HOT TOPICS
IN CARDIOLOGIA
2021

27 e 28 Settembre

Sede della Camera di Commercio di Napoli

Stenosi Aortica e CAD: Qual è il Trattamento Ottimale?

Prof. Ciro Indolfi

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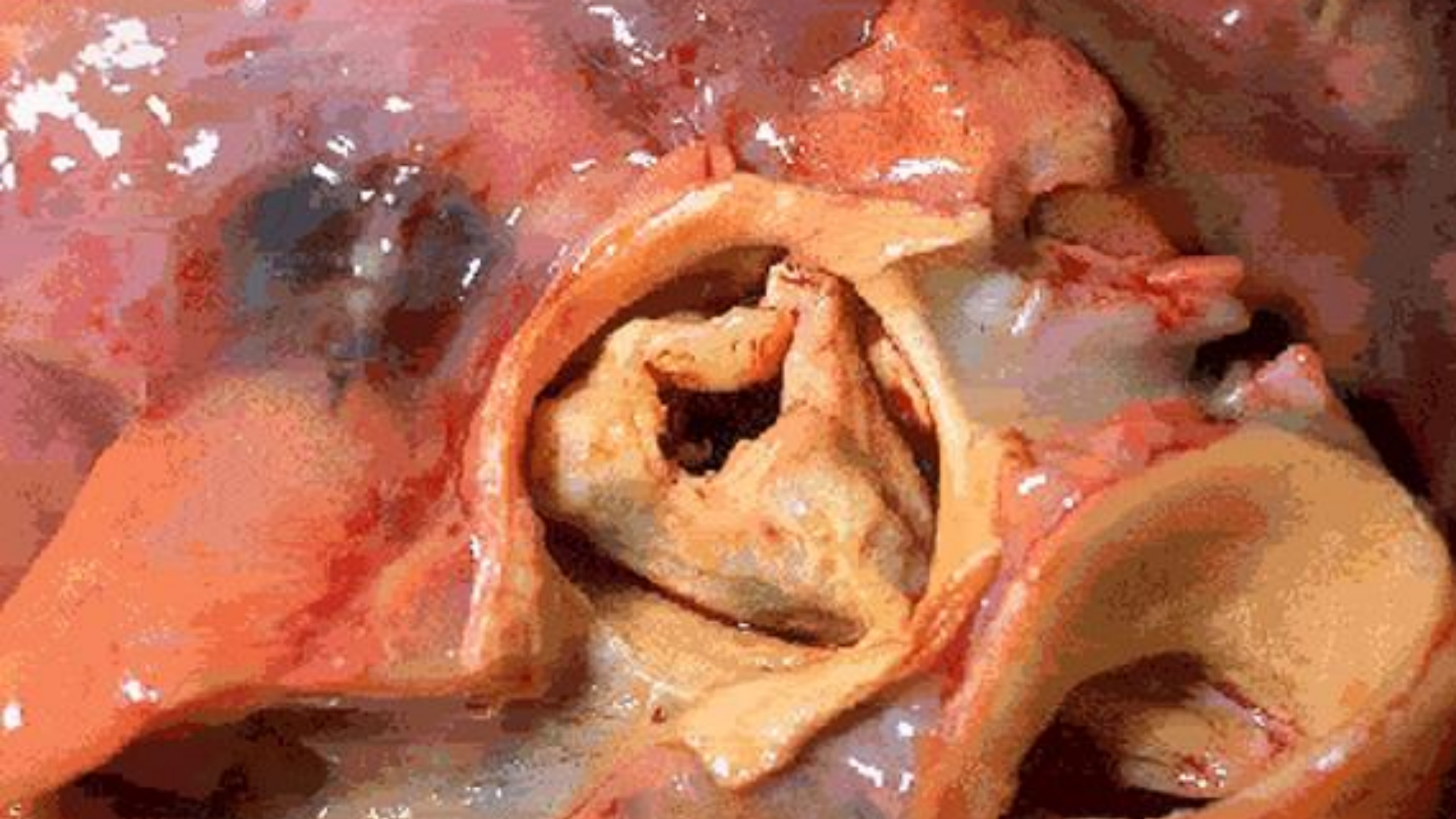
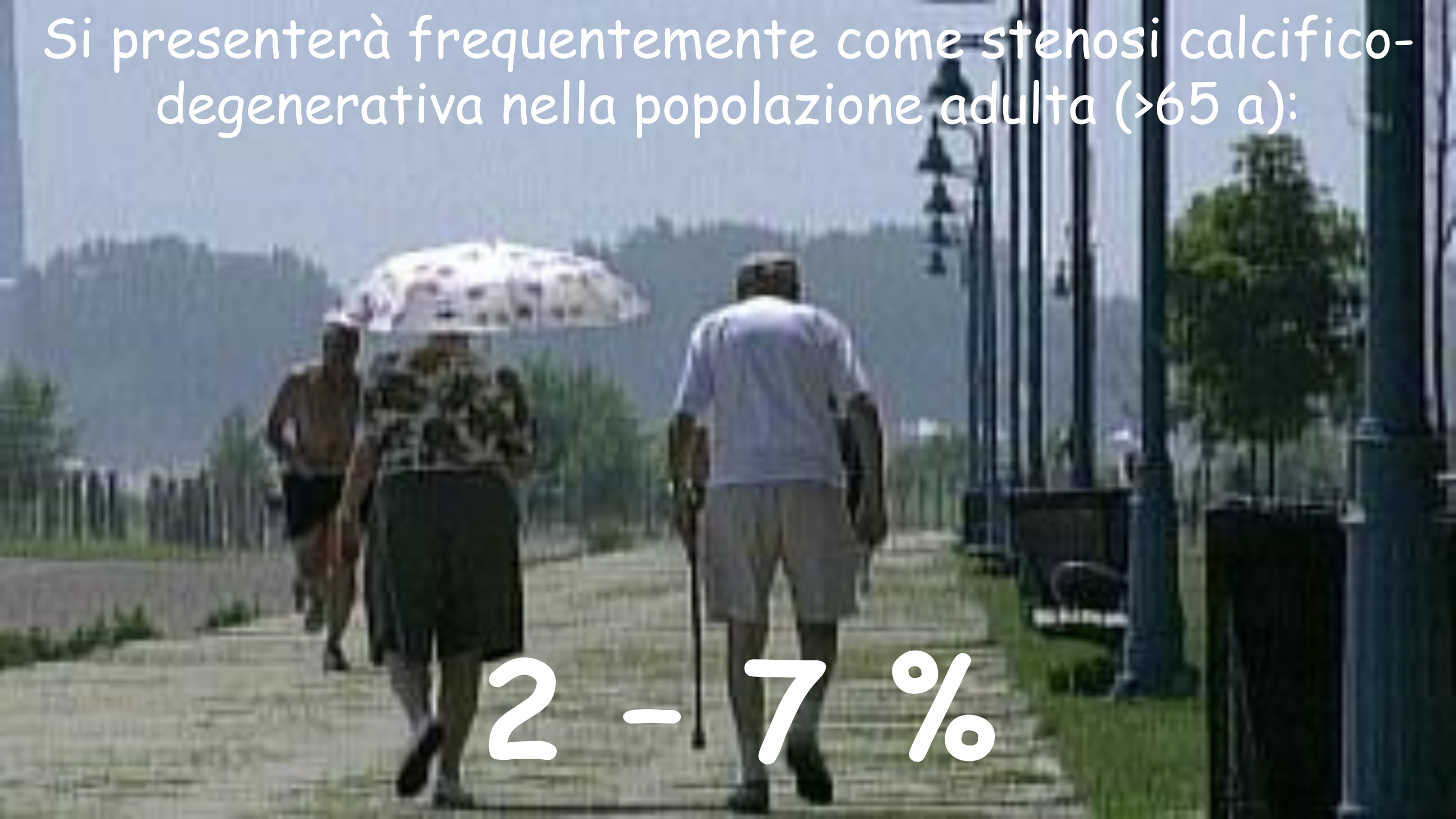
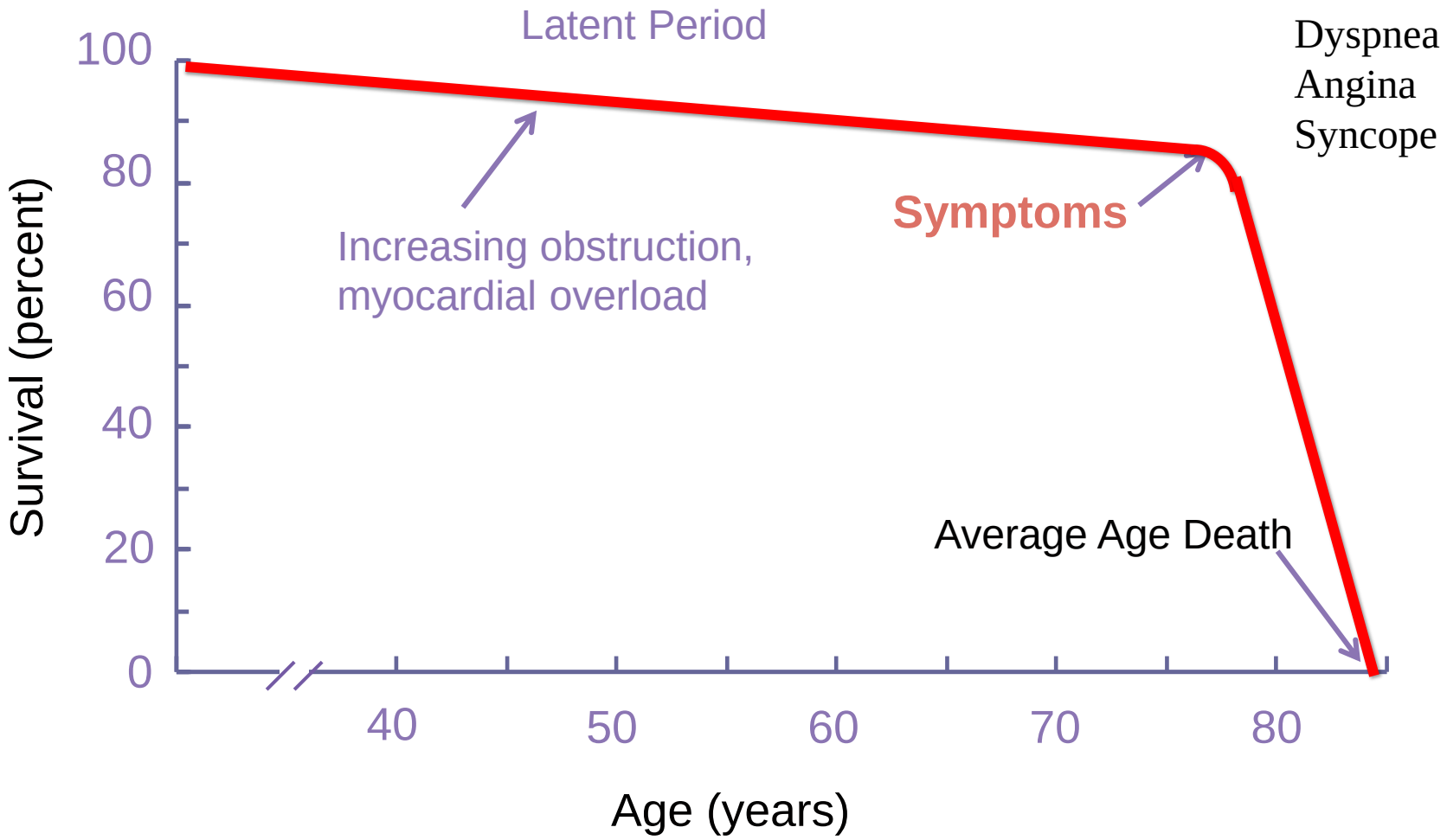


