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CardioAdvancedForum'20

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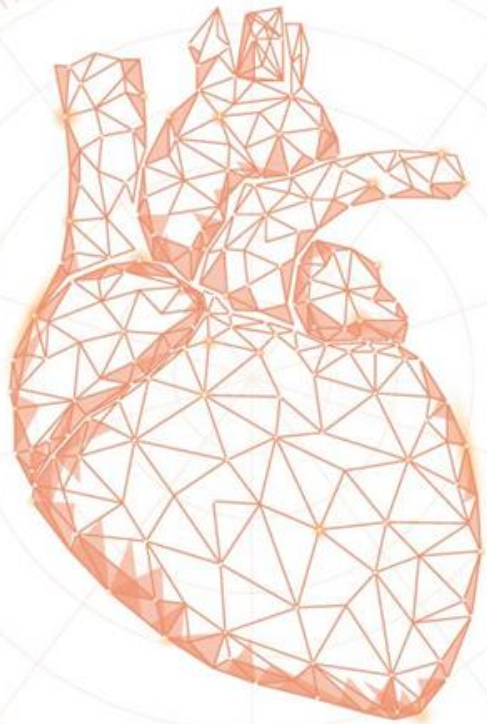
Nuevas guías Síndrome Coronario Agudo SIN elevación del segmento ST 2020

#ESCCongress



Pablo Jorge Pérez @pabloj
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Valoración inicial en 4 puntos

- Novedades: *Changing Practice*
- Práctica e ilustrativa
- Discutida y comentada
- Seguridad del paciente

→ Algoritmo diagnóstico 0/1; 0/2

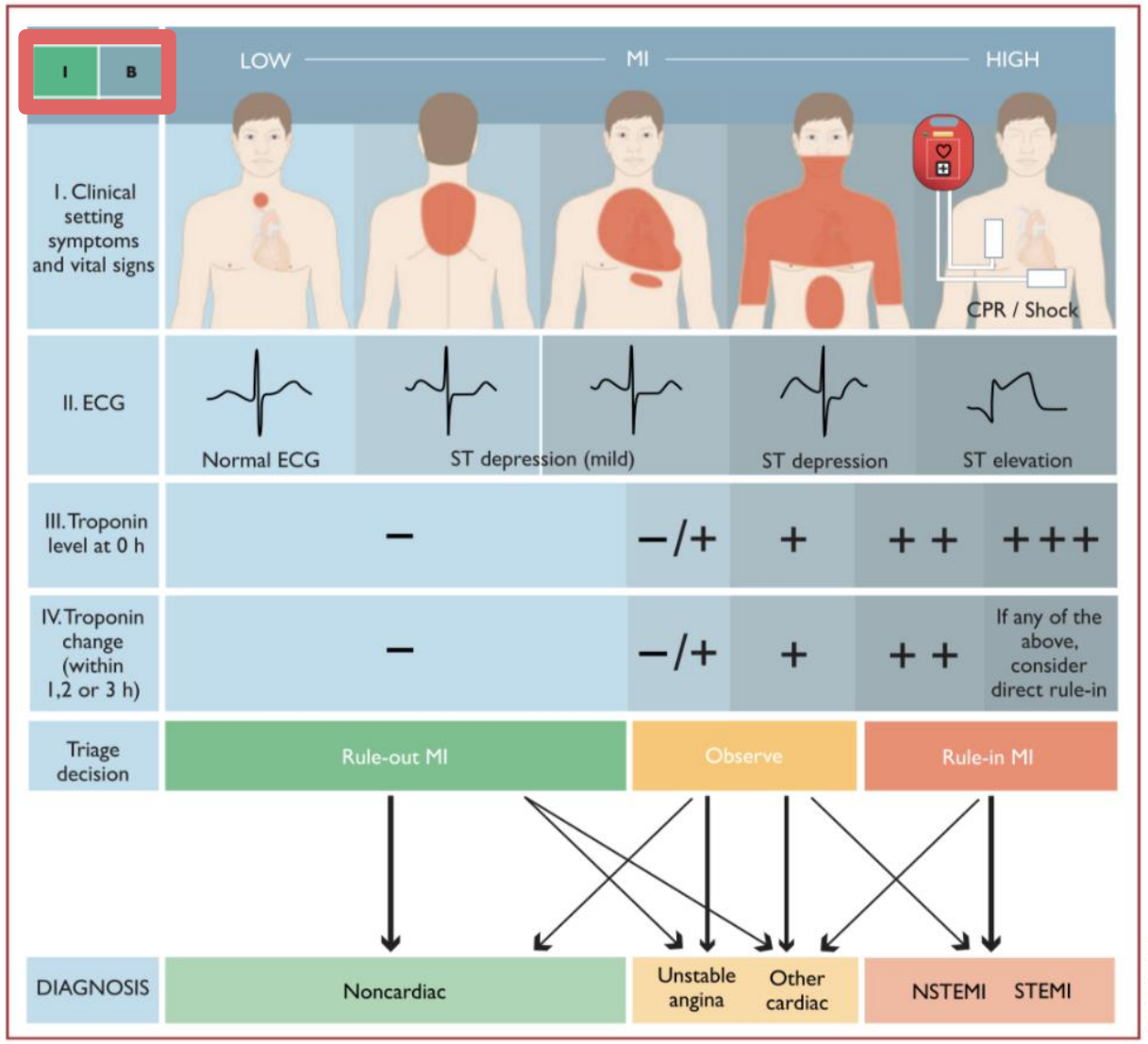
→ Pretratamiento

→ Estudio angiográfico, cuándo?

→ Terapia antitrombótica largo plazo

→ Triple terapia

Aproximación diagnóstica



1 As an alternative to the ESC 0 h/1 h algorithm, it is recommended to use the ESC 0 h/2 h algorithm with blood sampling at 0 h and 2 h, if an hs-cTn test with a validated 0 h/2 h algorithm is available.

