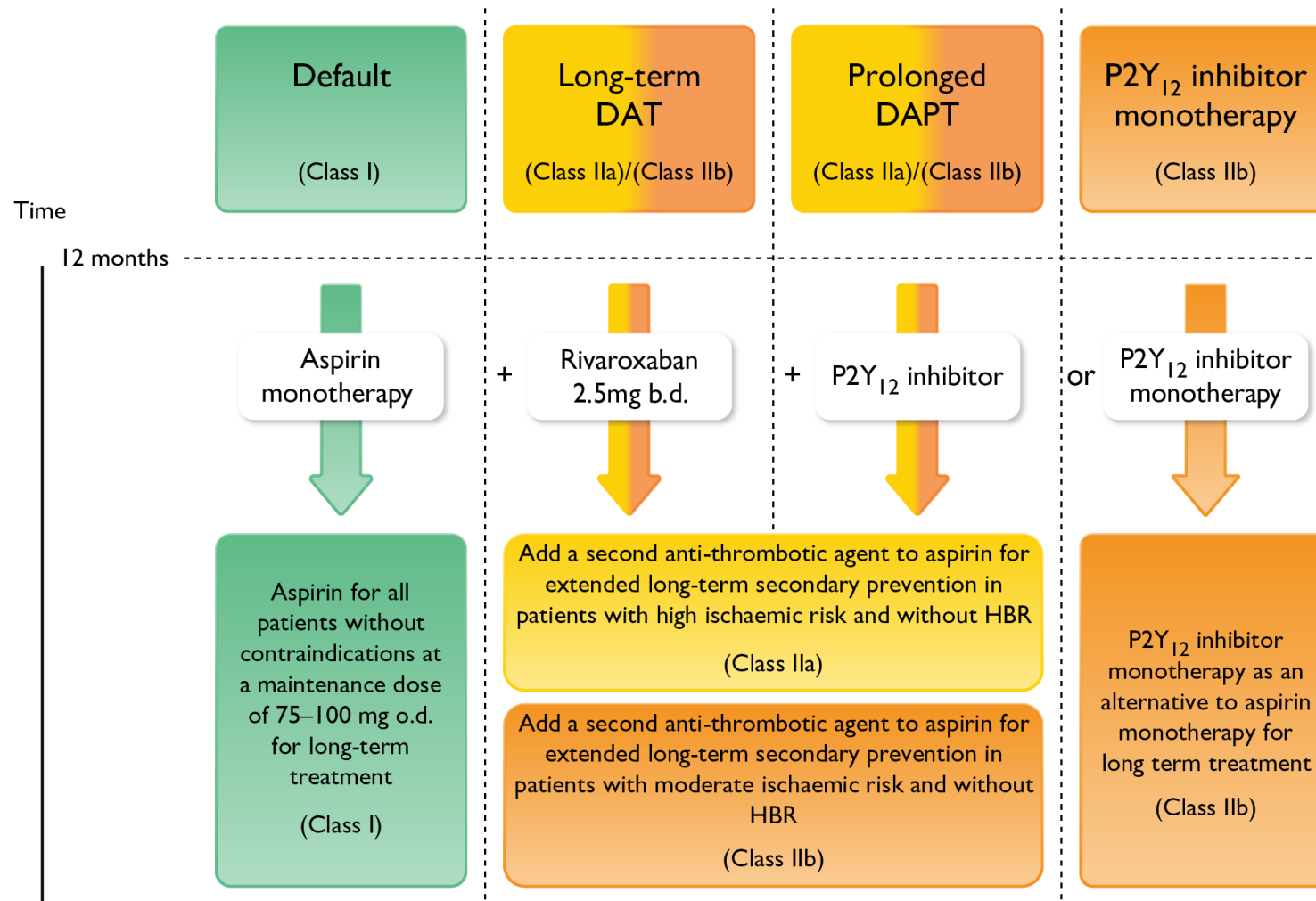
Terapêutica Antitrombótica



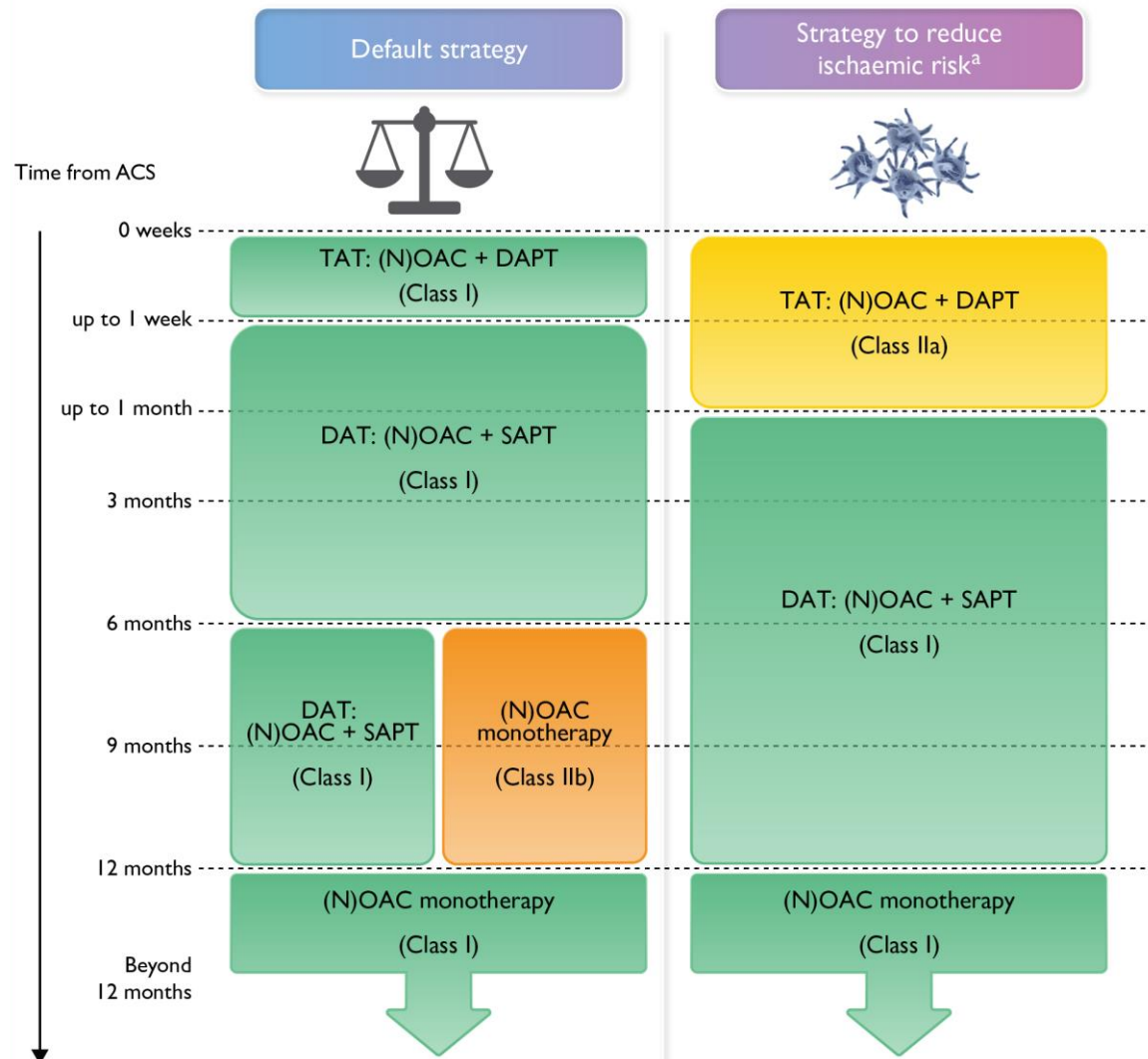
Terapêutica Antitrombótica



Após os 12 meses



Indicação OAC



Pós-PCR

A PPCI strategy is recommended in patients with resuscitated cardiac arrest and an ECG with persistent ST-segment elevation (or equivalents).

I

B

Routine immediate angiography after resuscitated cardiac arrest is not recommended in haemodynamically stable patients without persistent ST-segment elevation (or equivalents).

III

A

Choque Cardiogénico

Immediate coronary angiography and PCI of the IRA (if indicated) is recommended in patients with CS complicating ACS.

I

B

Emergency CABG is recommended for ACS-related CS if PCI of the IRA is not feasible/unsuccessful.

I

B

In patients with ACS and severe/refractory CS, short-term mechanical circulatory support may be considered.

IIb

C

The routine use of an IABP in ACS patients with CS and without mechanical complications is not recommended.

