Lecture accélérée des 2018 ESC/EACTS Guidelines sur la revascularisation myocardique - Revascularisation chirurgicale

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EACTS
European Association For Cardio-Thoracic Surgery

ESC
European Society of Cardiology

DÉCLARATION DE LIENS D'INTÉRÊT AVEC LA PRÉSENTATION

Intervenant : Philippe KOLH, Liège

☑ Je déclare les liens d'intérêt suivants :

Honoraires : AstraZeneca

2018 ESC/EACTS Guidelines on myocardial revascularisation
European Heart Journal (2018) 00, 1-96 - doi:10.1093/eurheartj/ehy394

Decision-making and patient information in the elective setting

Recommendations	Class	Level
It is recommended that patients undergoing coronary angiography are informed about benefits and risks, as well as potential therapeutic consequences, ahead of the procedure.	I	C
It is recommended that patients are adequately informed about short- and long-term benefits and risks of the revascularization procedure with information about local experience, and allowed enough time for informed decision-making.	I	C
It is recommended that institutional protocols are developed by the Heart Team to implement the appropriate revascularization strategy in accordance with current Guidelines.	I	C
In PCI centres without on-site surgery, it is recommended that institutional protocols are established with partner institutions providing cardiac surgery.	I	C

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Indications for revascularization in patients with stable angina or silent ischaemia (1)

Extent of CAD (anatomical and/or functional)		Class	Level
For prognosis	Left main disease with stenosis >50%.[a]	I	A
	Proximal LAD stenosis >50%.[a]	I	A
	Two- or three-vessel disease with stenosis >50% with impaired LV function (LVEF ≤35%).[a]	I	A
	Large area of ischaemia detected by functional testing (>10% LV) or abnormal invasive FFR.[b]	I	A
	Single remaining patent coronary artery with stenosis >50%.[c]	I	C

[a]With documented ischaemia or haemodynamically relevant lesion defined by FFR ≤ 0.80 or iwFR ≤ 0.89 or > 90% stenosis in a major coronary vessel.

[b]Based on FFR < 0.75 indicating a prognostically relevant lesion

Indications for revascularization in patients with stable angina or silent ischaemia (2)

		Class	Level
For symptoms	Haemodynamically significant coronary stenosis in the presence of limiting angina or angina equivalent, with insufficient response to optimized medical therapy.[a]	I	A

[a]In consideration of patient compliance and wishes in relation to intensity of antianginal therapy.

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Criteria for the choice between PCI and CABG

Recommendations	Class	Level
Assessment of surgical risk		
It is recommended that the STS score is calculated to assess in-hospital or 30 day mortality, and in-hospital morbidity after CABG.	I	B
Calculation of the EuroSCORE II score may be considered to assess in-hospital mortality after CABG.	IIb	B
Assessment of CAD complexity		
In patients with LM or multivessel disease, it is recommended that the SYNTAX score is calculated to assess the anatomical complexity of CAD and the long-term risk of mortality and morbidity after PCI.	I	B
When considering the decision between CABG and PCI, completenes of revascularization should be prioritized.	IIa	B

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Type of revascularization in patients with stable coronary artery disease with suitable coronary anatomy for both procedures and low predicted surgical mortality (1)

Recommendations according to extent of CAD	CABG		PCI	
	Class	Level	Class	Level
One-vessel CAD				
Without proximal LAD stenosis.	IIb	C	I	C
With proximal LAD stenosis.	I	A	I	A
Two-vessel CAD				
Without proximal LAD stenosis.	IIb	C	I	C
With proximal LAD stenosis.	I	B	I	C

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Type of revascularization in patients with stable coronary artery disease with suitable coronary anatomy for both procedures and low predicted surgical mortality (2)

Recommendations according to extent of CAD	CABG		PCI	
	Class	Level	Class	Level
Left main CAD				
Left main disease with low SYNTAX score (0-22).	I	A	I	A
Left main disease with intermediate SYNTAX score (23-32).	I	A	IIa	A
Left main disease with high SYNTAX score (≥33).[a]	I	A	III	B

[a]PCI should be considered, if the Heart Team is concerned about the surgical risk or if the patient refuses CABG after adequate counselling by the Heart Team.

