

Scanner cardiaque

le point de vue du cardiologue

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Coronaropathie

- Place de choix dans la douleur thoracique et la coronaropathie chronique .
- Première étape : Etablir la probabilité pré-test
 - Indication chez les patients présentant une probabilité faible ou intermédiaire
 - Exception : Utilisation chez les patients pontés car coronarographie de réalisation plus difficile et scanner plus pertinent pour contrôler la perméabilité des pontages

Recommendation Table 8 — Recommendations for non-invasive anatomical imaging tests in the initial diagnostic management of individuals with suspected chronic coronary syndrome—coronary computed tomography angiography, if available, and supported by local expertise (see also Evidence Table 8)

Recommendations	Class ^a	Level ^b
In individuals with suspected CCS and low or moderate (>5%–50%) pre-test likelihood of obstructive CAD, CCTA is recommended to diagnose obstructive CAD and to estimate the risk of MACE. ^{33,34,145,212,214–221}	I	A
CCTA is recommended in individuals with low or moderate (>5%–50%) pre-test likelihood of obstructive CAD to refine diagnosis if another non-invasive test is non-diagnostic. ²²²	I	B
CCTA is not recommended in patients with severe renal failure (eGFR <30 mL/min/1.73 m ²), decompensated heart failure, extensive coronary calcification, fast irregular heart rate, severe obesity, inability to cooperate with breath-hold commands, or any other conditions that can make obtaining good imaging quality unlikely.	III	C

1

Symptom score (0–3 points)

Chest pain characteristics

- Type and location: Constricting discomfort located retrosternally or in neck, jaw, shoulder or arm (1 point)
- Aggravated by: Physical or emotional stress (1 point)
- Relieved by: Rest or nitrates within 5 min (1 point)

Dyspnoea characteristics

Shortness of breath and/or trouble catching breath aggravated by physical exertion (2 points)

Symptom score

Main symptom either:
Chest pain (0–3 points)
or
Dyspnoea (2 points)

2

Number of risk factors for CAD (0–5):

Family history, smoking, dyslipidaemia, hypertension and diabetes

3

Estimate the Risk Factor-weighted Clinical Likelihood (RF-CL) of obstructive CAD

Number of risk factors	Symptom score																	
	0–1 point		2 points		3 points													
	Women	Men	Women	Men	Women	Men												
Age 30–39	0	1	2	1	2	5	0	1	3	2	4	8	2	5	10	9	14	22
Age 40–49	1	1	3	2	4	8	1	2	5	3	6	12	4	7	12	14	20	27
Age 50–59	1	2	5	4	7	12	2	3	7	6	11	17	6	10	15	21	27	33
Age 60–69	2	4	7	8	12	17	3	6	11	12	17	25	10	14	19	32	35	39
Age 70–80	4	7	11	15	19	24	6	10	16	22	27	34	16	19	23	44	44	45

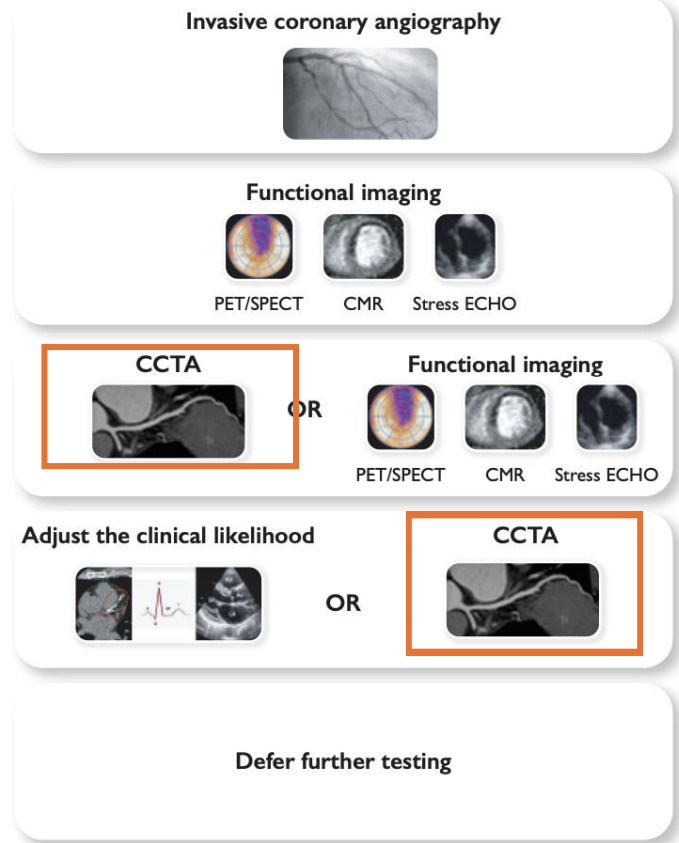
Clinical likelihood: ● Very low ● Low ● Moderate