III

B

Doença Coronária Multivaso

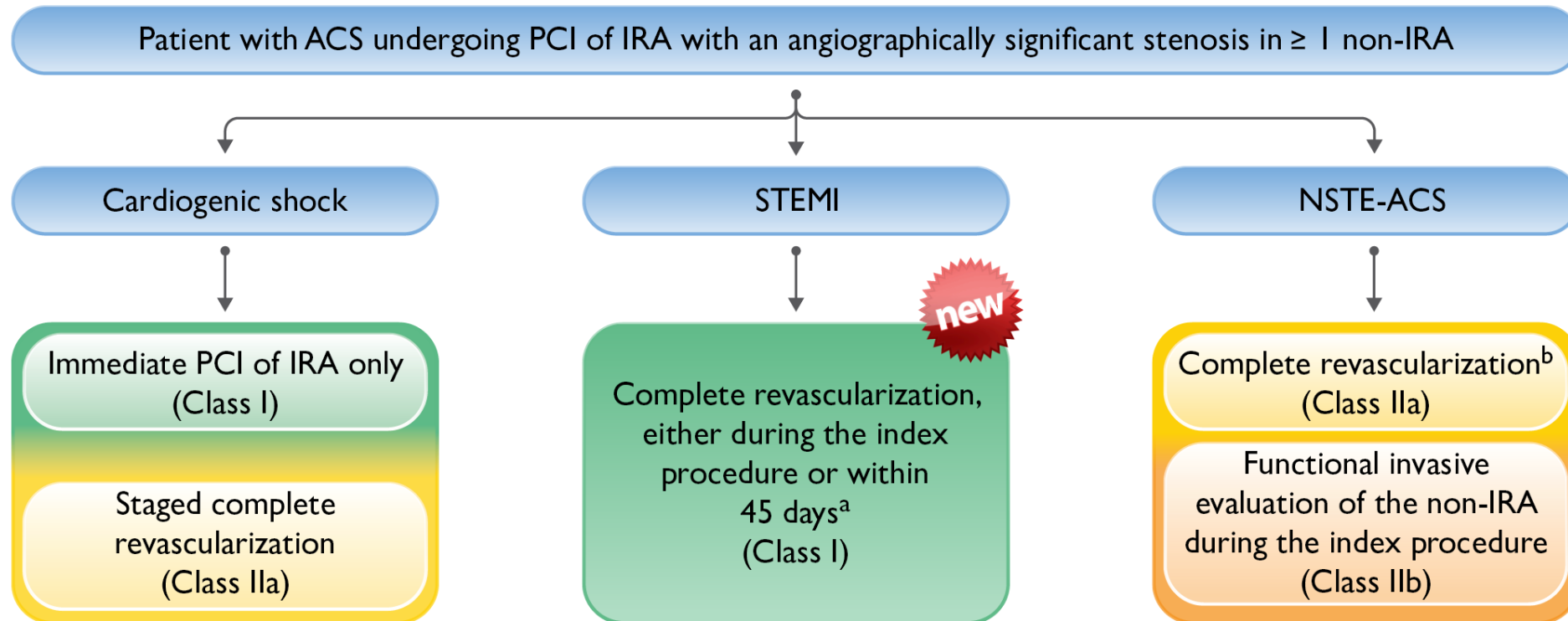
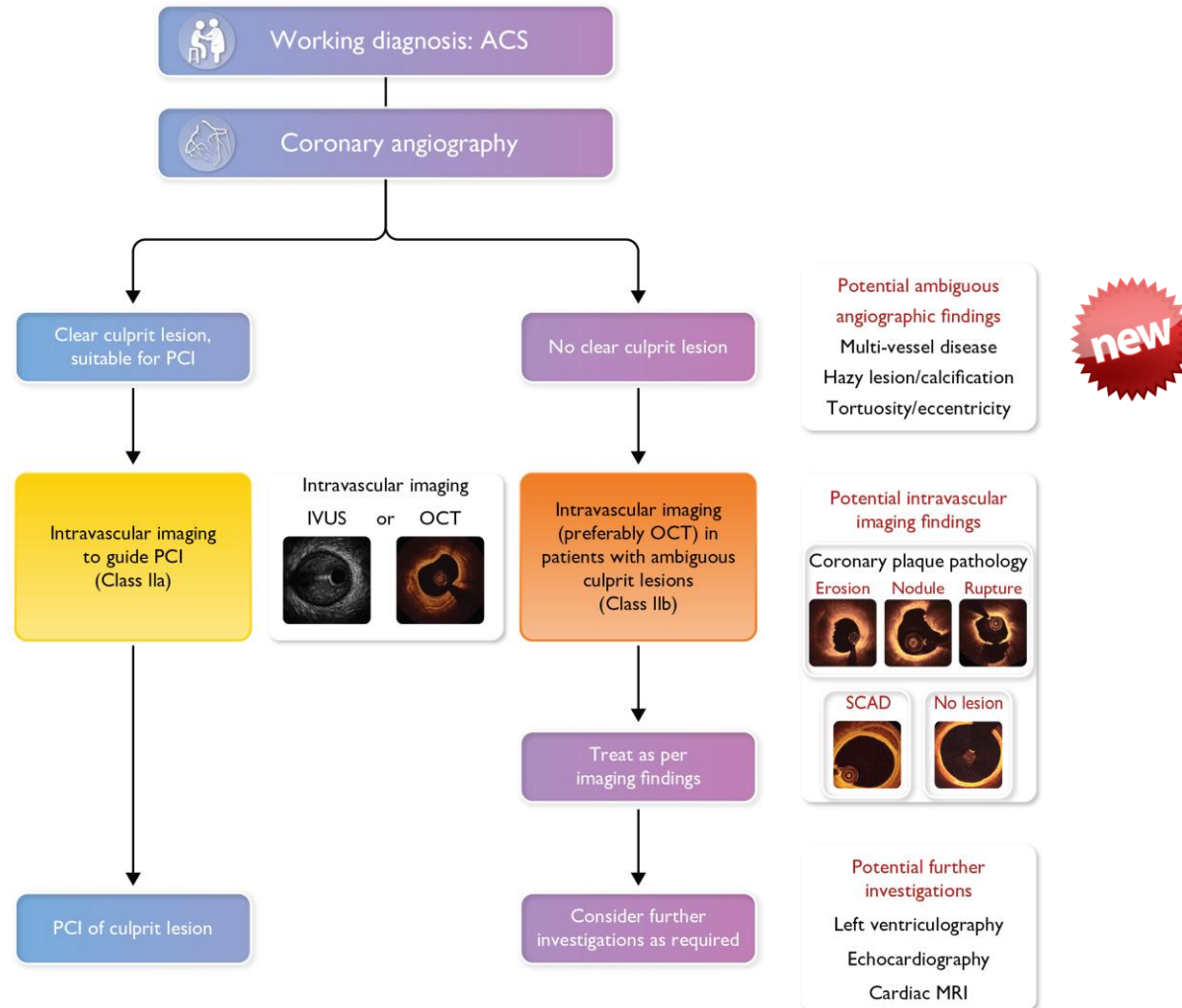