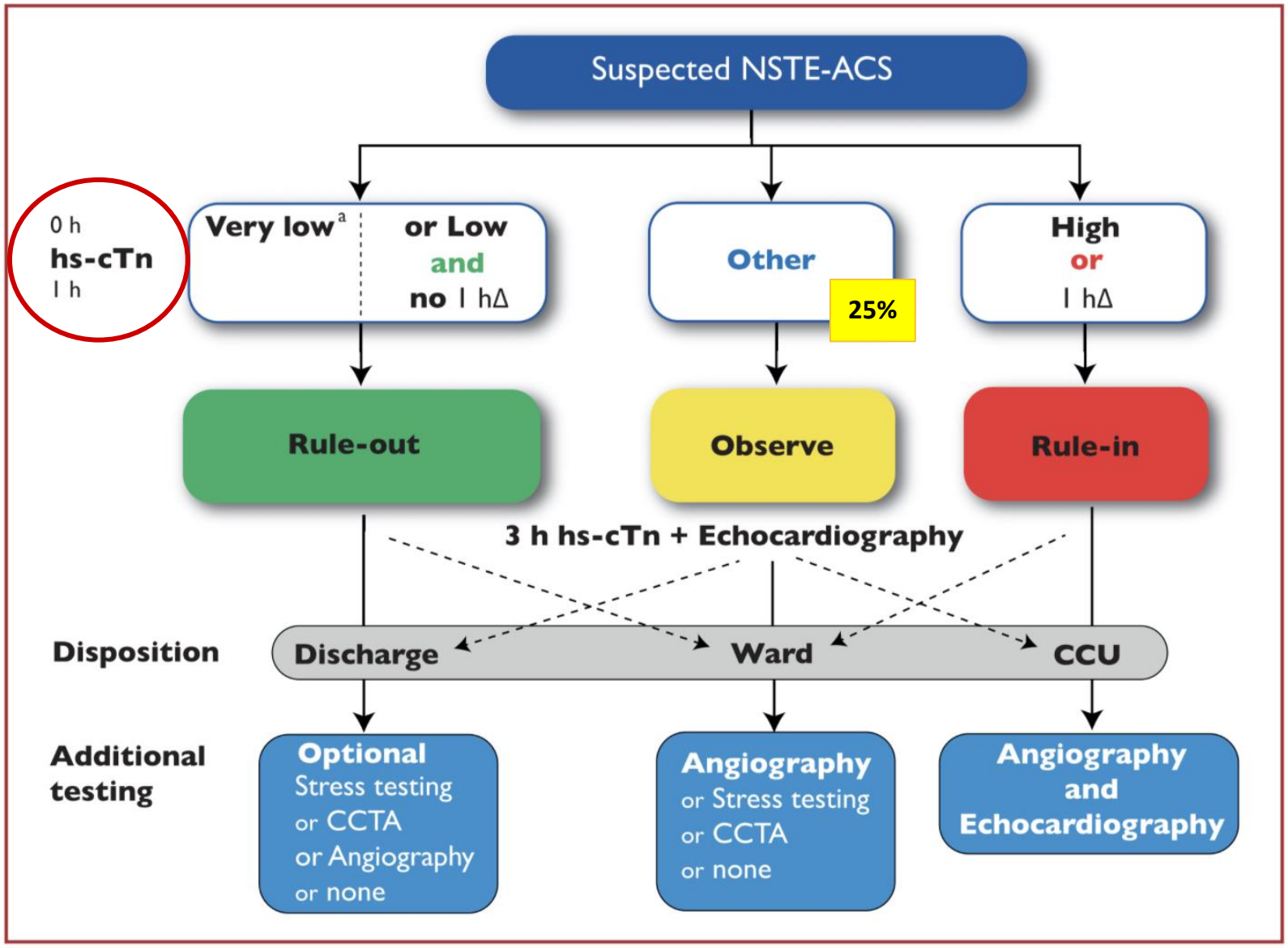
2 For diagnostic purposes, it is not recommended to routinely measure additional biomarkers such as CK, CK-MB, h-FABP, or copeptin, in addition to hs-cTn.

2015	2020
Diagnosis	
3 A rapid rule-out protocol at 0 h and 3 h is recommended if hs-cTn tests are available.	A rapid rule-out and rule-in protocol with blood sampling at 0 h and 3 h should be considered if an hs-cTn test with a validated 0 h/3 h algorithm is available.
4 Rhythm monitoring up to 24 h or PCI (whichever comes first) should be considered in NSTEMI patients at low risk for cardiac arrhythmias.	Rhythm monitoring up to 24 h or to PCI (whichever comes first) is recommended in NSTEMI patients at low risk for cardiac arrhythmias.
Rhythm monitoring for >24 h should be considered in NSTEMI patients at intermediate-to-high risk for cardiac arrhythmias.	Rhythm monitoring for >24 h is recommended in NSTEMI patients at increased risk for cardiac arrhythmias.
Risk assessment	
5 It is recommended to use established risk scores for prognosis estimation.	GRACE risk score models should be considered for estimating prognosis.

**

AGRIS cluster RCT
no valor añadido uso rutinario

Jean-Philippe Collet, Holger Thiele et. al. 2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation, *European Heart Journal*, , ehaa575, https://doi.org/10.1093/eurheartj/ehaa575



