5 6 7 JUIN 2019

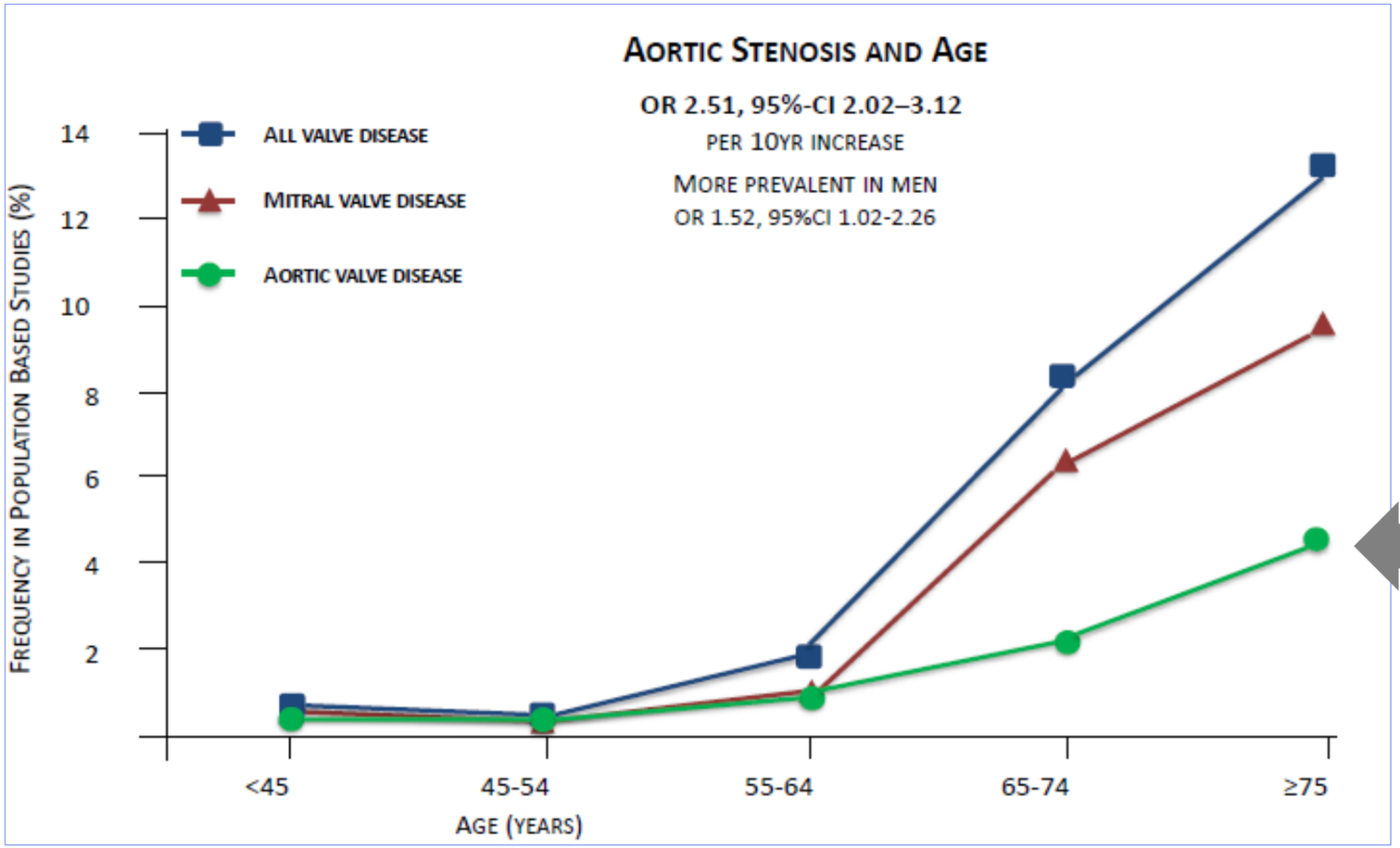
APPAC Ensemble, imaginons la cardiologie de demain