Si presenterà frequentemente come stenosi calcifico-degenerativa nella popolazione adulta (>65 a):



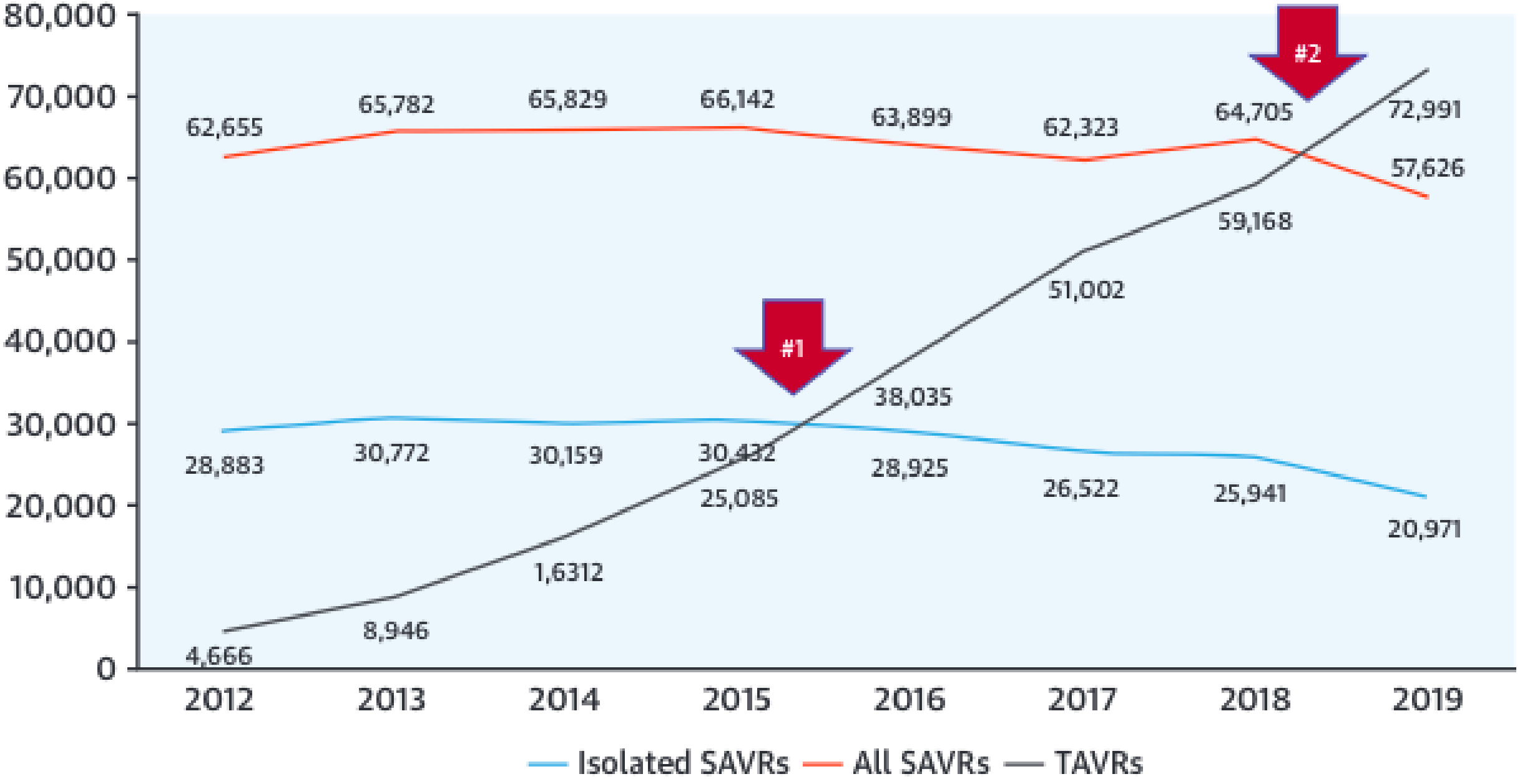
2 - 7 %

Natural History of Aortic Stenosis

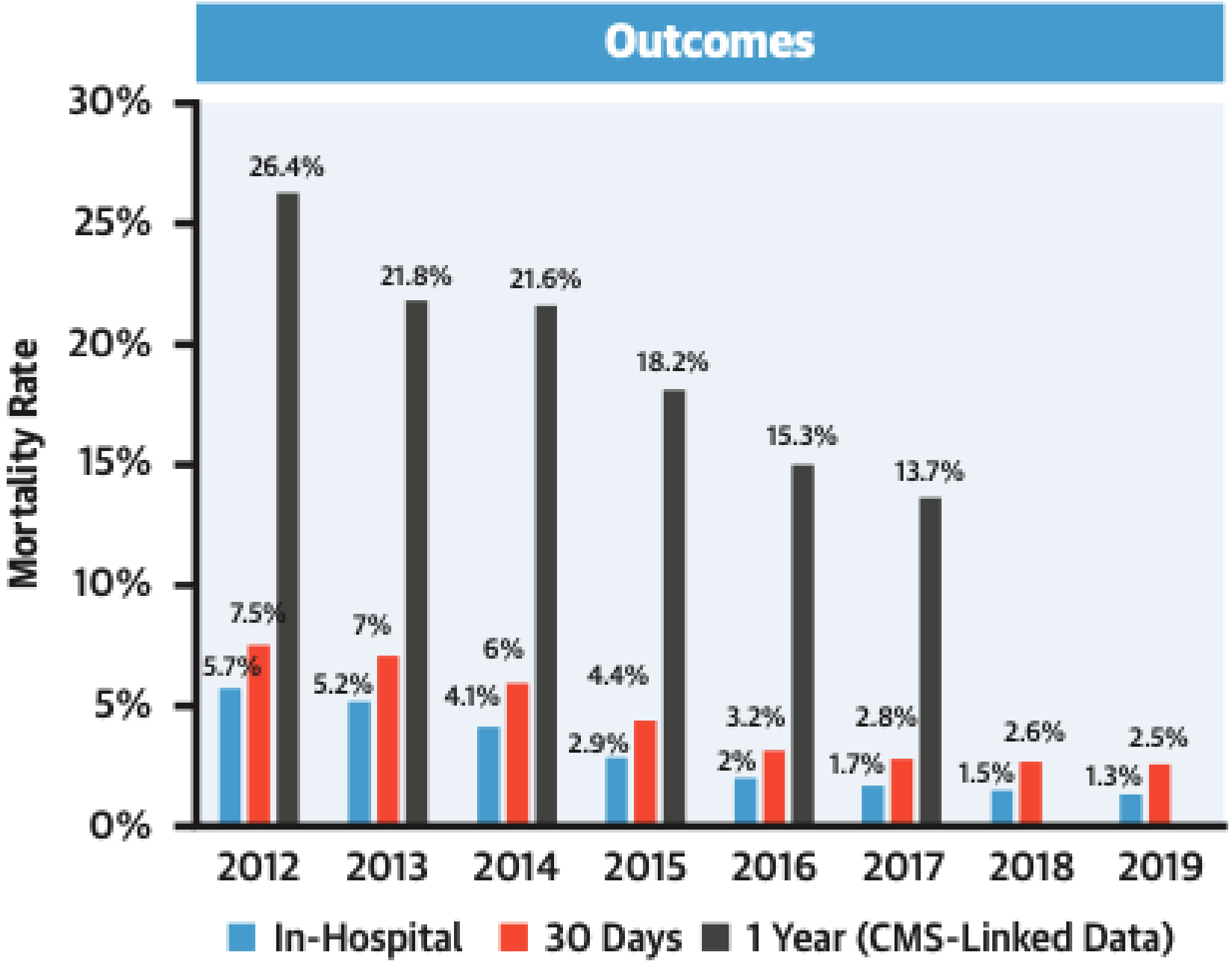


Modified from Ross, *Circulation* 1968;38:V-61

1977 1986 2002 2003 2021



Carroll, J.D. et al. J Am Coll Cardiol. 2020;76(21):2492–516.