Trop-us

- VPN
- Detección precoz

- x5 URL VPP 90% para IAM tipo 1
- x3 URL VPP 50-60% IAM tipo 1

- Incremento y descenso distinguen con daño crónico

- *POC* menos sensibles y menor VPN

- Precaución en:
  - Edad avanzada
  - Enf renal
  - Sexo

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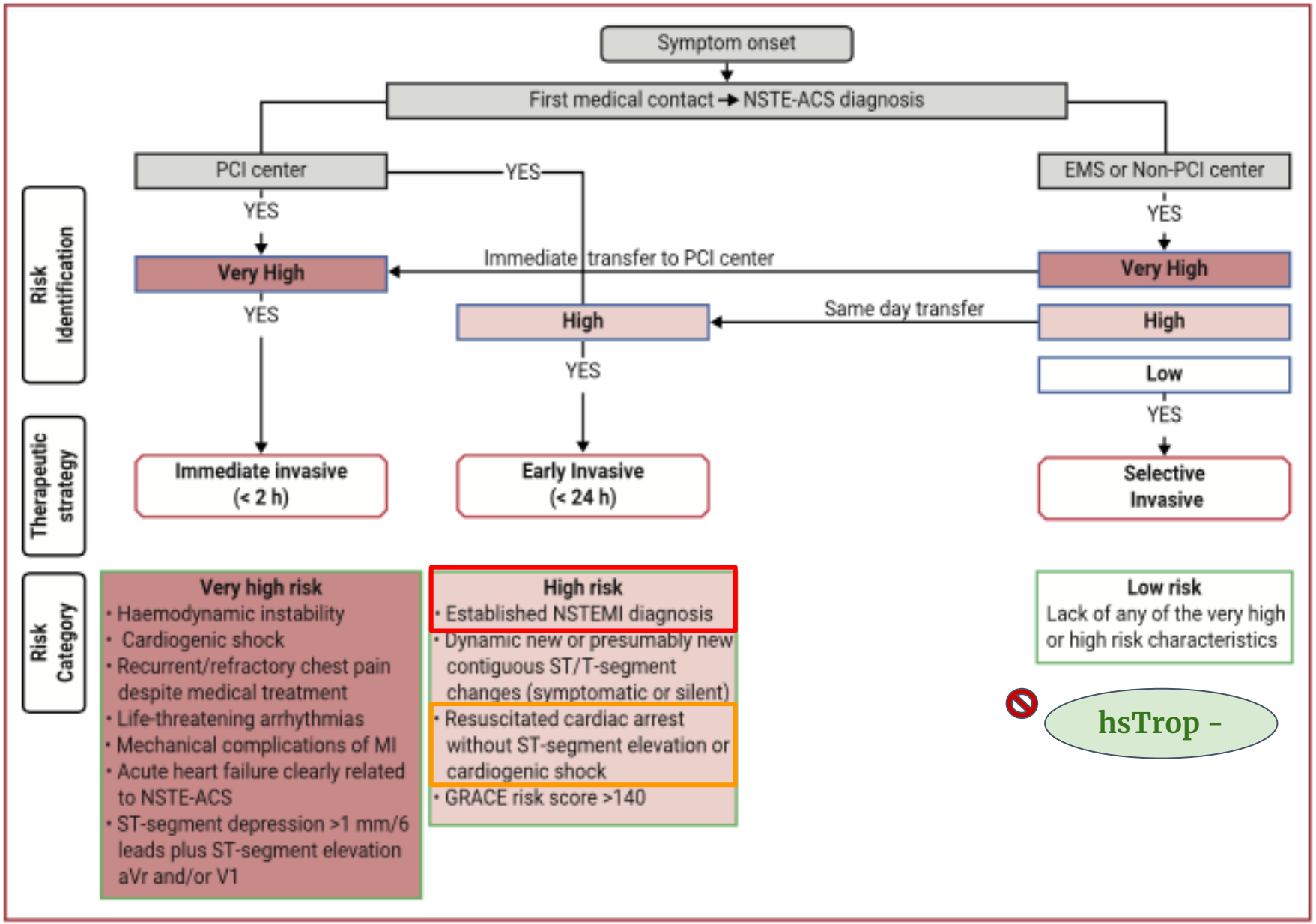
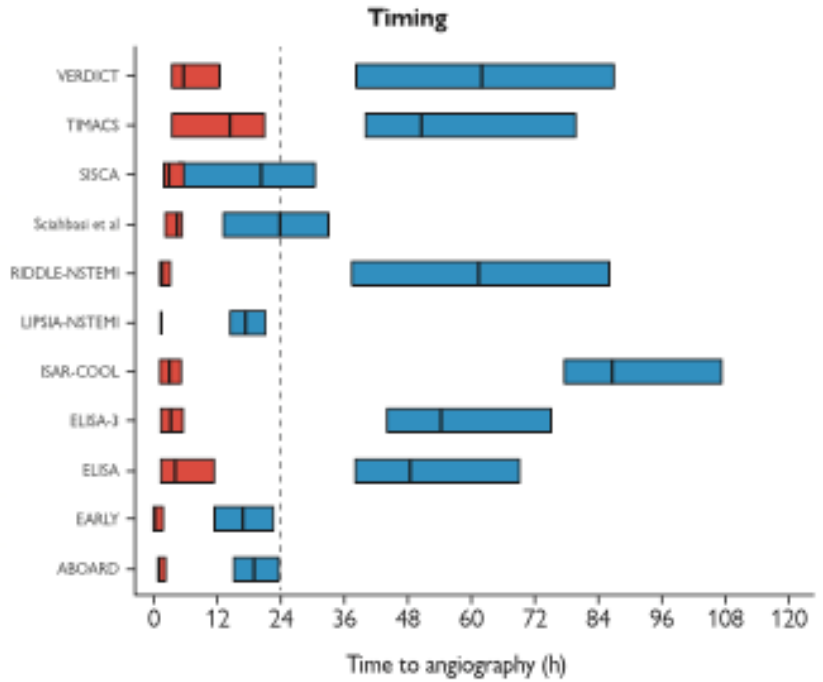


Jean-Philippe Collet, Holger Thiele et. al. 2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation, *European Heart Journal*, , ehaa575, https://doi.org/10.1093/eurheartj/ehaa575

Trials	Patients	Primary endpoint finding
VERDICT (2018)[273]	2147	No difference in composite endpoint
TIMACS (2009)[271]	3031	No difference in composite endpoint
SISCA (2015)[279]	170	↘ in MACE
Sciahbasi et al (2010)[280]	54	No difference in post-PCI myocardial blush grade
RIDDLE-NSTEMI (2016)[281]	323	↘ in death or new MI
LIPSIA-NSTEMI (2012)[282]	400	No ↘ in CK-MB
ISAR-COOL (2003)[283]	410	↘ in death or large MI
ELISA-3 (2013)[284]	534	No difference in composite endpoint
ELISA (2003)[285]	220	More enzymatic infarct size
EARLY (2020)[286]	709	↘ in cardiovascular death and recurrent ischaemic events
ABOARD (2009)[287]	352	No reduction in peak troponin level



¿Why early angio?

1. Los tiempos desde randomización hasta PCI en los RCTs son heterogéneos
2. Beneficio se asocia con el riesgo individual. GRACE risk score >140 beneficia estrategia invasiva precoz
3. Tendencia a menor ICA, angina refractaria y reducción días de ingreso

Jean-Philippe Collet, Holger Thiele et. al. 2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation, *European Heart Journal*, , ehaa575, https://doi.org/10.1093/eurheartj/ehaa575

24h angio

An early invasive strategy within 24 h is recommended in patients with any of the following high-risk criteria:

- Diagnosis of NSTEMI.
- Dynamic or presumably new contiguous ST/T-segment changes suggesting ongoing ischaemia.
- Transient ST-segment elevation.
- GRACE risk score >140.