Imagem Intravascular



In patients with spontaneous coronary artery dissection, PCI is recommended only for patients with symptoms and signs of ongoing myocardial ischaemia, a large area of myocardium in jeopardy, and reduced antegrade flow.

I

C

MINOCA

Step 1
Cath lab assessment

Assessments to consider^a

Clinical history	Physical exam	ECG assessment
Detailed angiographic assessment ± LV angiography (incl. LVEDP)	Intravascular imaging (IVUS/OCT)	Assess for coronary microvascular dysfunction ± vasoreactivity (ACh testing)

Step 2
Ward assessment

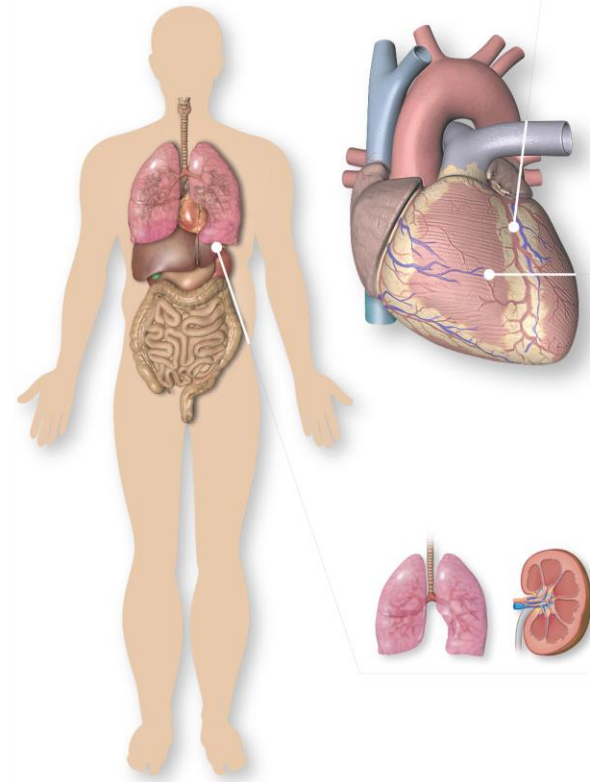
Assessments to consider^a

Clinical history	Physical exam	ECG assessment	Echocardiography
CMRI	Blood tests ^b	CTPA/CT brain ^c	

Step 3
Post discharge care

Assessments to consider^a

Follow-up clinic evaluation	Repeat echocardiography	Repeat CMRI	Cardiac rehabilitation
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- Coronary causes
- Coronary embolism
 - Coronary microvascular dysfunction
 - Coronary spasm
 - Coronary thrombosis
 - Myocardial bridging
 - Plaque rupture/erosion
 - Spontaneous coronary artery dissection

- Non-coronary, cardiac causes
- Cardiac trauma
 - Cardiomyopathy
 - Cardiotoxins
 - Myocarditis
 - Strenuous exercise
 - Takotsubo cardiomyopathy
 - Transplant rejection

- Non-cardiac causes
- Acute respiratory distress syndrome
 - Allergic/hypersensitivity reactions
 - End-stage renal failure
 - Inflammation
 - Pulmonary embolism
 - Sepsis
 - Stroke

Complicações SCA

Insuficiência Cardíaca

Trombo VE

Fibrilhação Auricular

Arritmias Ventriculares

Bradiarritmias

Complicações SCA

Insuficiência Cardíaca

Trombo VE

Fibrilhação Auricular

Arritmias Ventriculares

Bradiarritmias



IABP should be considered in patients with haemodynamic instability/cardiogenic shock due to ACS-related mechanical complications.