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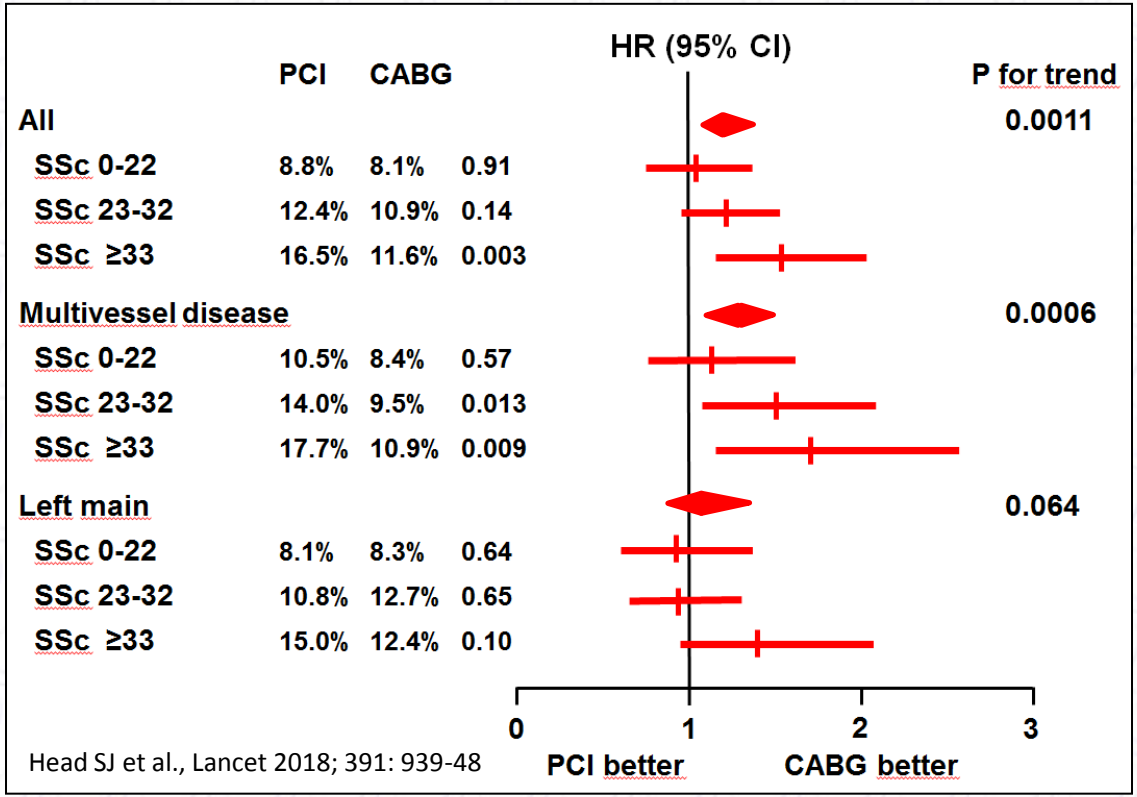
Type of revascularization in patients with stable coronary artery disease with suitable coronary anatomy for both procedures and low predicted surgical mortality (3)

Recommendations according to extent of CAD	CABG		PCI	
	Class	Level	Class	Level
Three-vessel CAD without diabetes mellitus				
Three-vessel disease with low SYNTAX score (0-22).	I	A	I	A
Three-vessel disease with intermediate or high SYNTAX score (>22).[a]	I	A	III	A
Three-vessel CAD with diabetes mellitus				
Three-vessel disease with low SYNTAX score (0-22).	I	A	IIb	A
Three-vessel disease with intermediate or high SYNTAX score (>22).[a]	I	A	III	A

[a] PCI should be considered, if the Heart Team is concerned about the surgical risk or if the patient refuses CABG after adequate counselling by the Heart Team.