TCMD

A selective invasive strategy after appropriate ischaemia testing or detection of obstructive CAD by CCTA is recommended in patients considered at low risk.

OOHCA

Delayed, as opposed to immediate, angiography should be considered in haemodynamically stable patients without ST-segment elevation successfully resuscitated after an out-of-hospital cardiac arrest.

Complete revascularization

Complete revascularization should be considered in NSTE-ACS patients without cardiogenic shock and with multivessel CAD.

Complete revascularization during index PCI may be considered in NSTE-ACS patients with multivessel disease.

FFR-guided revascularization of non-culprit NSTE-ACS lesions may be used during index PCI.

Jean-Philippe Collet, Holger Thiele et. al. 2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation, *European Heart Journal*, , ehaa575, https://doi.org/10.1093/eurheartj/ehaa575

Reducción riesgo sangrado

Table 12 Suggested strategies to reduce bleeding risk related to percutaneous coronary intervention

- Anticoagulant doses adjusted to body weight and renal function, especially in women and older patients
- Radial artery approach as default vascular access
- Proton pump inhibitors in patients on DAPT at higher-than-average risk of gastrointestinal bleeds (i.e. history of gastrointestinal ulcer/haemorrhage, anti-coagulant therapy, chronic non-steroidal anti-inflammatory drugs/corticosteroid use, or two or more of:
  a. Age ≥65 years
  b. Dyspepsia
  c. Gastro-oesophageal reflux disease
  d. *Helicobacter pylori* infection
  e. Chronic alcohol use
- In patients on OAC
  a. PCI performed without interruption of VKAs or NOACs
  b. In patients on VKAs, do not administer UFH if INR >2.5
  c. In patients on NOACs, regardless of the timing of the last administration of NOACs, add low-dose parenteral anticoagulation (e.g. enoxaparin 0.5 mg/kg i.v. or UFH 60 IU/kg)
- Aspirin is indicated but avoid pre-treatment with $P2Y_{12}$ receptor inhibitors → ACCOAST; SCAAR
- GP IIb/IIIa inhibitors only for bailout or periprocedural complications

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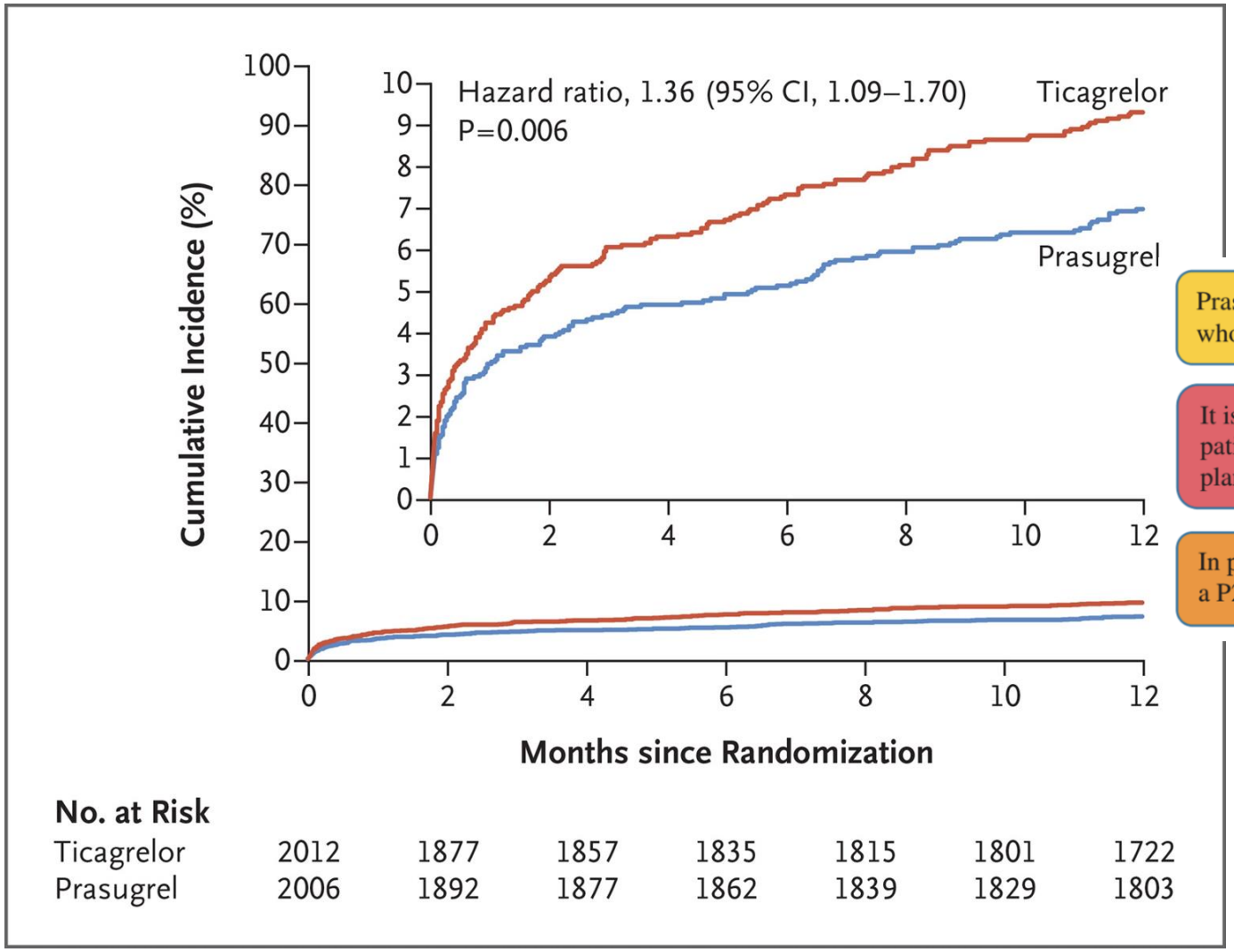