IIa

C

Complicações SCA

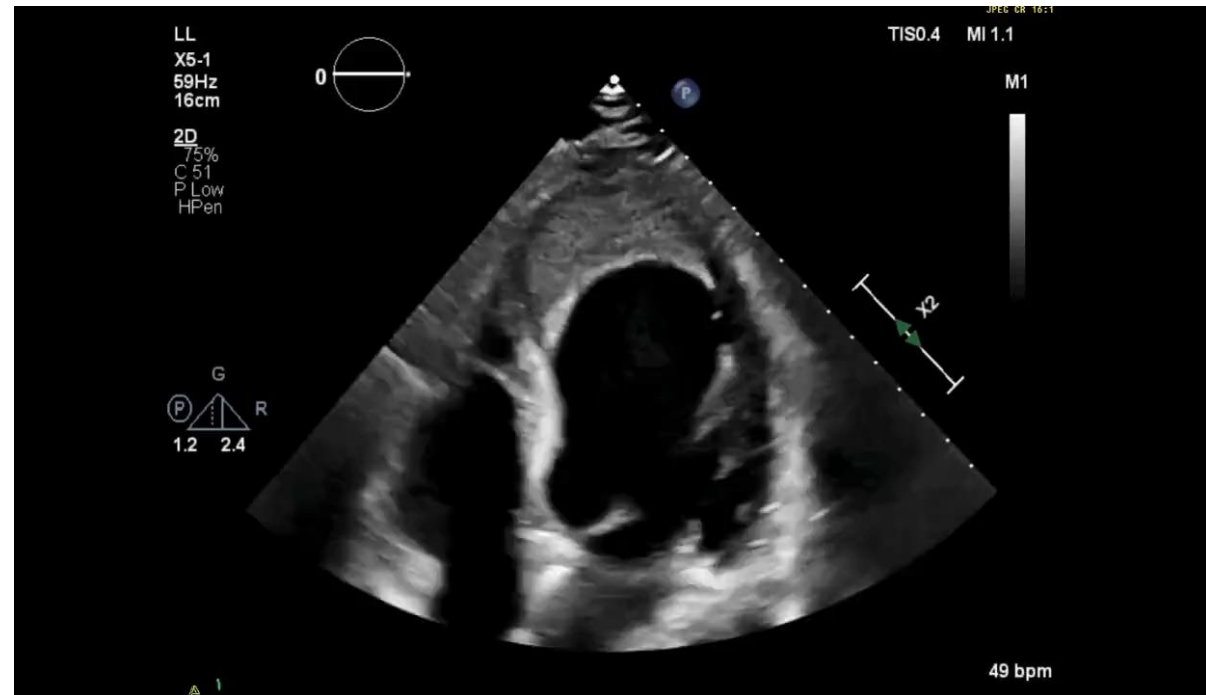
Insuficiência Cardíaca

Trombo VE

Fibrilhação Auricular

Arritmias Ventriculares

Bradiarritmias



Oral anticoagulant therapy (VKA or NOAC) should be considered for 3–6 months in patients with confirmed LV thrombus.

Ila

C

Complicações SCA

Insuficiência Cardíaca

Trombo VE

Fibrilhação Auricular

Arritmias Ventriculares

Bradiarritmias



In patients with documented *de novo* AF during the acute phase of ACS, long-term oral anticoagulation should be considered depending on the CHA₂DS₂-VASc score, after taking the HAS-BLED score and the need for concomitant antiplatelet therapy into consideration. NOACs are the preferred drugs.

Ila

C

Complicações SCA

Insuficiência Cardíaca

Trombo VE

Fibrilhação Auricular

Arritmias Ventriculares

Bradiarritmias

Intravenous <u>beta-blocker and/or amiodarone</u> treatment is recommended for patients with polymorphic VT and/or VF unless contraindicated.	I	B
<u>Prompt and complete revascularization</u> is recommended to treat myocardial ischaemia that may be present in patients with recurrent VT and/or VF.	I	C
Transvenous catheter pacing termination and/or <u>overdrive pacing</u> should be considered if VT cannot be controlled by repeated electrical cardioversion.	IIa	C
<u>Radiofrequency catheter ablation</u> at a specialized ablation centre followed by ICD implantation should be considered in patients with recurrent VT, VF, or electrical storm despite complete revascularization and optimal medical therapy.	IIa	C
Treatment of recurrent VT with haemodynamic relevance (despite repeated electrical cardioversion) with <u>lidocaine</u> may be considered if beta-blockers, amiodarone, and overdrive stimulation are not effective/applicable.	IIb	C
In patients with recurrent life-threatening ventricular arrhythmias, <u>sedation</u> or general anaesthesia to reduce sympathetic drive may be considered.	IIb	C