Dernières évidences cliniques sur le TAVI

TAVI et coronaires

Olivier Darremont
Clinique St Augustin, Bordeaux
Biarritz le 5 juin 2019

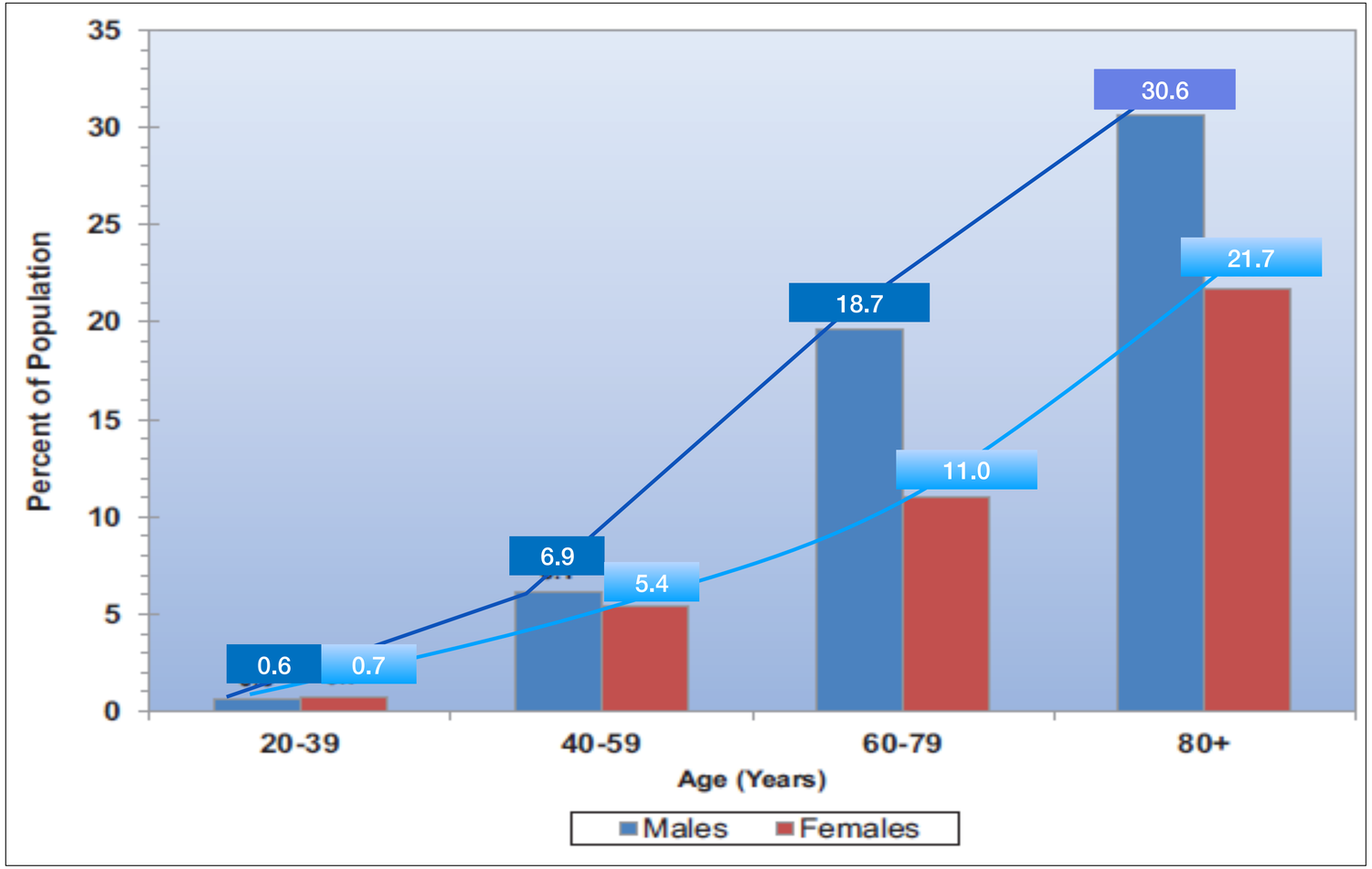
Prévalence de la sténose aortique : augmente avec l‘âge