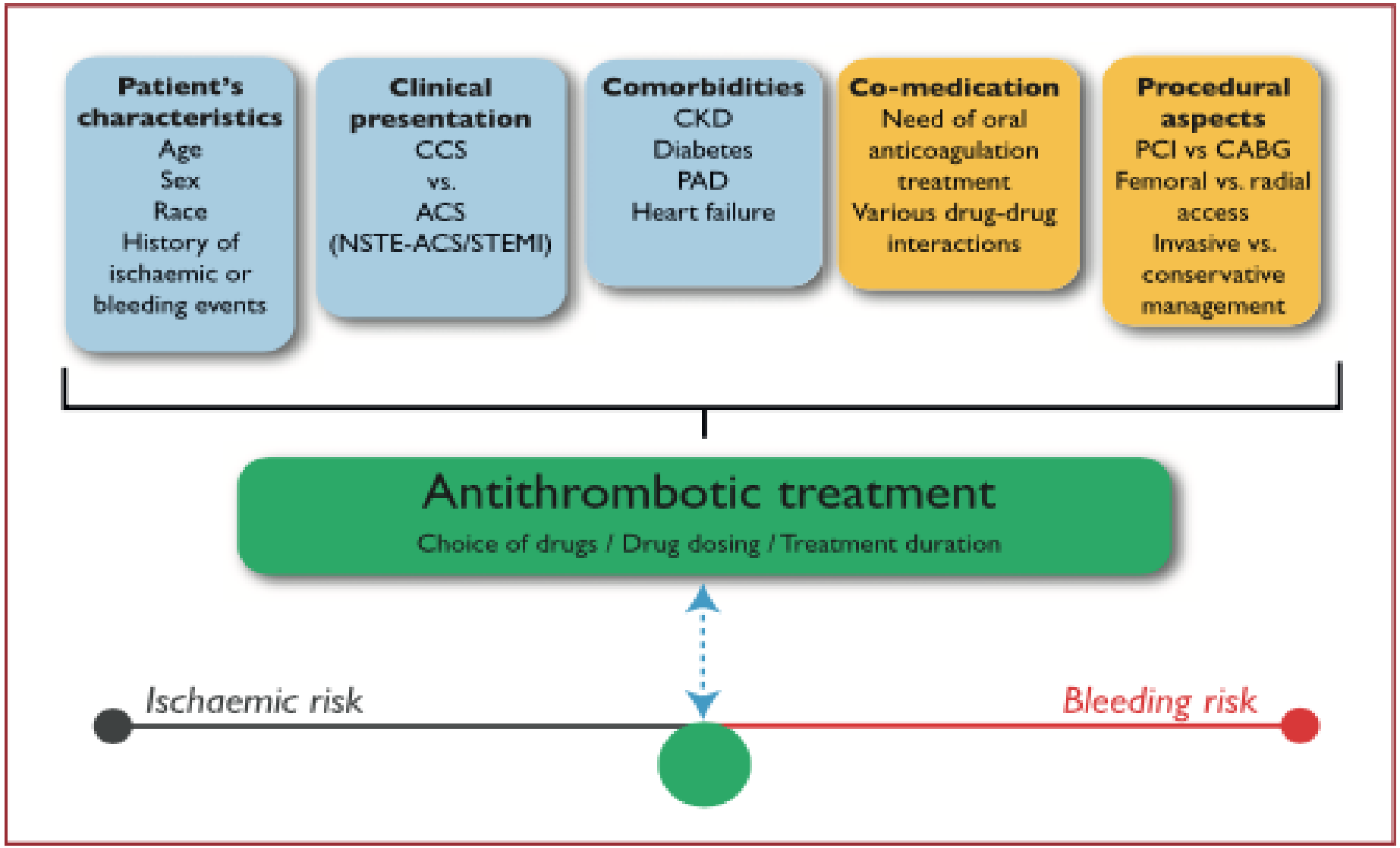
Prasugrel should be considered in preference to ticagrelor for NSTE-ACS patients who proceed to PCI.

It is not recommended to administer routine pre-treatment with a $P2Y_{12}$ receptor inhibitor to patients in whom the coronary anatomy is not known and early invasive management is planned.

In patients with NSTE-ACS who cannot undergo an early invasive strategy, pre-treatment with a $P2Y_{12}$ receptor inhibitor may be considered depending on bleeding risk.

October 17, 2019 N Engl J Med 2019; 381:1524-1534 DOI: 10.1056/NEJMoa1908973

Jean-Philippe Collet, Holger Thiele et. al. 2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation, *European Heart Journal*, , ehaa575, https://doi.org/10.1093/eurheartj/ehaa575