Complicações SCA

Insuficiência Cardíaca

Trombo VE

Fibrilhação Auricular

Arritmias Ventriculares

Bradiarritmias

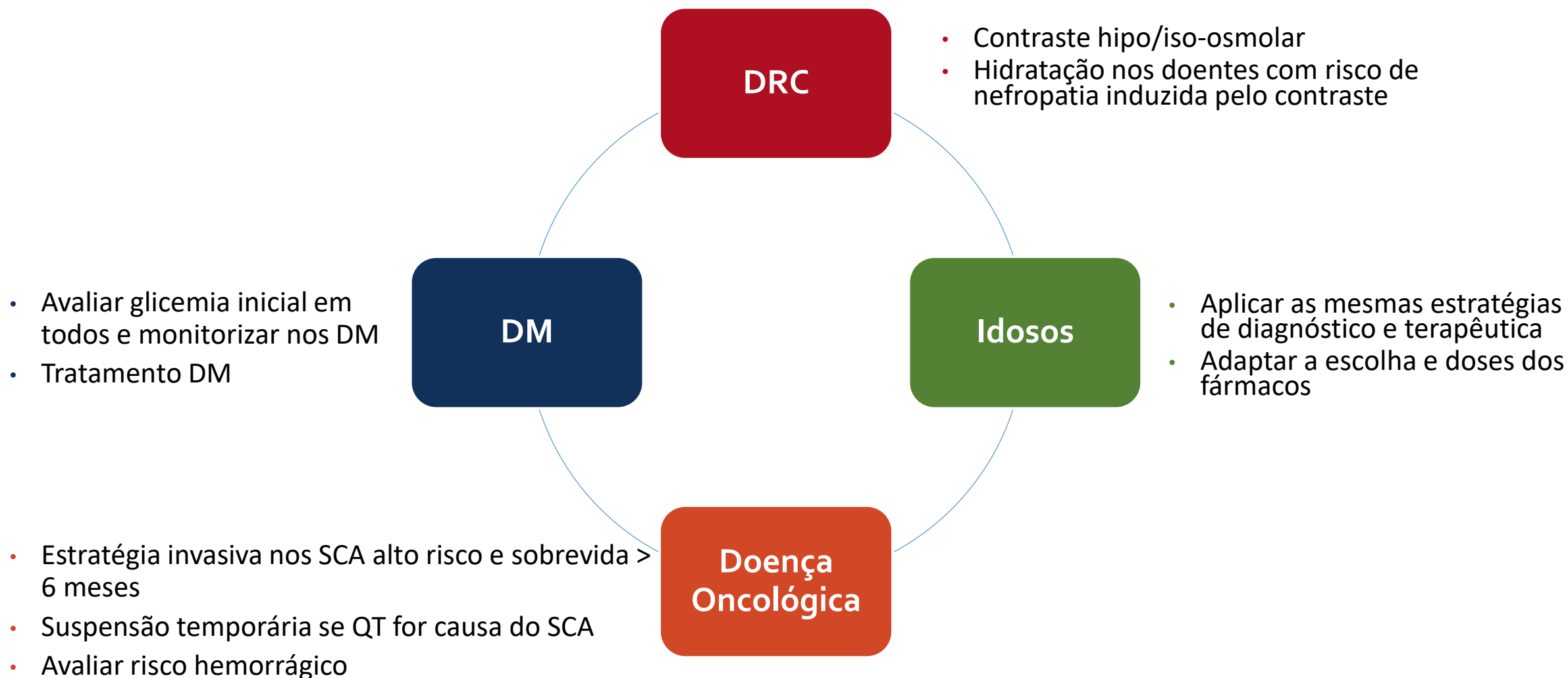
In cases of sinus bradycardia with haemodynamic intolerance or high-degree AV block without stable escape rhythm:

- i.v. positive chronotropic medication (adrenaline, vasopressin, and/or atropine) is recommended. **I C**
- temporary pacing is recommended in cases of failure to respond to atropine. **I C**
- urgent angiography with a view to revascularization is recommended if the patient has not received previous reperfusion therapy. **I C**