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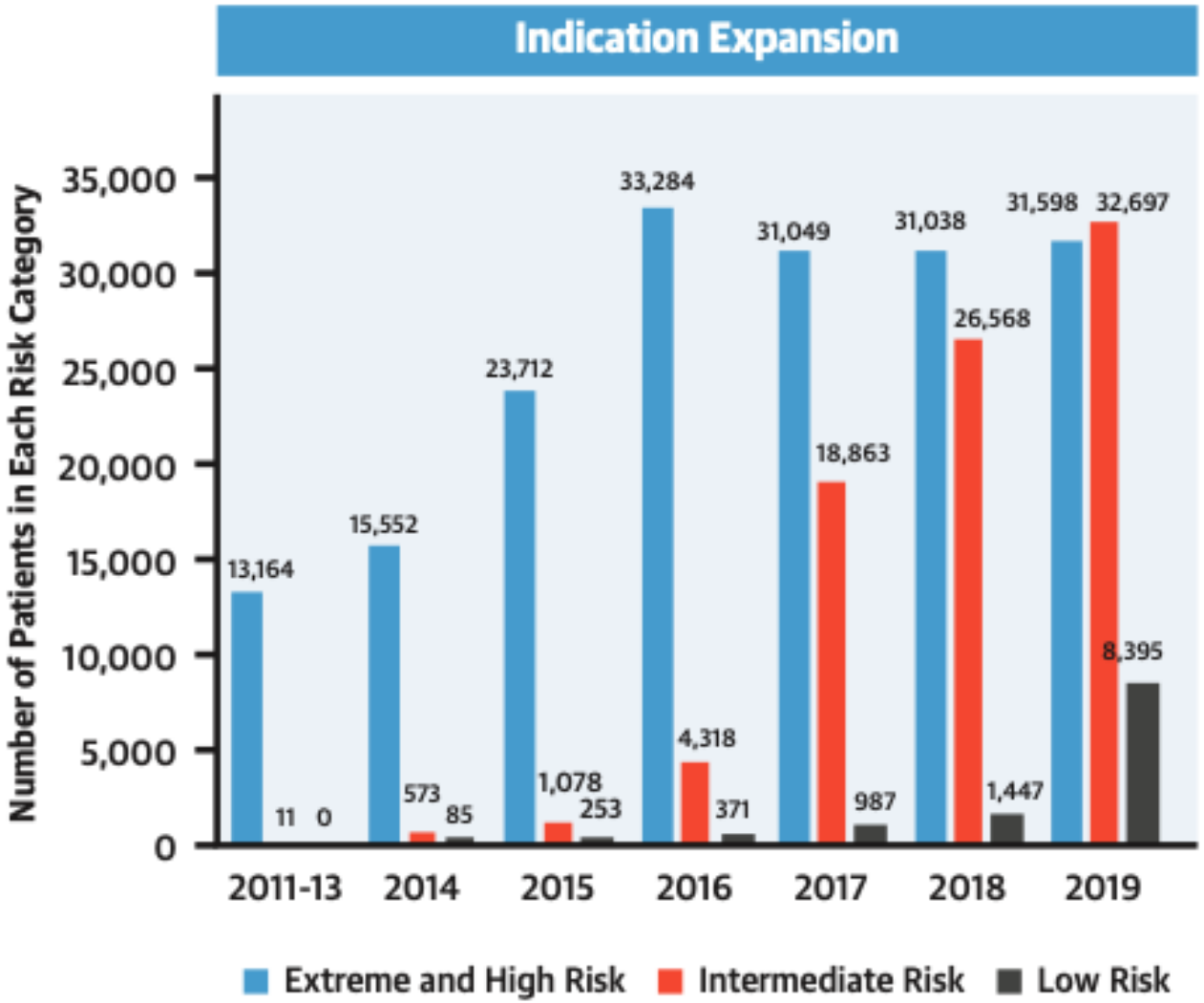
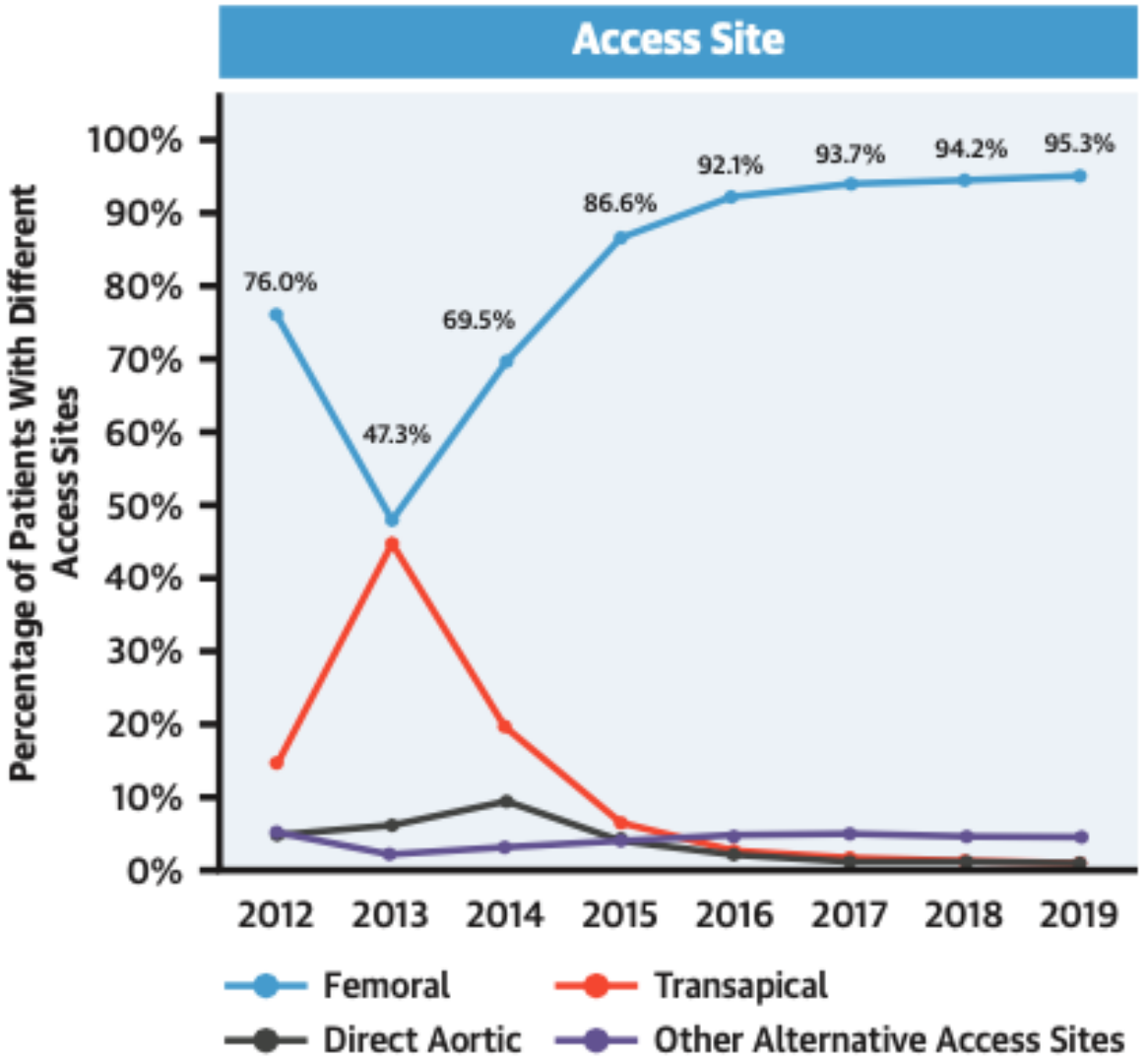
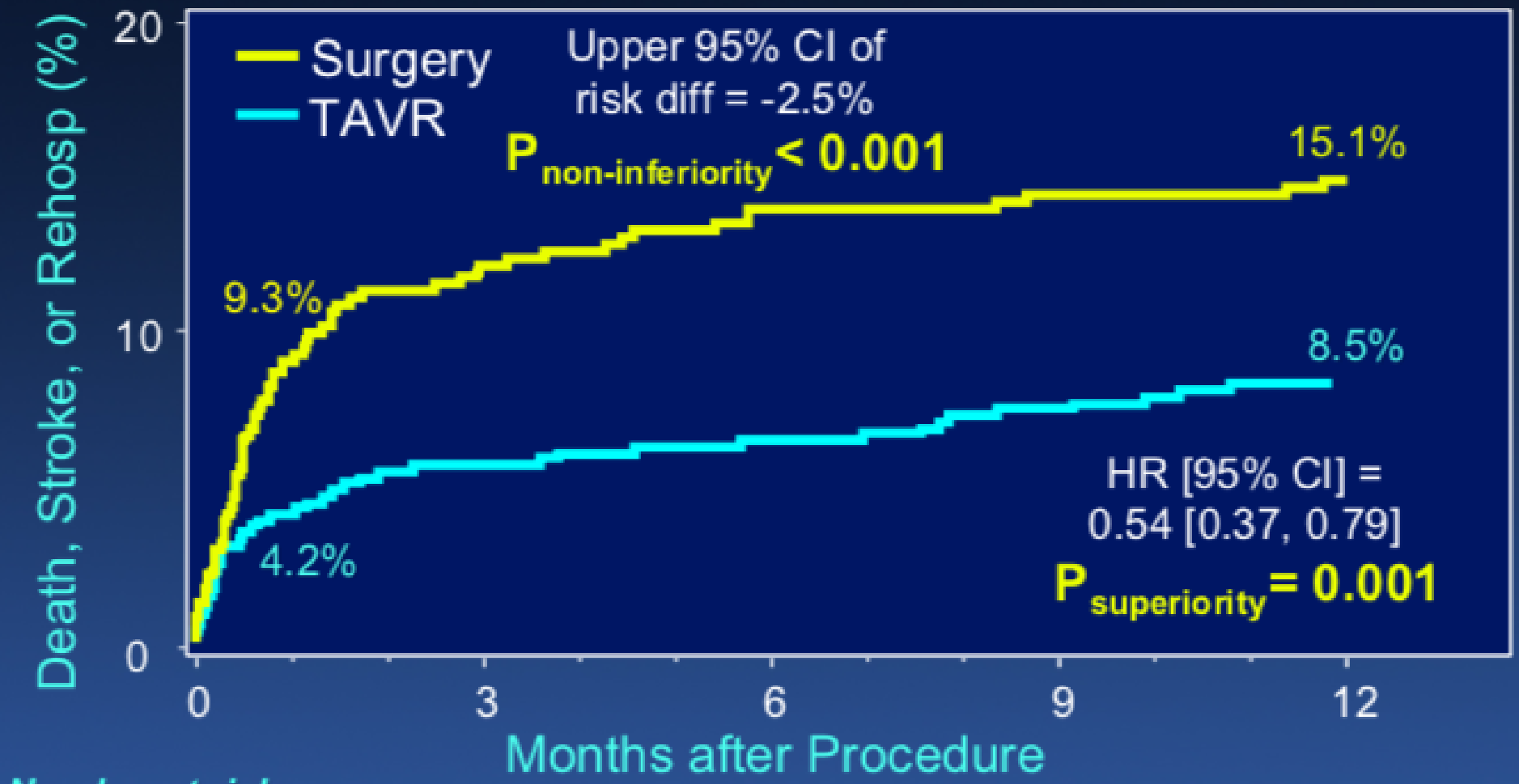