Moderate to severe Aortic Stenosis

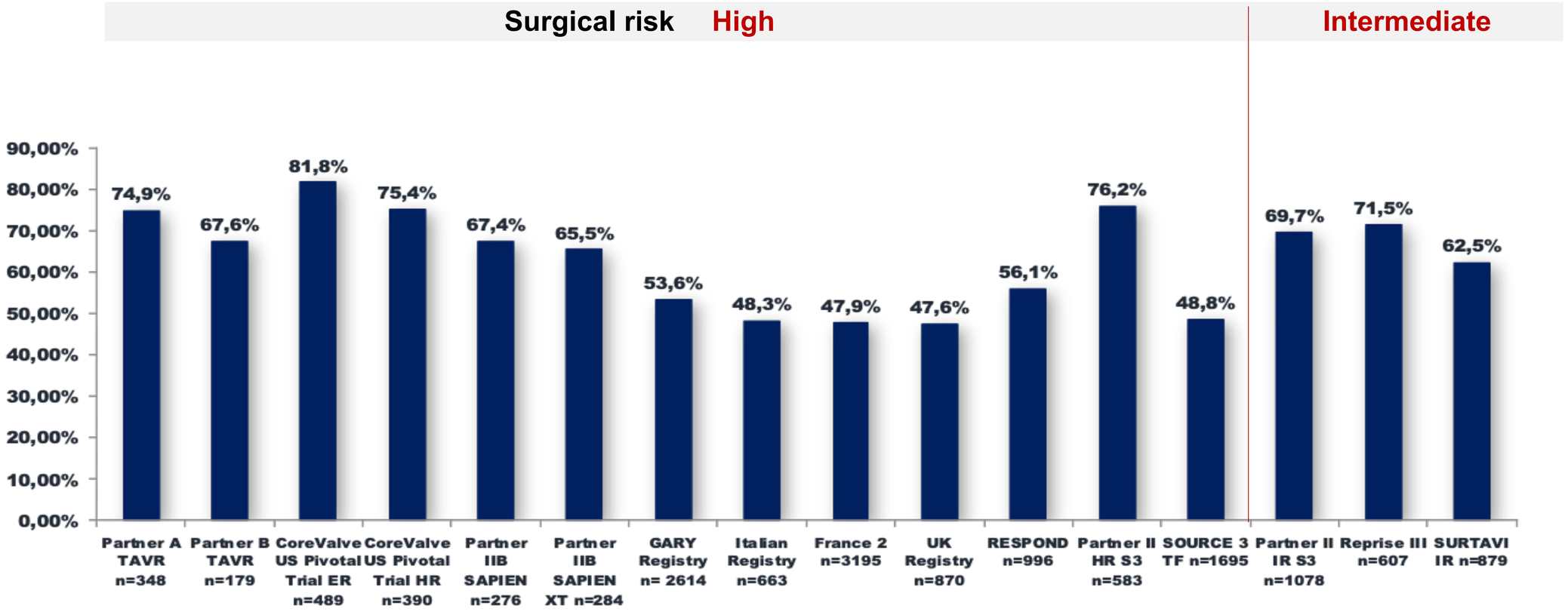
Nkomo VT et al. LANCET 2006;386:1005-11

Prévalence de la maladie coronaire : augmente avec l‘âge!



Prevalence of coronary heart disease by age and sex (NHANES: 2011–2014).
NHANES indicates National Health and Nutrition Examination Survey.