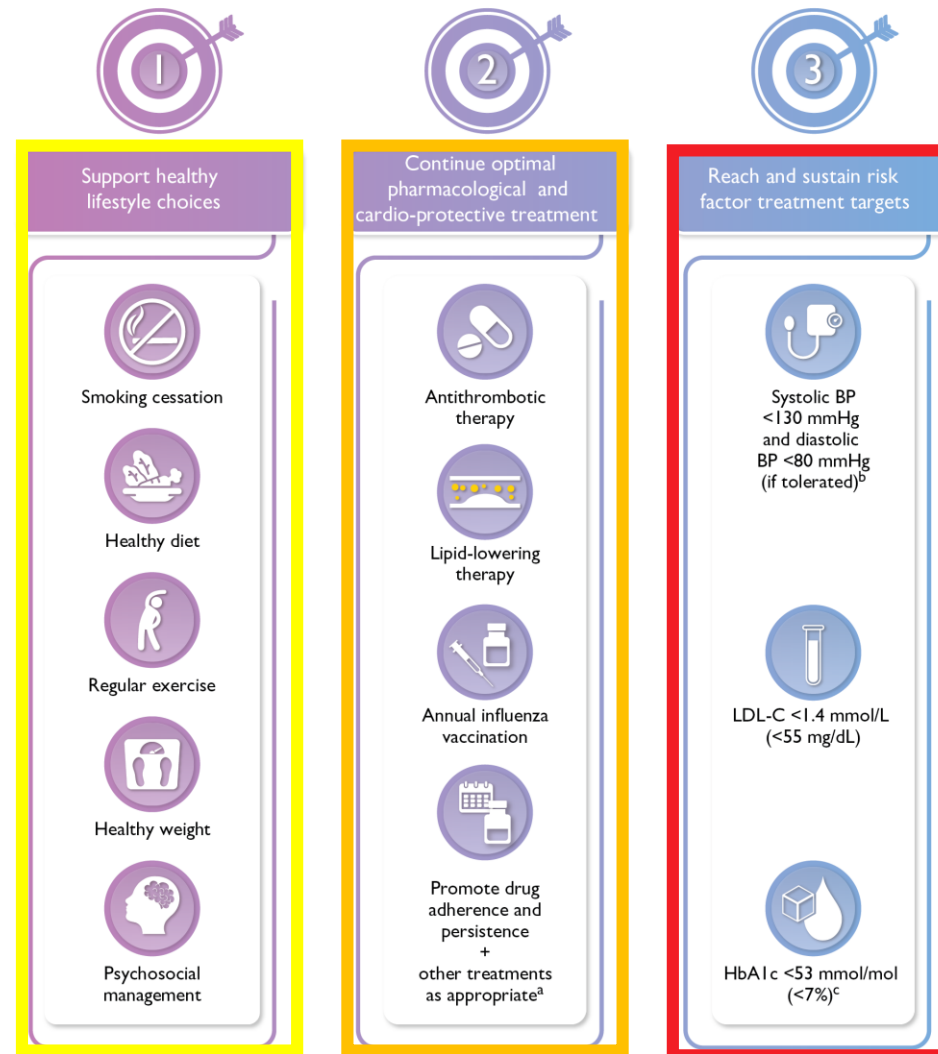
Implantation of a permanent pacemaker is recommended when high-degree AV block does not resolve within a waiting period of at least 5 days after MI. **I C**

In selected patients with high-degree AV block in the context of an anterior wall MI and acute HF, early device implantation (CRT-D/CRT-P) may be considered. **IIb C**