5-Year all-cause mortality after PCI versus CABG according to disease type and strata of SYNTAX score



Head SJ et al., Lancet 2018; 391: 939-48

Windecker S et al., Eur Heart J 2018, in press
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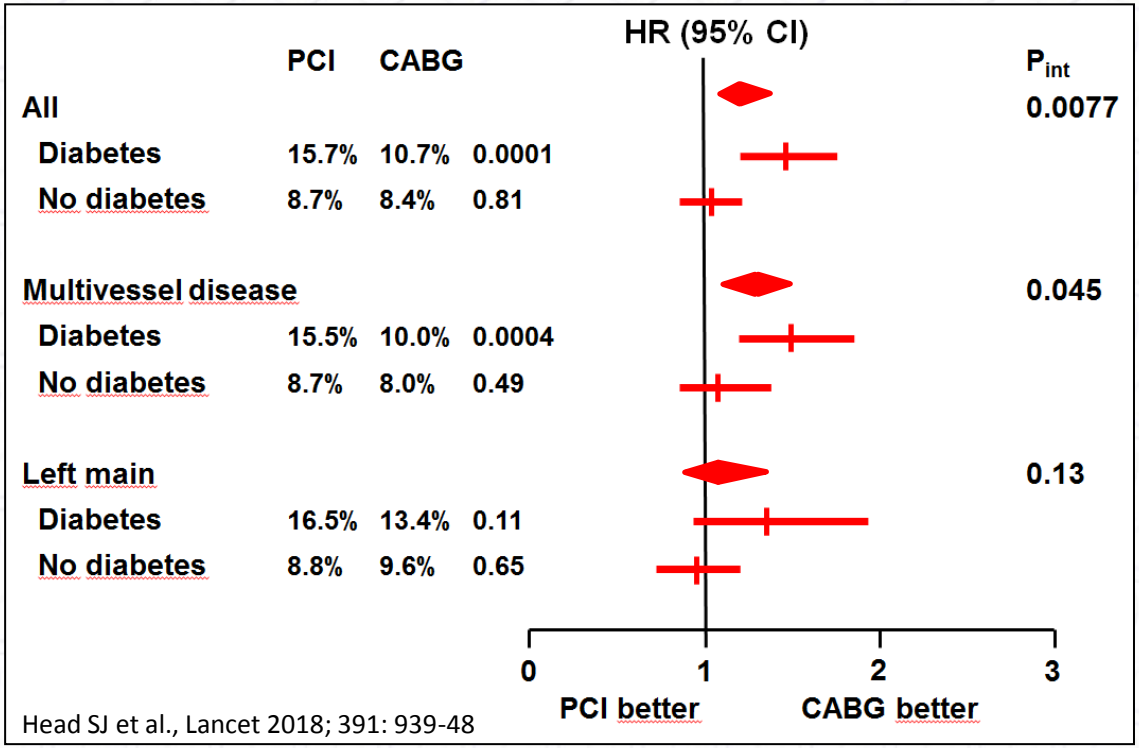
5-Year all-cause mortality after PCI versus CABG according to disease type and diabetes mellitus



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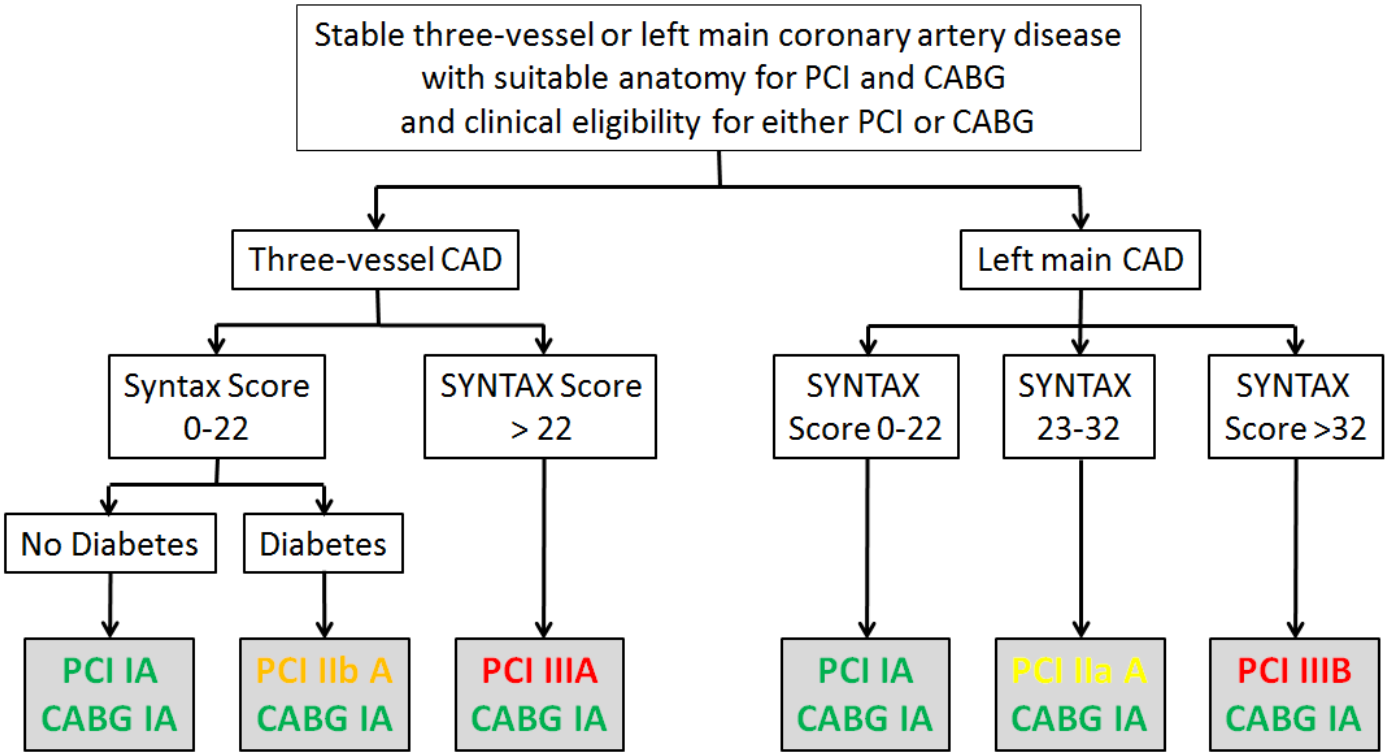
Type of revascularization in patients with stable three-vessel or left main coronary artery disease