Maladie coronaire dans les études TAVI

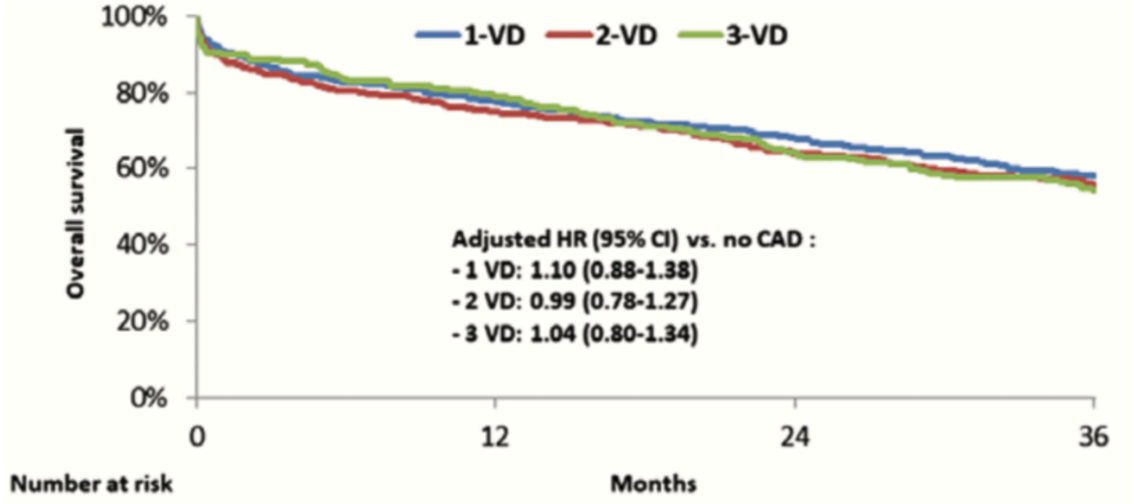


✓ **De 48% à 82% dans les études „all comers“**

✓ **2/3 des patients dans les études TAVI risque intermédiaire**

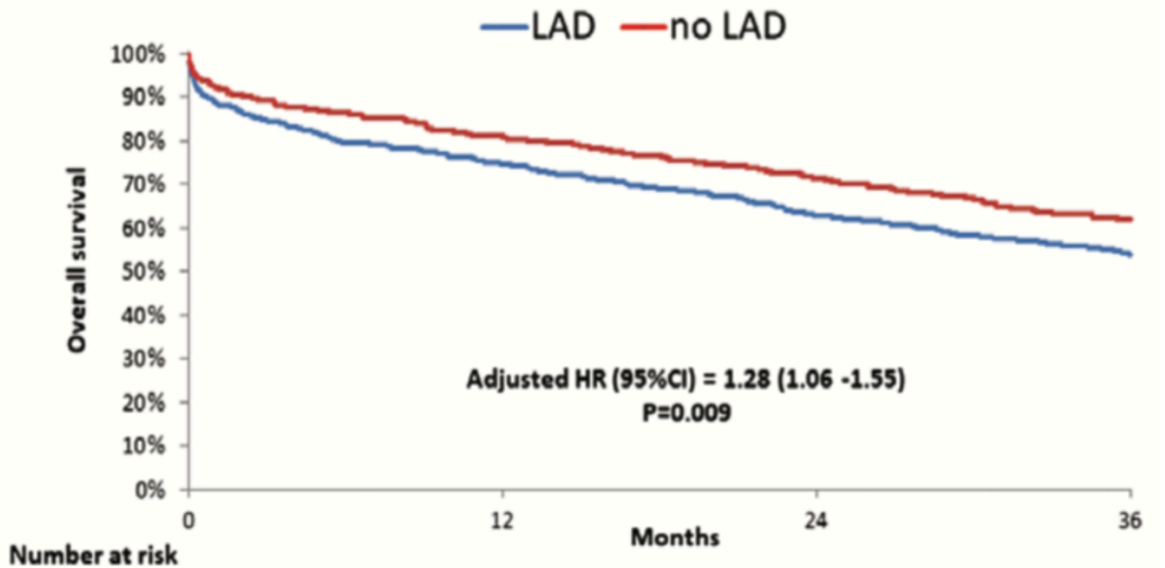
Impact of coronary artery disease in patients undergoing transcatheter aortic valve replacement: Insights from the FRANCE-2 registry