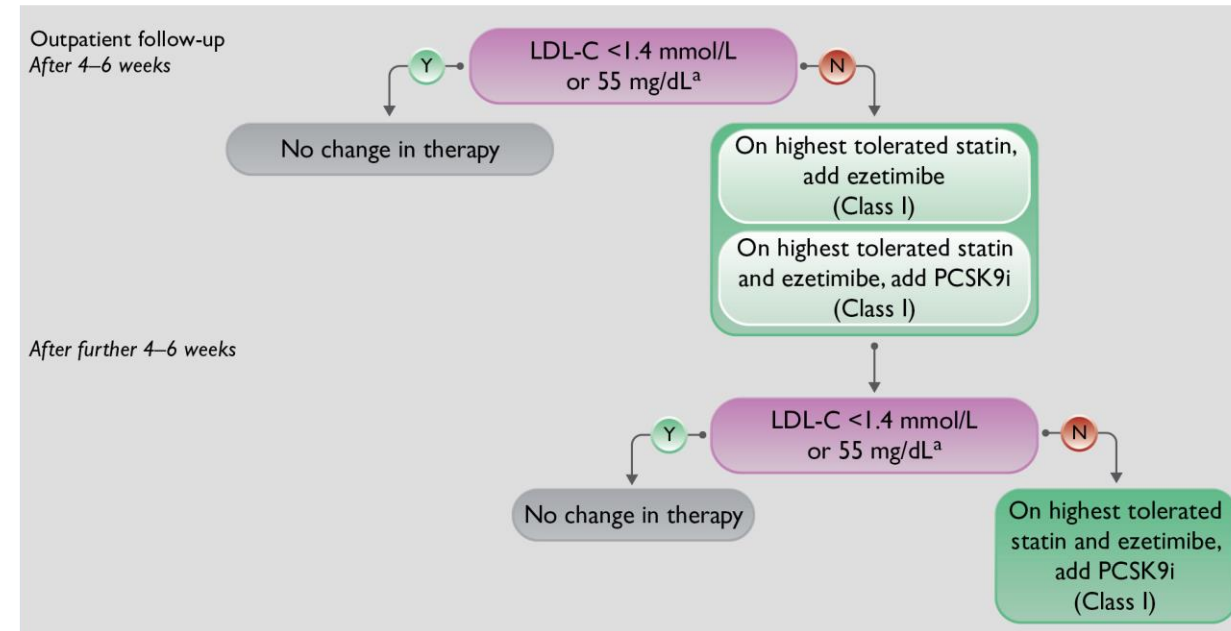
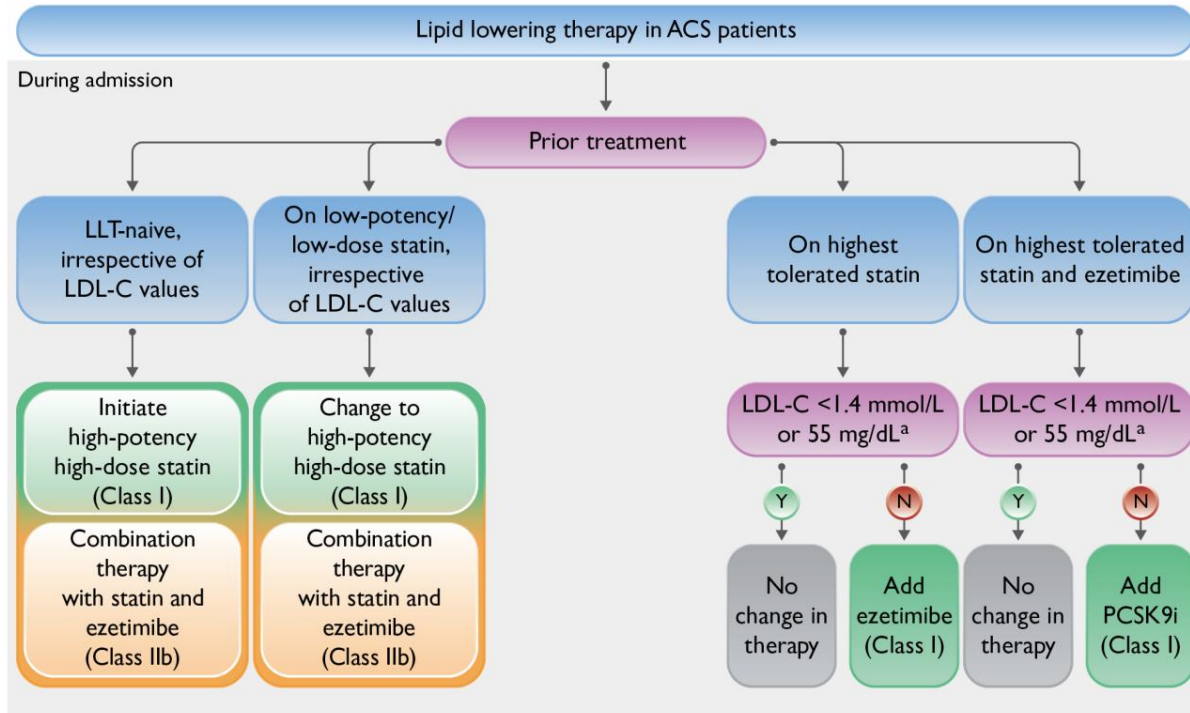
Comorbilidades



Trattamento a Lungo Prazzo



Hipolipemiantes



Em doentes com DCV aterosclerótica estabelecida e com **2 eventos vasculares em 2 anos** sob dose máxima tolerada de estatina, um LDL alvo < 40 mg/dL pode ser considerado.

BB

Beta-blockers are recommended in ACS patients with LVEF ≤40% regardless of HF symptoms.

I

A

Routine beta-blockers for all ACS patients regardless of LVEF should be considered.

IIa

B

Inibidores RAA

Angiotensin-converting enzyme (ACE) inhibitors are recommended in ACS patients with HF symptoms, LVEF ≤40%, diabetes, hypertension, and/or CKD.

I

A

Mineralocorticoid receptor antagonists are recommended in ACS patients with an LVEF ≤40% and HF or diabetes.

I

A

Routine ACE inhibitors for all ACS patients regardless of LVEF should be considered.

IIa

A

Colchicina

Low-dose colchicine (0.5 mg once daily) may be considered, particularly if other risk factors are insufficiently controlled or if recurrent cardiovascular disease events occur under optimal therapy.

IIb

A



Abordagem Individualizada

At every stage, consider physical and psychosocial needs



Premorbid condition



Consider all risk factors



Establish medical history and prior medications



Consider psychosocial factors



Hospital admission



Individualize care at triage



Perform a person-centred clinical assessment



Employ shared decision-making



Preparing for discharge



Explain regarding long-term treatment



Educate about lifestyle modification



Consider mental and emotional health

Obrigada!