Carroll, J.D. et al. J Am Coll Cardiol. 2020;76(21):2492–516.

Primary Endpoint

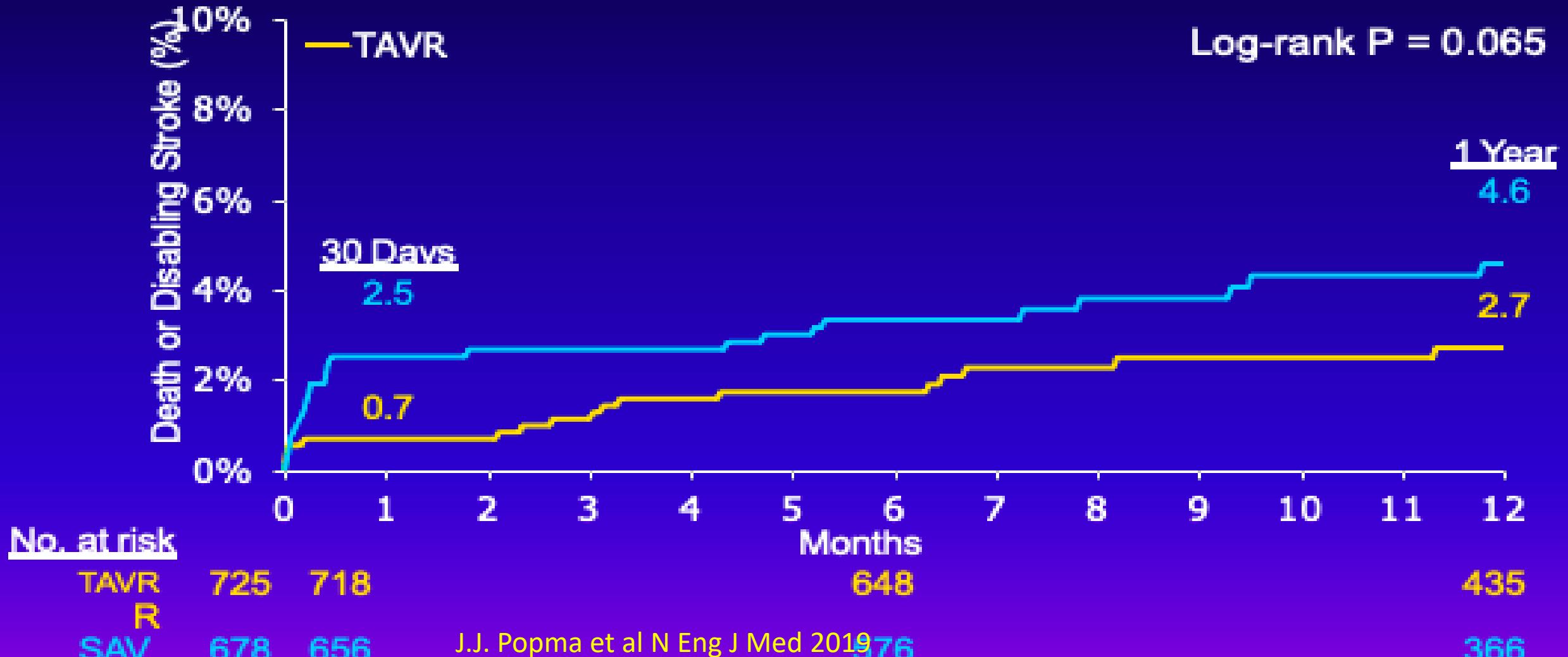


Number at risk:

Surgery	454	408	390	381	377	374
TAVR	496	475	467	462	456	451

M.J. Mack et al N Eng J Med 2019

K-M All-Cause Mortality or Disabling Stroke at 1Y



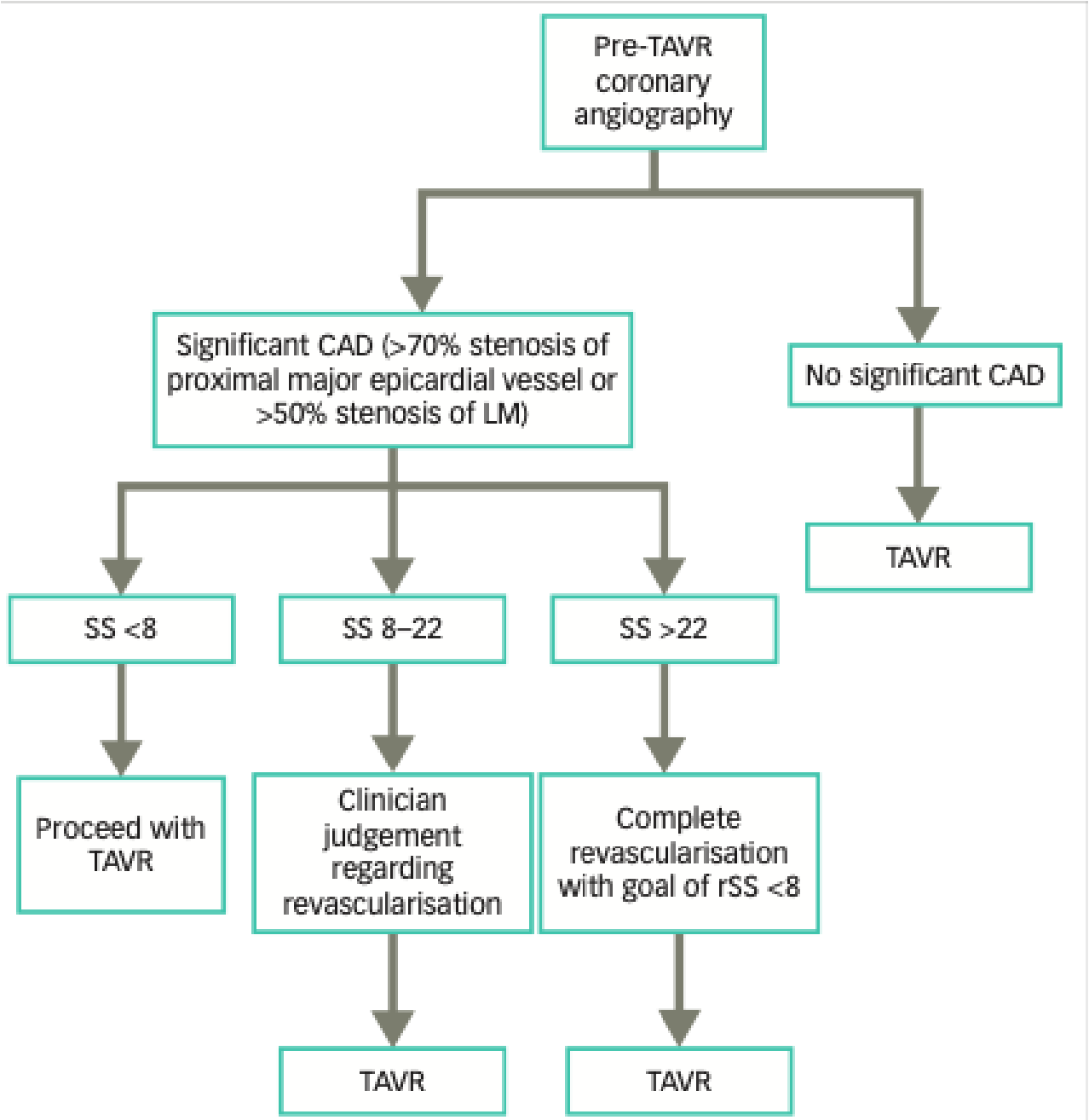
J.J. Popma et al N Eng J Med 2019

PCI BEFORE TAVI

Aortic stenosis and coronary artery disease (CAD) frequently co-exist, as they share a common pathophysiology and risk factors.

Due to lack of randomised controlled trials (RCTs) and exclusion of significant CAD in transcatheter aortic valve replacement (TAVR) trials, the optimal method of revascularisation of CAD in patients undergoing TAVR remains unknown.

Katta N et al Heart International. 2020;14(1):24-8 DOI: https://doi.org/10.17925/HI.2020.14.1.24

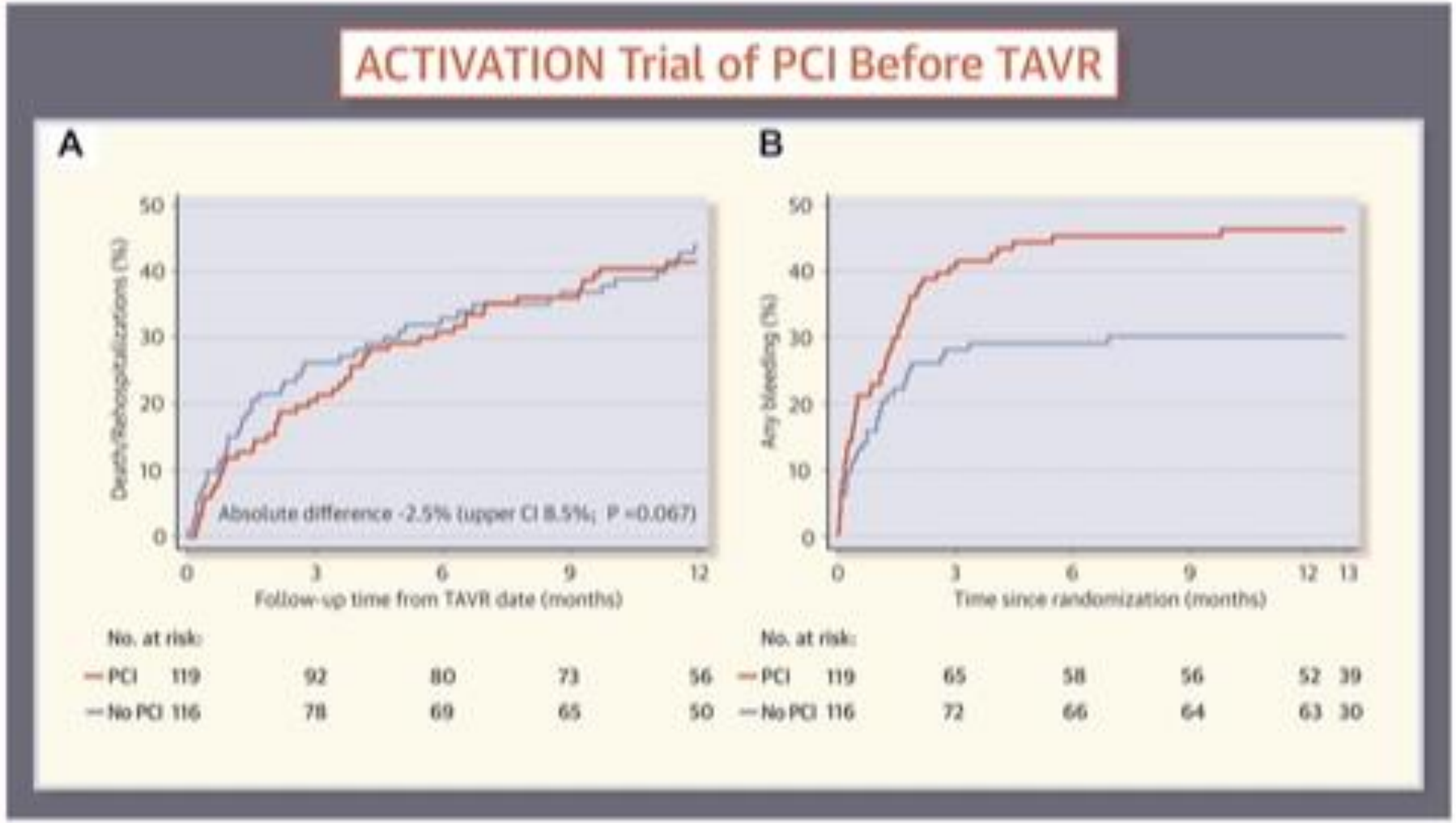


Katta N et al Heart International. 2020;14(1):24-8 DOI: https://doi.org/10.17925/HI.2020.14.1.24

- In patients with CAD undergoing TAVR, the **SYNTAX score** can be a useful tool in deciding which patients may benefit from PCI prior to TAVR.
- In patients with high SYNTAX score (>22), we recommend performing PCI before TAVR to improve post-TAVR outcomes.
- In those with low SYNTAX score (<8), no additional coronary intervention is necessary and operators can proceed directly with TAVR.
- However, in those with intermediate SYNTAX score (8–22), the decision to perform PCI should be individualised based on the clinical risk factors in consultation with the heart team.