Etienne Puymirat[1] | Romain Didier[2] | Hélène Eltchaninoff[3] | Bernard Lung[4] | Jean-Philippe Collet[5] | Dominique Himbert[4] | Eric Durand[3] | Alain Leguerrier[6] | Pascal Leprince[7] | Jean Fajadet[8] | Emmanuel Teiger[9] | Karine Chevreul[10] | Michel Lièvre[11] | Didier Tchetché[8] | Florence Leclercq[12] | Stéphan Chassaing[13] | Hervé Le Breton[14] | Patrick Donzeau-Gouge[15] | Thierry Lefèvre[15] | Didier Carrié[16] | Martine Gillard[2] | Didier Blanchard[1]



Number at risk

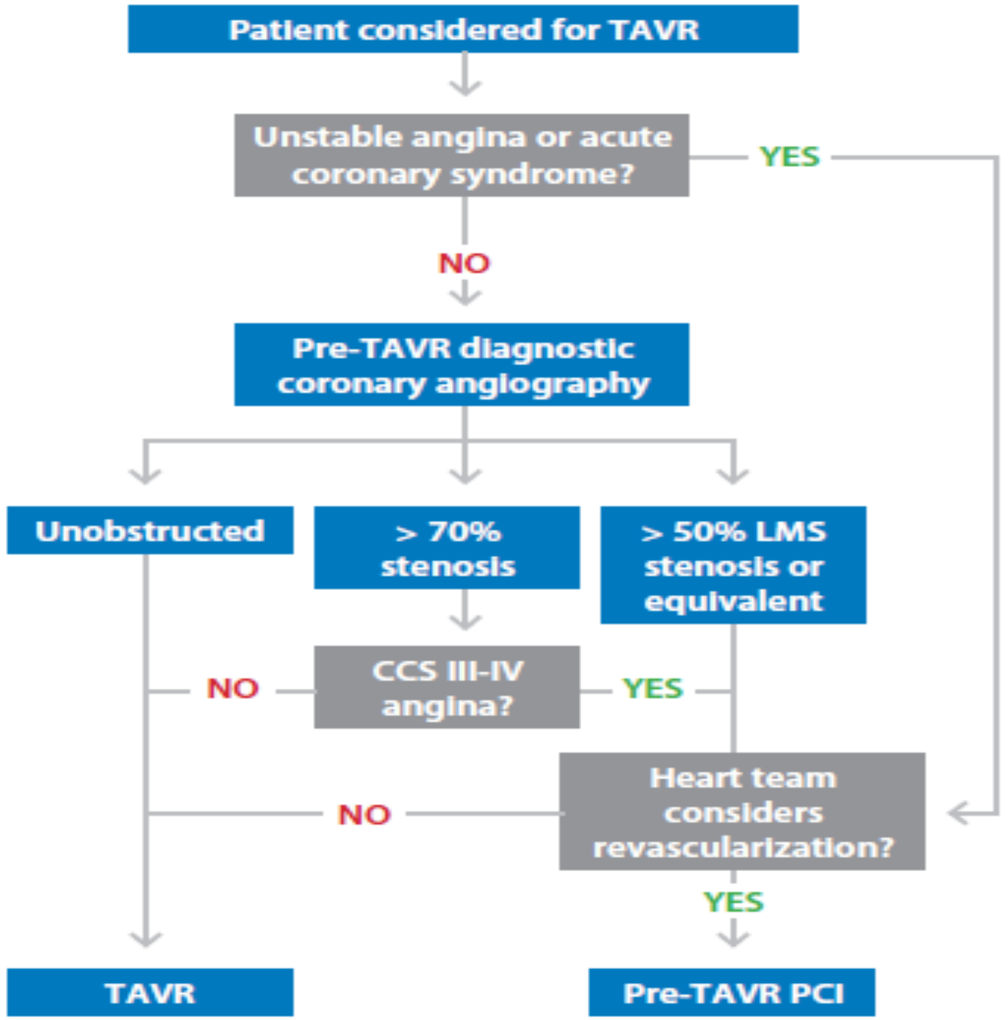
No CAD	2192	1653	1416	1065
1 VD	650	497	431	337
2 VD	397	294	249	185
3 VD	205	160	129	100