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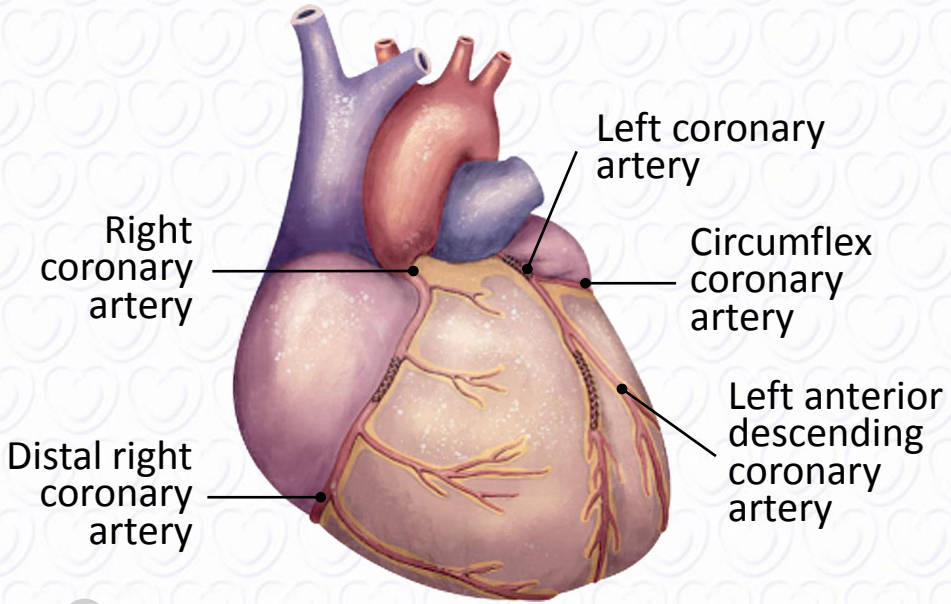
Aspects to be considered by the Heart Team for decision-making between PCI and CABG among patients with stable multivessel and/or left main coronary artery disease (1)

PCI



FAVOURS PCI
Clinical caracteristics Presence of severe co-morbidity (not adequately reflected by scores). Advanced age/frailty/reduced life expectancy. Restricted mobility and conditions that affect the rehabilitation process.
Anatomical and technical aspects MVD with SYNTAX score 0-22. Anatomy likely resulting in incomplete revascularization with CABG due to poor quality or missing conduits. Severe chest deformation or scolliosis. Sequelae of chest radiation. Porcelain aorta.[a]