Katta N et al Heart International. 2020;14(1):24-8 DOI: https://doi.org/10.17925/HI.2020.14.1.24

CENTRAL ILLUSTRATION: The ACTIVATION Trial of PCI Compared With No PCI Prior to TAVR Demonstrated No Difference in the Primary Endpoint of Death or Rehospitalization at 1 Year and Increased Bleeding Events in the PCI Arm



Patterson, T. et al. J Am Coll Cardiol Intv. 2021;14(18):1965-1974.

ESC
European Society of Cardiology

European Heart Journal (2021) **00**, 1–12
doi:10.1093/eurheartj/ehab395

ESC/EACTS GUIDELINES

2021 ESC/EACTS Guidelines for the management of valvular heart disease

Recommendations for Coronary Angiography before Surgery in Severe VHD (ESC 2021)

Recommendations	Class	Level
Diagnosis of CAD		
Coronary angiography is recommended before valve surgery in patients with severe VHD and any of the following: • History of cardiovascular disease. • Suspected myocardial ischaemia. • LV systolic dysfunction. • In men >40 years of age and postmenopausal women. • One or more cardiovascular risk factors.	I	C

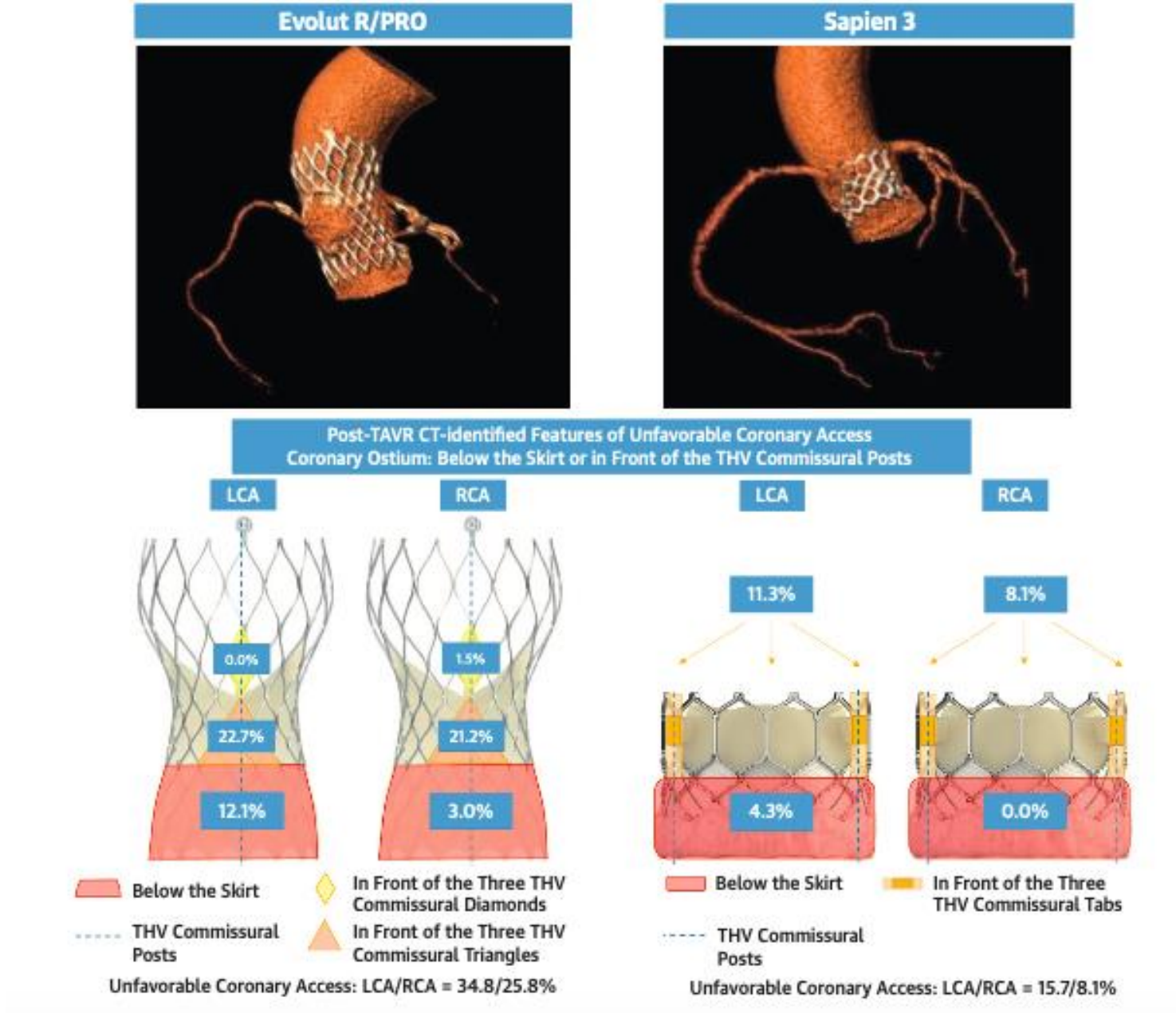
Recommendations for CABG in patients with CAD in VHD (ESC 2021)

Recommendations	Class	Level
Indications for myocardial revascularization		
CABG is recommended in patients with a primary indication for aortic/mitral/tricuspid valve surgery and coronary artery diameter stenosis ≥70%.*,**	I	C
CABG should be considered in patients with a primary indication for aortic/mitral/tricuspid valve surgery and coronary artery diameter stenosis ≥50–70%.	IIa	C

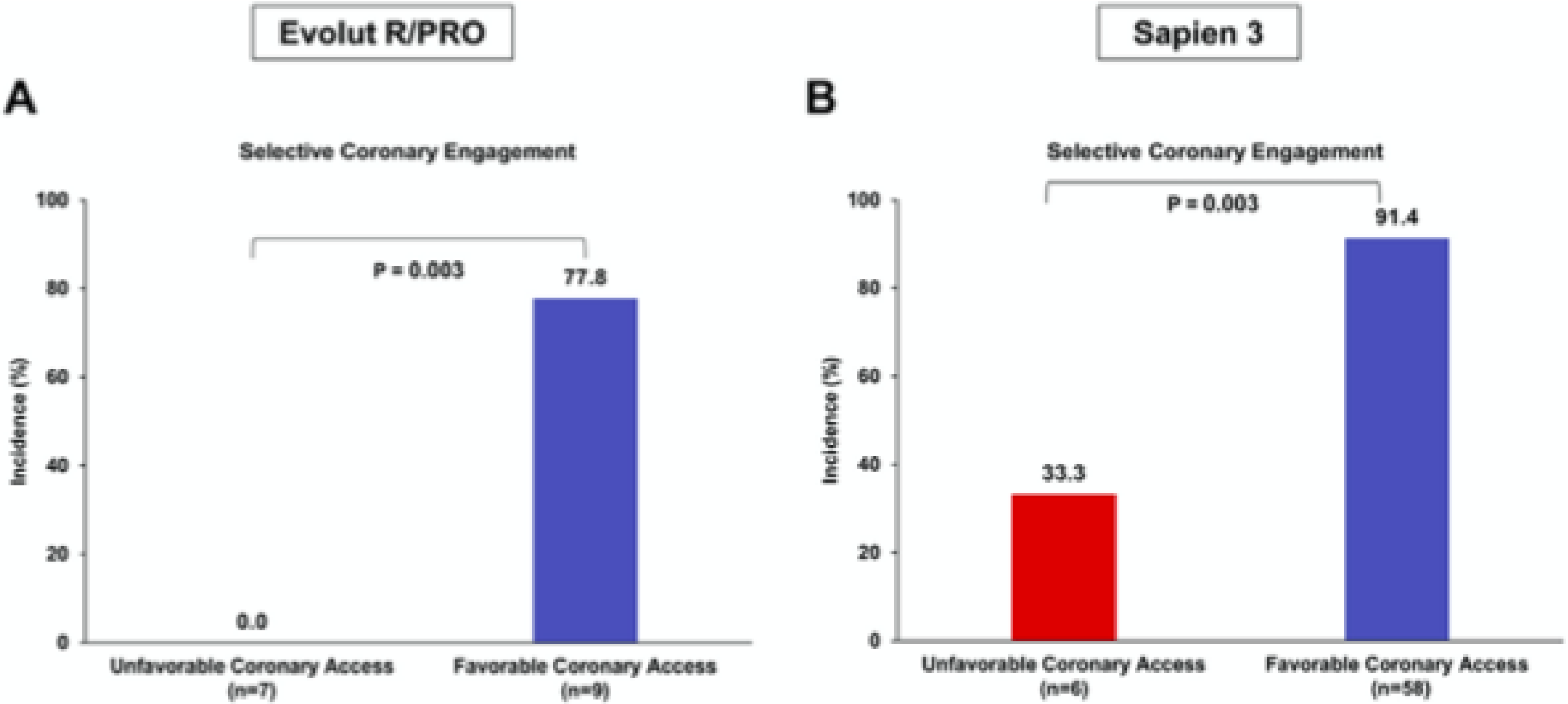
Recommendations for PCI in patients with CAD & TAVI (ESC 2021)