Number at risk

No LAD	444	356	311	227
LAD	888	594	498	382

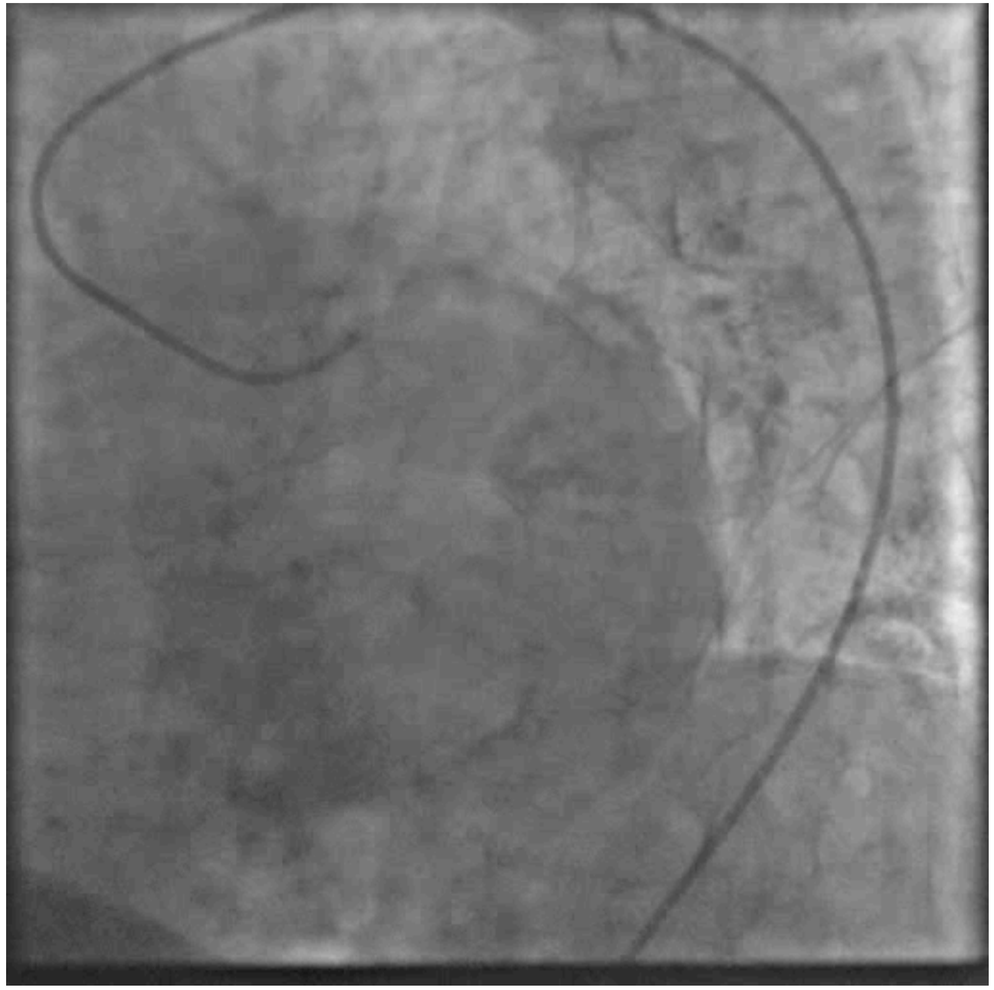
Traitement des lesions coronaires et TAVI : ESC Guidelines