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Terapia antitrombótica

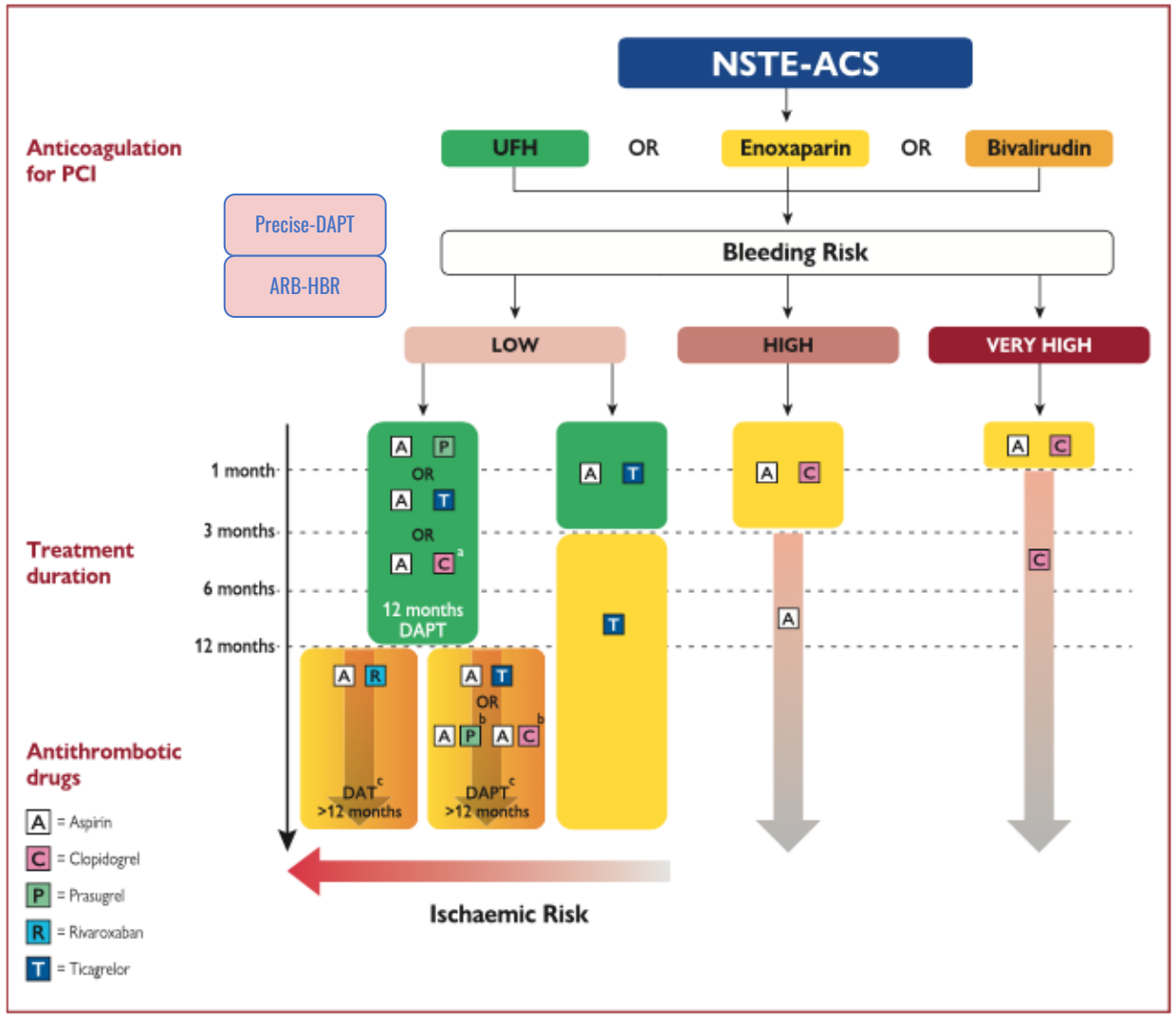

Table 11 Risk criteria for extended treatment with a second antithrombotic agent

High thrombotic risk (Class IIa)	Moderate thrombotic risk (Class IIb)
Complex CAD and at least 1 criterion	**Non-complex CAD and at least 1 criterion**
Risk enhancers	
Diabetes mellitus requiring medication	Diabetes mellitus requiring medication
History of recurrent MI	History of recurrent MI
Any multivessel CAD	Polyvascular disease (CAD plus PAD)
Polyvascular disease (CAD plus PAD)	CKD with eGFR 15–59 mL/min/1.73 m^2
Premature (<45 years) or accelerated (new lesion within a 2-year time frame) CAD	
Concomitant systemic inflammatory disease (e.g. human immunodeficiency virus, systemic lupus erythematosus, chronic arthritis)	
CKD with eGFR 15–59 mL/min/1.73 m^2	
Technical aspects	
At least 3 stents implanted	
At least 3 lesions treated	
Total stent length >60 mm	
History of complex revascularization (left main, bifurcation stenting with ≥2 stents implanted, chronic total occlusion, stenting of last patent vessel)	
History of stent thrombosis on antiplatelet treatment	

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Table 10 Treatment options for extended dual antithrombotic or antiplatelet therapies

Drug	Dose	Indication	NNT (ischaemic outcomes)	NNH (bleeding outcomes)
DAT regimens for extended treatment (including aspirin 75–100 mg o.d.)				
Rivaroxaban (COMPASS trial)	2.5 mg b.i.d.	Patients with CAD or symptomatic PAD at high risk of ischaemic events	77	84
DAPT regimens for extended treatment (including aspirin 75–100 mg o.d.)				
Clopidogrel (DAPT trial)	75 mg/d	Post MI in patients who have tolerated DAPT for 1 year	63	105
Prasugrel (DAPT trial)	10 mg/d (5 mg/d if body weight <60 kg or age >75 years)	Post PCI for MI in patients who have tolerated DAPT for 1 year	63	105
Ticagrelor (PEGASUS-TIMI 54)	60/90 mg b.i.d.	Post MI in patients who have tolerated DAPT for 1 year	84	81

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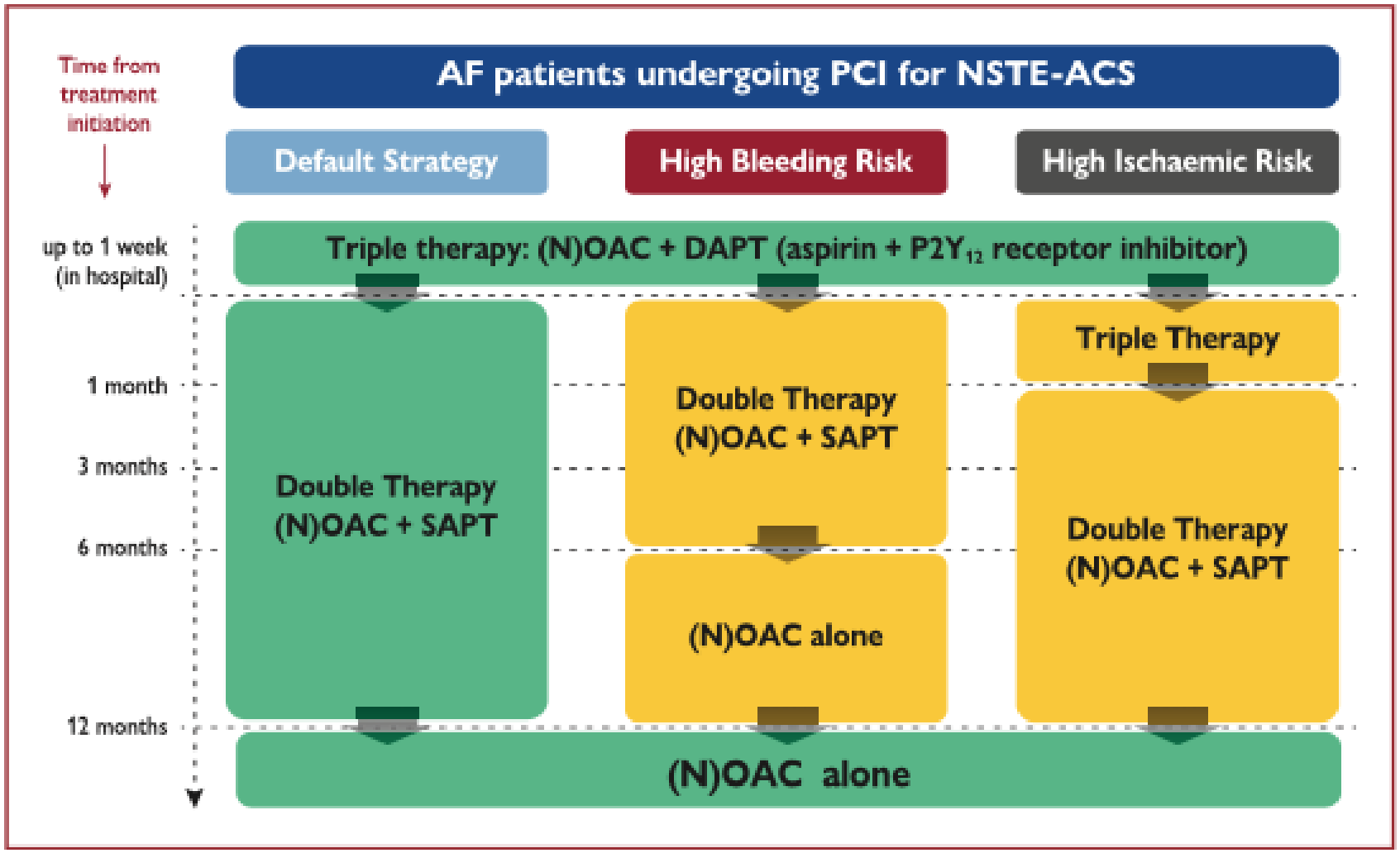
Triple terapia: PCI + FA