Recommendations	Class	Level
Indications for myocardial revascularization		
PCI should be considered in patients with a primary indication to undergo TAVI and coronary artery diameter stenosis >70% in proximal segments.	IIa	C

PCI AFTER TAVI



Ochiai T et al JACC: CARDIOVASCULAR INTERVENTIONS VOL. 13, NO. 6, 2020



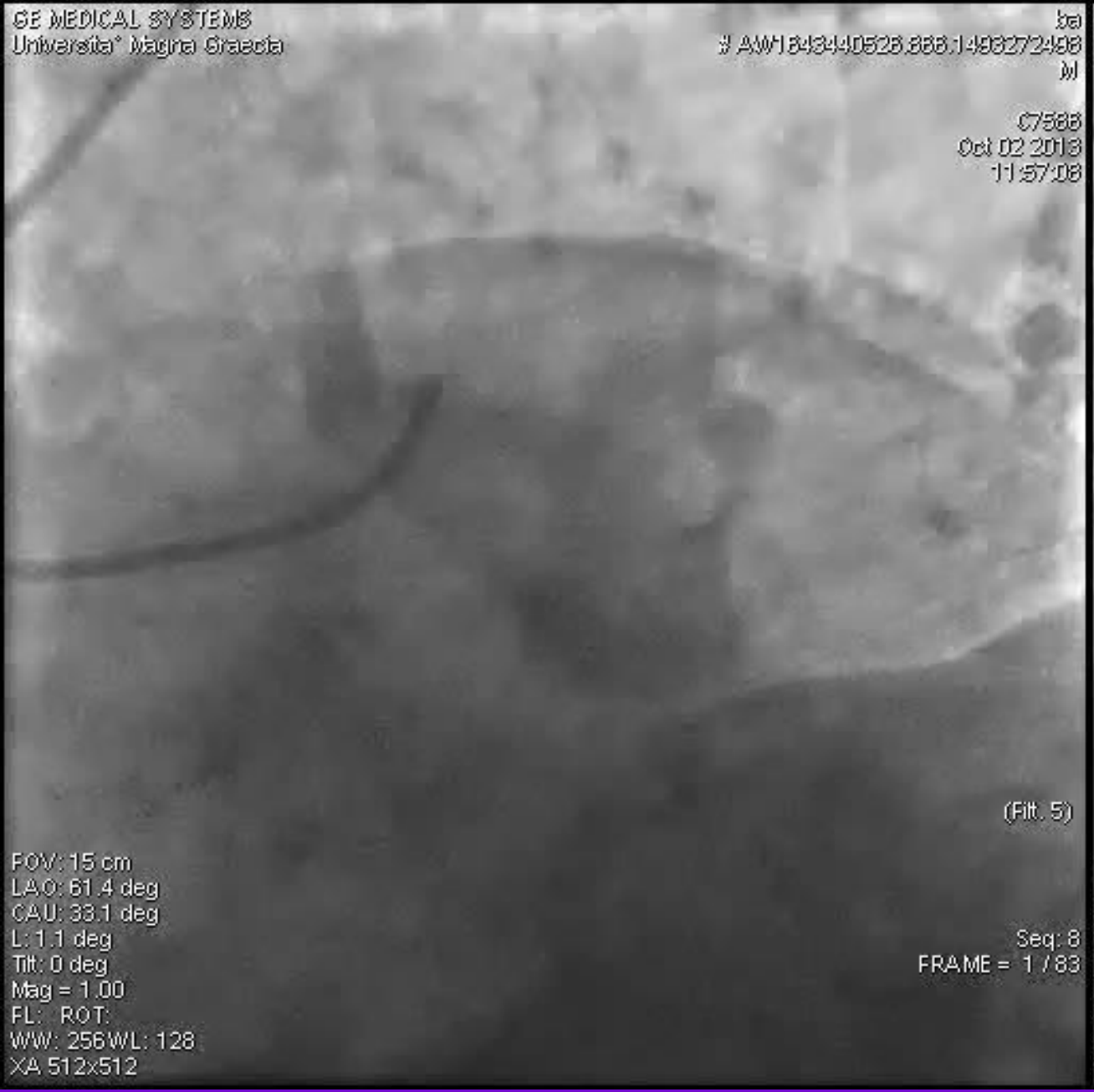
Ochiai T elt al JACC: CARDIOVASCULAR INTERVENTIONS VOL. 13, NO. 6, 2020

Paziente uomo A. B., di 82 anni

Fattori di rischio cardiovascolare: ipertensione arteriosa, Dislipidemia, Diabete Mellito di tipo 2, ex tabagismo. Pregresso TIA. IRC. FA cronica in trattamento con NOAC.

Anamnesi patologica remota: Nel 2010 impianto di endoprotesi per aneurisma di aorta addominale sottorenale.

Anamnesi patologica prossima: da qualche mese episodi di dolore retrosternale costrittivo da sforzo. Episodi sincopali. Stenosi aortica severa.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CONCLUSIONS

- **Coronary artery disease (CAD) is present in 40–75% of patients undergoing transcatheter aortic valve implantation (TAVI) for severe symptomatic aortic stenosis.**
- **The indication for TAVI is expanding toward younger patients at lower surgical risk and the necessity for coronary angiography, including percutaneous coronary intervention, will subsequently increase.**
- **Data on the impact of PCI in patients with severe CAD scheduled for TAVI are controversial and the optimal timing for PCI remains unclear due to a lack of evidence.**
- **Depending on the valve type, position, and axial alignment of the implanted device, PCI after TAVI can be challenging.**

GRAZIE PER L'ATTENZIONE