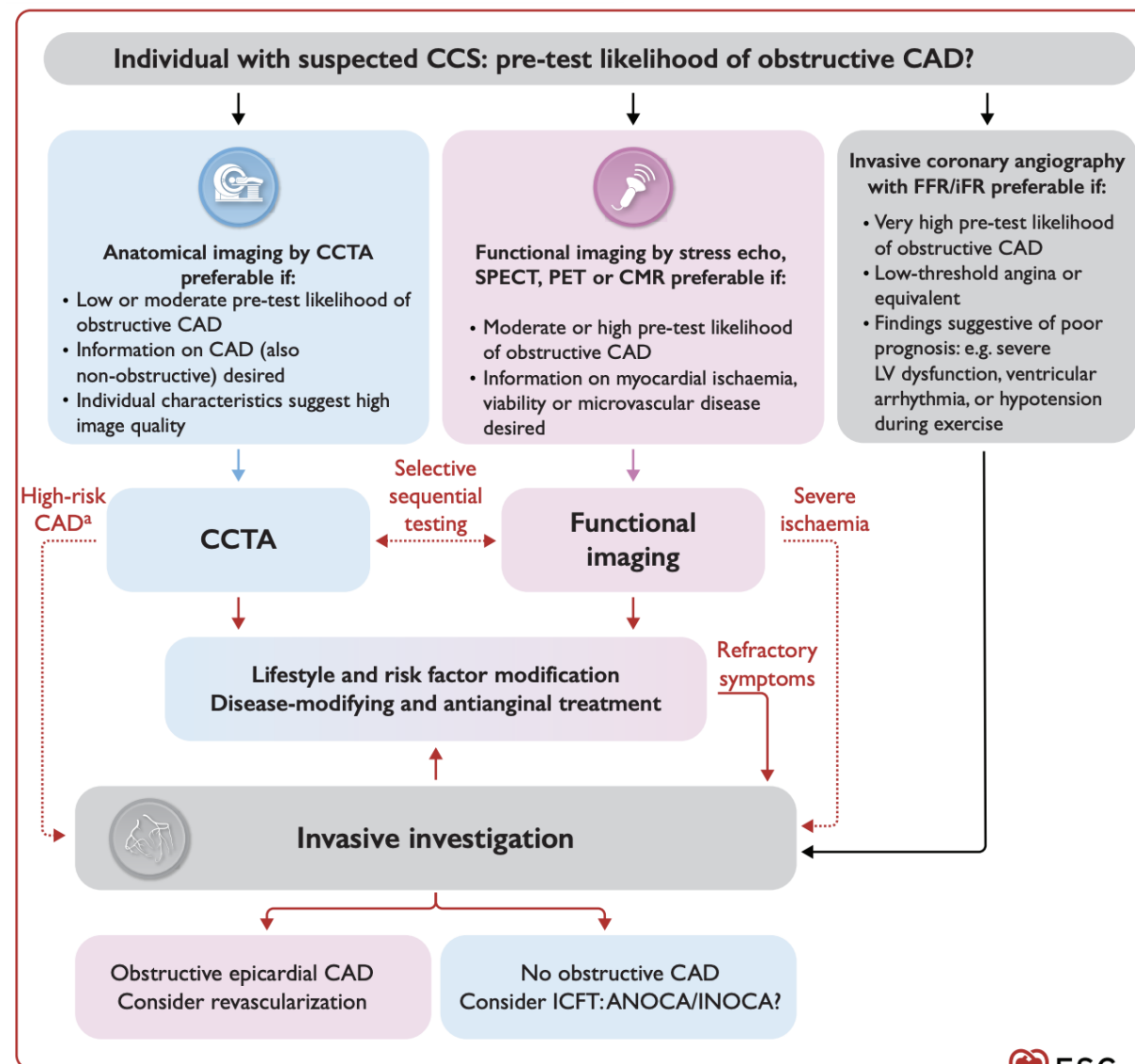
Clinical likelihood of obstructive CAD^a