- NOAC > AVK (seguridad)
- Antiagregante de elección: clopidogrel
- Triple terapia entre una **1 semana - 1 mes**

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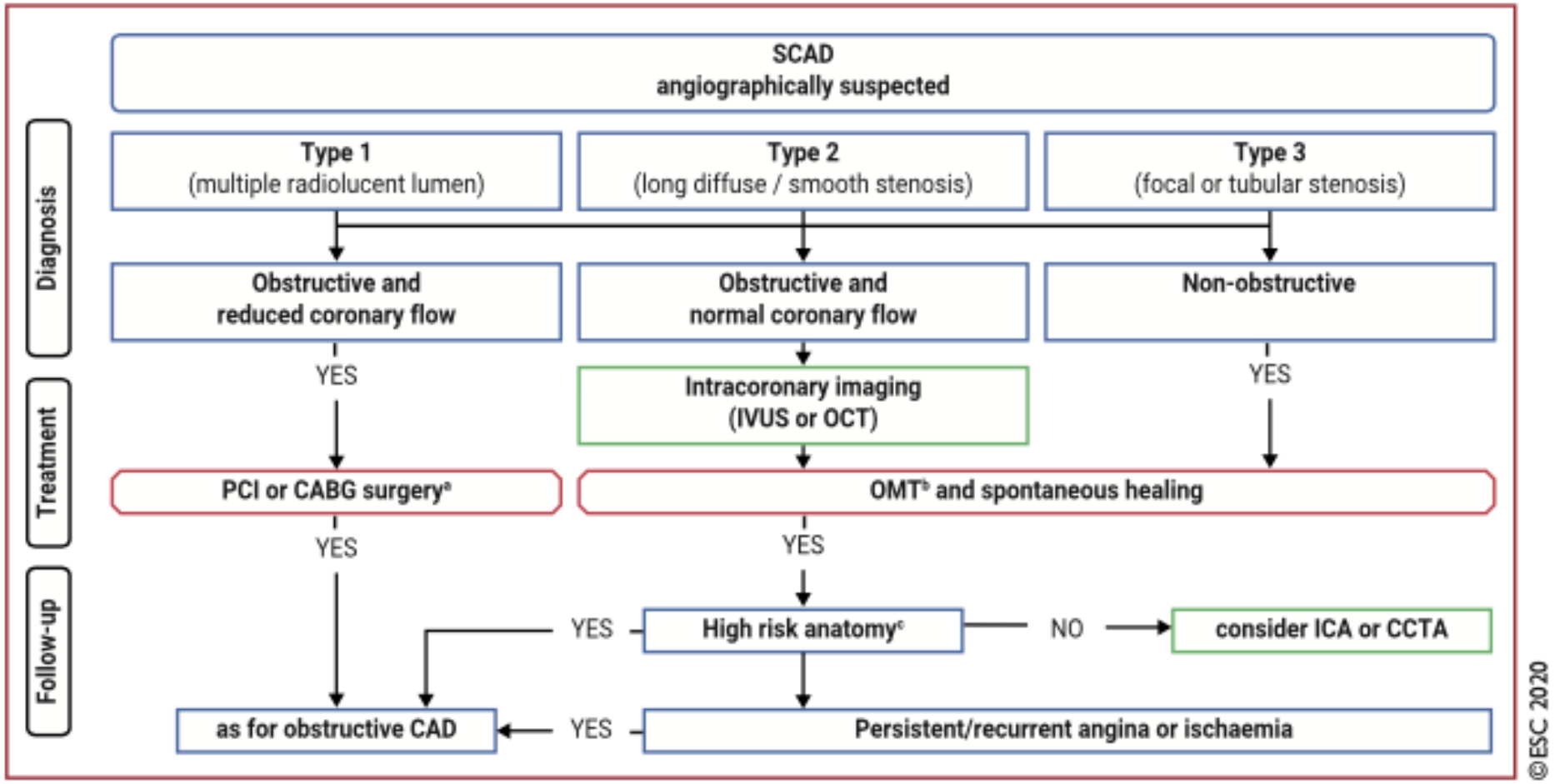
Algoritmo SCAD