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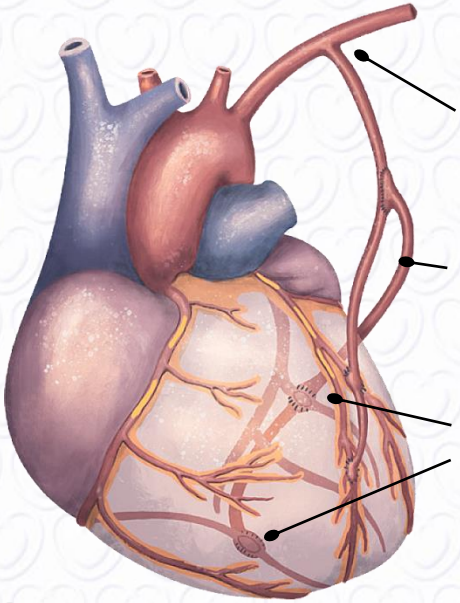
Aspects to be considered by the Heart Team for decision-making between PCI and CABG among patients with stable multivessel and/or left main coronary artery disease (2)

CABG



Left internal thoracic artery to left anterior descending

Right internal thoracic artery or radial artery

Sequential anastomosis to obtuse marginal 1 and 3

FAVOURS CABG
Clinical caracteristics Diabetes. Reduced LV function (EF ≤35%). Contraindication to DAPT. Recurrent diffuse in-stent restenosis.
Anatomical and technical aspects MVD with SYNTAX score ≥23. Anatomy likely resulting in incomplete revascularization with PCI. Severely calcified coronary artery lesions limiting lesion expansion.
Need for concomitant interventions Ascending aortic pathology with indication for surgery. Concomitant cardiac surgery.

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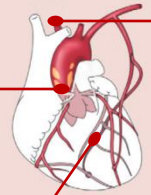
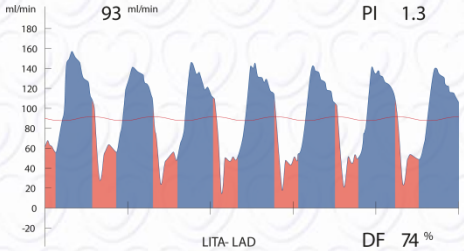
Technical aspects of CABG

Minimize aortic manipulation **IB**
Off-pump if calcified aorta **IB**
Off-pump if high-risk **IIaB**



LIMA to LAD **IB**
BIMA if low risk of sternal complications **IIaB**
Skeletonize if risk of sternal complications **IB**

Complete revascularization **IB**
Graft flow measurement **IIaB**



Radial artery in high-grade stenosis **IB**

Endoscopic vein harvesting **IIaA**
No-touch vein harvesting **IIaB**

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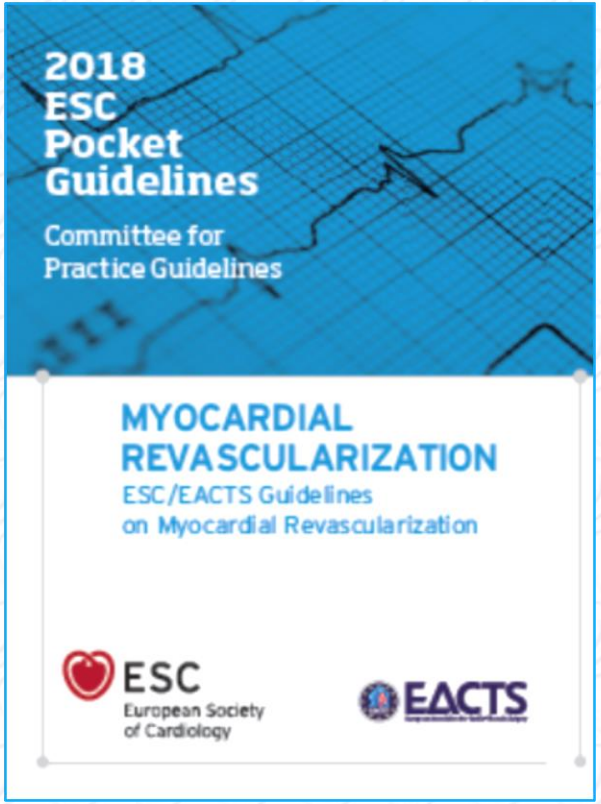

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