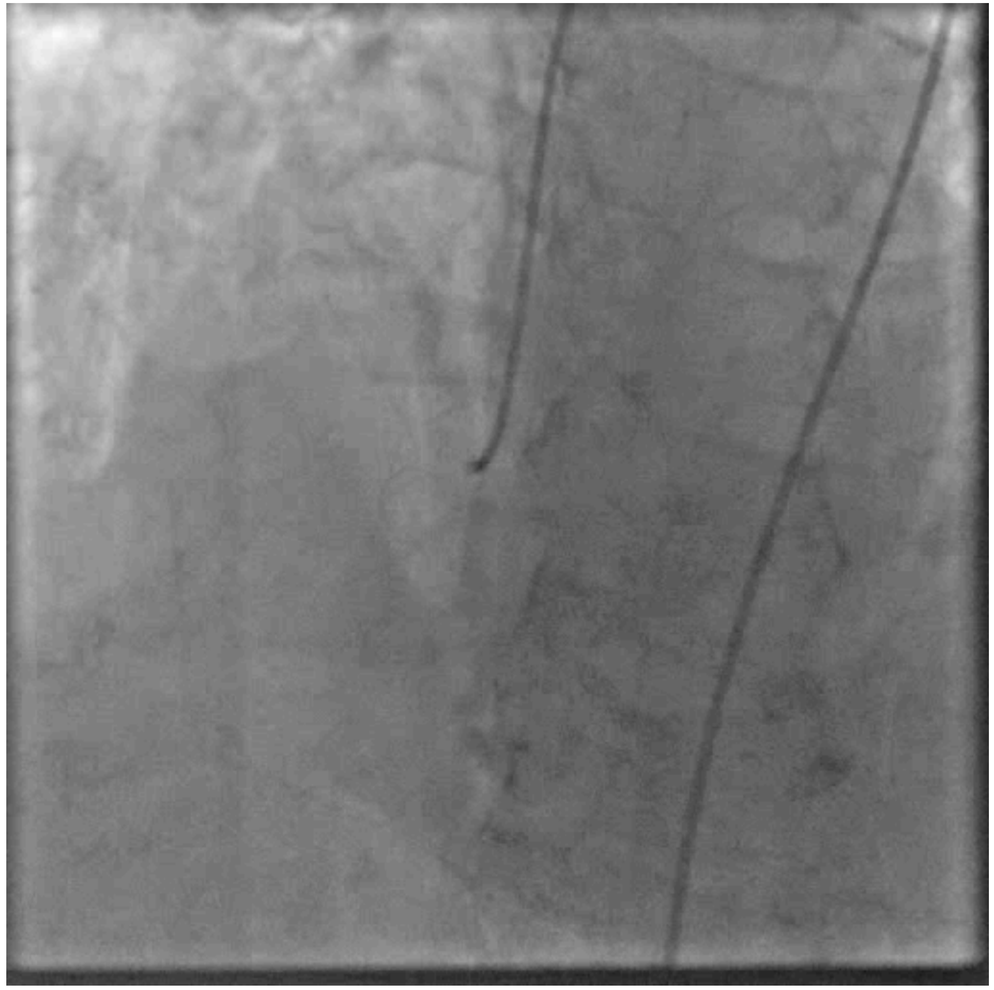


Primary valve intervention and coronary revascularization		
CABG is recommended in patients with a primary indication for aortic/mitral valve surgery and coronary artery diameter stenosis >70%.	I	C
CABG should be considered in patients with a primary indication for aortic/mitral valve surgery and coronary artery diameter stenosis of 50–70%.	IIa	C
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 should be considered in patients with a primary indication to undergo transcatheter mitral valve interventions and coronary artery diameter stenosis >70% in proximal segments.	IIa	C