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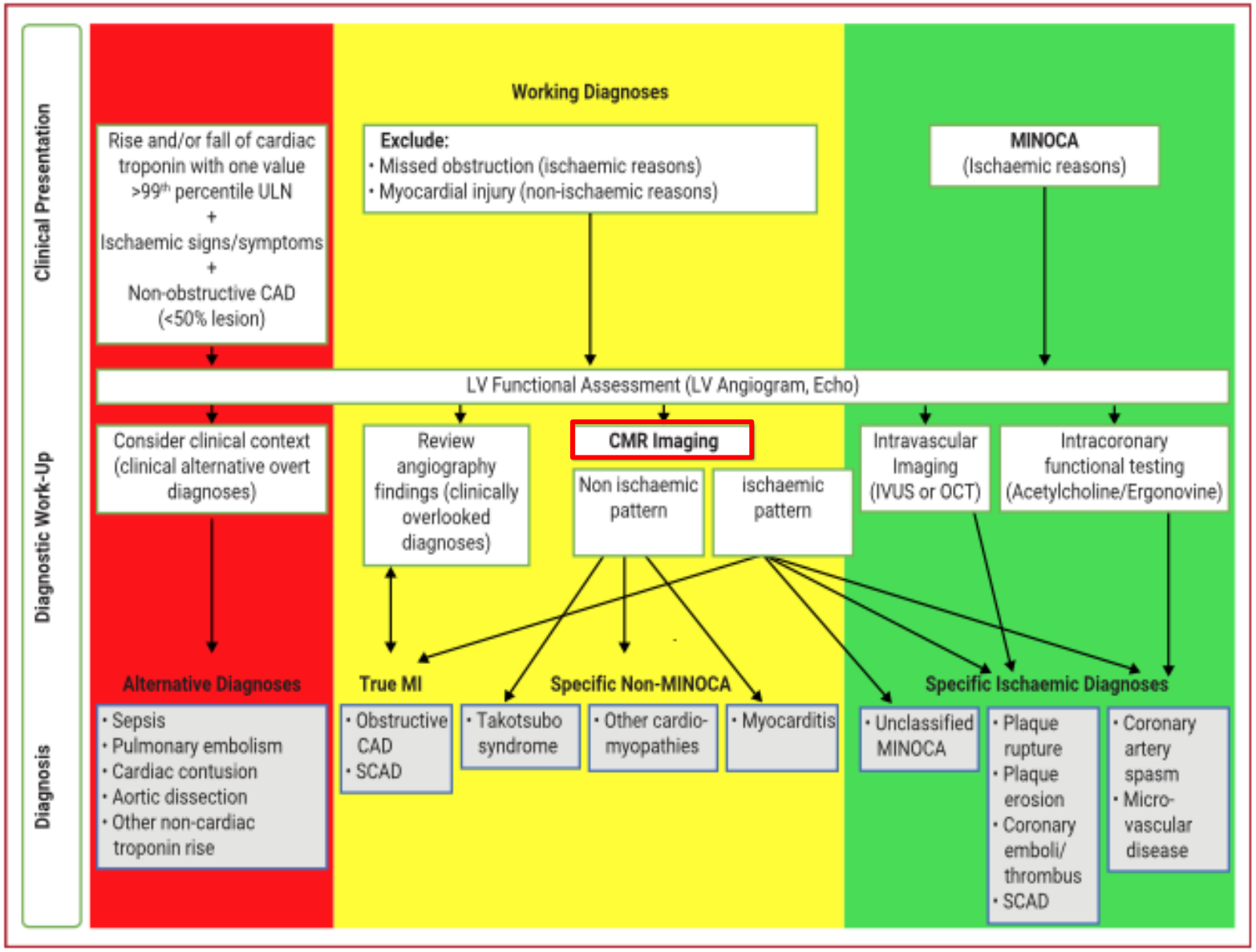
Algoritmo MINOCA

CMR I B



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Gestión indicadores de calidad

Corresponding ESC CPG recommendation: statins are recommended in all NSTE-ACS patients. The aim is to reduce LDL-C by at least 50% from baseline and/or achieve LDL-C <1.4 mmol/L (<55 mg/dL).	I	A
Corresponding ESC CPG recommendation: echocardiography is recommended to evaluate regional and global LV function and to rule in or rule out differential diagnoses.	I	C
Corresponding ESC CPG recommendation: radial access is recommended as the standard approach, unless there are overriding procedural considerations.	I	A
Corresponding ESC CPG recommendation: an early invasive strategy within 24 h is recommended in patients with any of high-risk criteria, including the diagnosis of NSTEMI suggested by a diagnostic algorithm.	I	A
Corresponding ESC CPG recommendation: it is recommended to measure cardiac troponins with high-sensitivity assays immediately after admission and obtain the results within 60 min of blood sampling.	I	B

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Practical Q&A

Q26. A 68-year-old female patient with permanent atrial fibrillation received aspirin, clopidogrel, and apixaban 5 mg BID following NSTE-ACS. No significant CAD was evidenced. Considering that no revascularization was performed, how do you best manage the antithrombotic therapy?

The only evidence available thus far in this kind of patient is the one derived from the AUGUSTUS (Antithrombotic Therapy After Acute Coronary Syndrome or PCI in Atrial Fibrillation) trial. The patient can be discharged with apixaban 5 mg BID plus clopidogrel for at least 6 months (section 5.3.1).

Q4. A 56-year-old male patient with a history of recent intracranial haemorrhage and severe arterial hypertension (systolic blood pressure > 200 mmHg) is admitted to the emergency department. He suffers from typical chest pain and the initial high-sensitivity cardiac troponin (hs-cTn) is markedly elevated (> 5 upper limit of normal [ULN]). Coronary angiography reveals single vessel disease with a stenosis of the medial right coronary artery (RCA). PCI is performed successfully. What are the options for $P2Y_{12}$ inhibitor treatment for this patient?

The only optional treatment is clopidogrel (600 mg loading dose, 75 mg daily dose) for this patient. Of note, both potent $P2Y_{12}$ receptor inhibitors prasugrel and ticagrelor are contraindicated in patients with a history of intracranial haemorrhage (Figure 7, Table 7).

Q5. What is the recommended treatment duration for dual antiplatelet therapy (DAPT) with aspirin and clopidogrel in this patient?

The recommended treatment duration for DAPT is 12 months unless there are contraindications or an excessive risk of bleeding. Indeed, the bleeding risk is high in this patient (e.g. PRECISE-DAPT ≥25 or ARC-HBR [Academic Research Consortium High Bleeding Risk] criteria met) and discontinuation of $P2Y_{12}$ inhibitor therapy after 3 months should be considered (Figure 7, Table 7).

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Qué puede cambiar…

- **Precocidad y fiabilidad 0/1 y 0/2.** Adaptar algoritmo diagnóstico en cada centro.
- **SCORE en pacientes seleccionados.** GRACE, PRECISE. **ARB**
- **Angio en 24h,** Requiere organización y gestión a varios niveles
- No **pretratamiento si angio<24h.** Implica cambios a diferentes niveles
- **Prasugrel** > ticagrelor
- No **terapia puente!**
- Diferentes opciones **estrategia antitrombótica a largo plazo**
- **NOAC en triple terapia.** Seguridad

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