Appropriate first-line test for suspected CCS



- Réalisation du scanner :
 - Evaluation des plaques et de leur niveau de risque
 - Plaques à haut risque : Sténose > 50% du TCG, atteinte tritronculaires avec des sténoses > 70%, atteinte de l'IVA proximale.
 - Plaque mixtes, instables, avec des signes de vulnérabilité?
- Discuter coronarographie si atteinte à haut risque ou si plaque instable
- Discuter test d'ischémie en cas de résultat intermédiaire



Quid des patients asymptomatiques et de l'évaluation du risque ?

- Il n'y a dans les dernières recommandations pas de place pour le coroscanner pour le dépistage des patients asymptomatiques. En revanche on note l'intérêt du score calcique.

Recommendation Table 27 — Recommendations for screening for coronary artery disease in asymptomatic individuals (see also Evidence Table 27)

Recommendations	Class ^a	Level ^b
Opportunistic screening of healthy individuals for cardiovascular risk factors and to estimate the risk of future cardiovascular events using scoring systems, e.g. SCORE2 and SCORE-OP, is recommended to detect individuals at high risk and guide treatment decisions. ^{16,1101,1112}	I	C
When coronary artery calcification findings are available from previous chest CT scans, using these findings to enhance risk stratification and guide treatment of modifiable risk factors should be considered. ^{17,1108–1110}	IIa	C
CACS may be considered to improve risk classification around treatment decision thresholds. ^{1104–1106}	IIb	C
An ultrasound of the carotid arteries may be considered as an alternative when CACS is unavailable or not feasible to detect atherosclerotic disease and to improve risk classification around treatment decision thresholds. ¹¹¹¹	IIb	B

Score Calcique

In individuals with a *low* (>5%–15%) pre-test likelihood of obstructive CAD, CACS should be considered to reclassify subjects and to identify more individuals with very low ($\leq 5\%$) CACS-weighted clinical likelihood.^{139,143,165}

IIa

B

Very high risk

People with any of the following:

- Documented ASCVD, either clinical or unequivocal on imaging. Documented ASCVD includes previous ACS (MI or unstable angina), chronic coronary syndromes, coronary revascularization (PCI, CABG, and other arterial revascularization procedures), stroke and TIA, and peripheral arterial disease. Unequivocally documented ASCVD on imaging includes those findings that are known to be predictive of clinical events, such as significant plaque^a on coronary angiography or CT scan or on carotid or femoral ultrasound or **markedly elevated CAC score** by CT^b
- DM with target organ damage,^c or at least three major risk factors, or early onset of T1DM of long duration (>20 years)
- Severe CKD (eGFR <30 mL/min/1.73 m²)
- A calculated SCORE2 or SCORE2-OP $\geq 20\%$ for 10 year risk of fatal or non-fatal CVD
- FH with ASCVD or with another major risk factor

Elevated CAC score > 300

Sources

- 2024 ESC Guidelines for the management of chronic coronary syndromes
- 2023 ESC Guidelines for the management of cardiomyopathies
- 2023 ESC Guidelines for the management of acute coronary syndromes
- 2025 ESC Guidelines for the management of myocarditis and pericarditis