FJ. Neumann et al.,European Heart Journal (2019) 40, 87–16

Me H. 90 ans

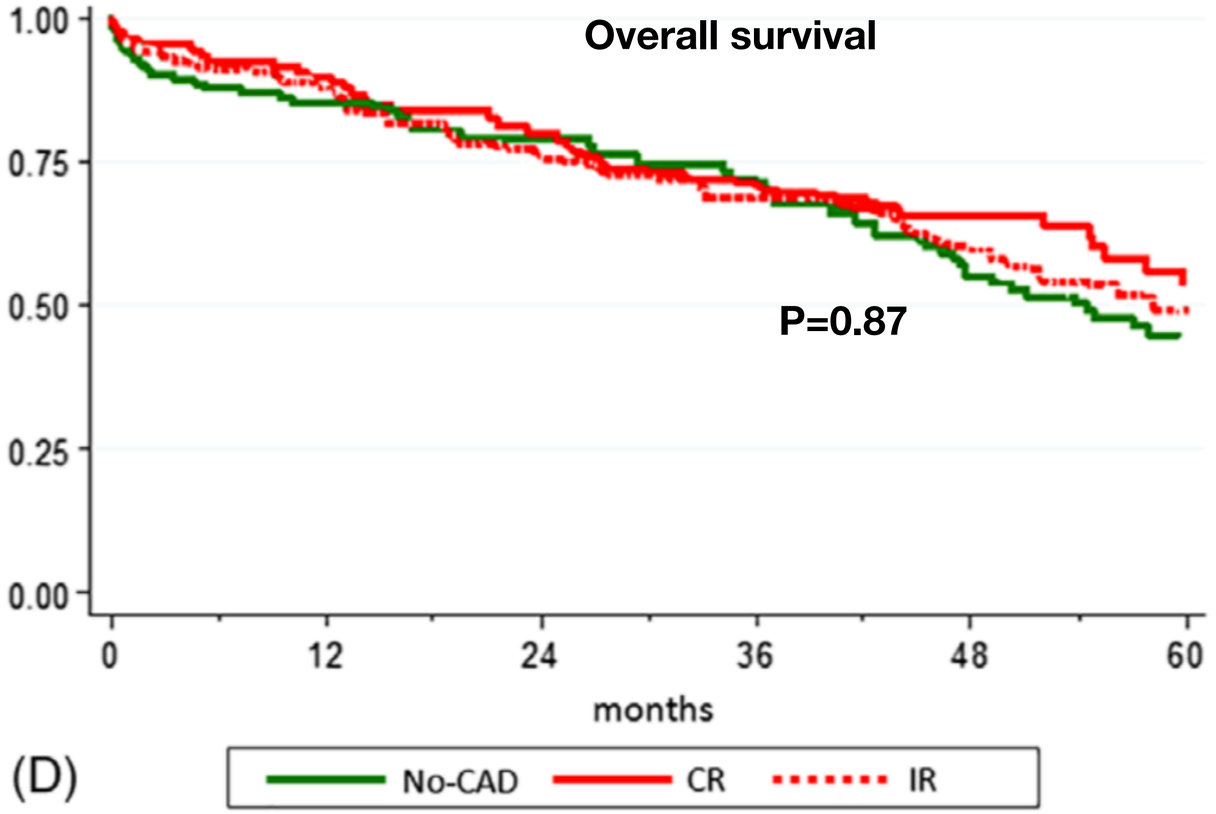




Coronary artery disease and reasonably incomplete coronary revascularization in high-risk patients undergoing transcatheter aortic valve implantation

Francesco Saia MD, PhD | Tullio Palmerini MD | Miriam Compagnone MD |

- 540 consecutive patients
- 291 PCI pre TAVI
- Mean Age 82.7
- 138 Pts CR, 153 Pts IR

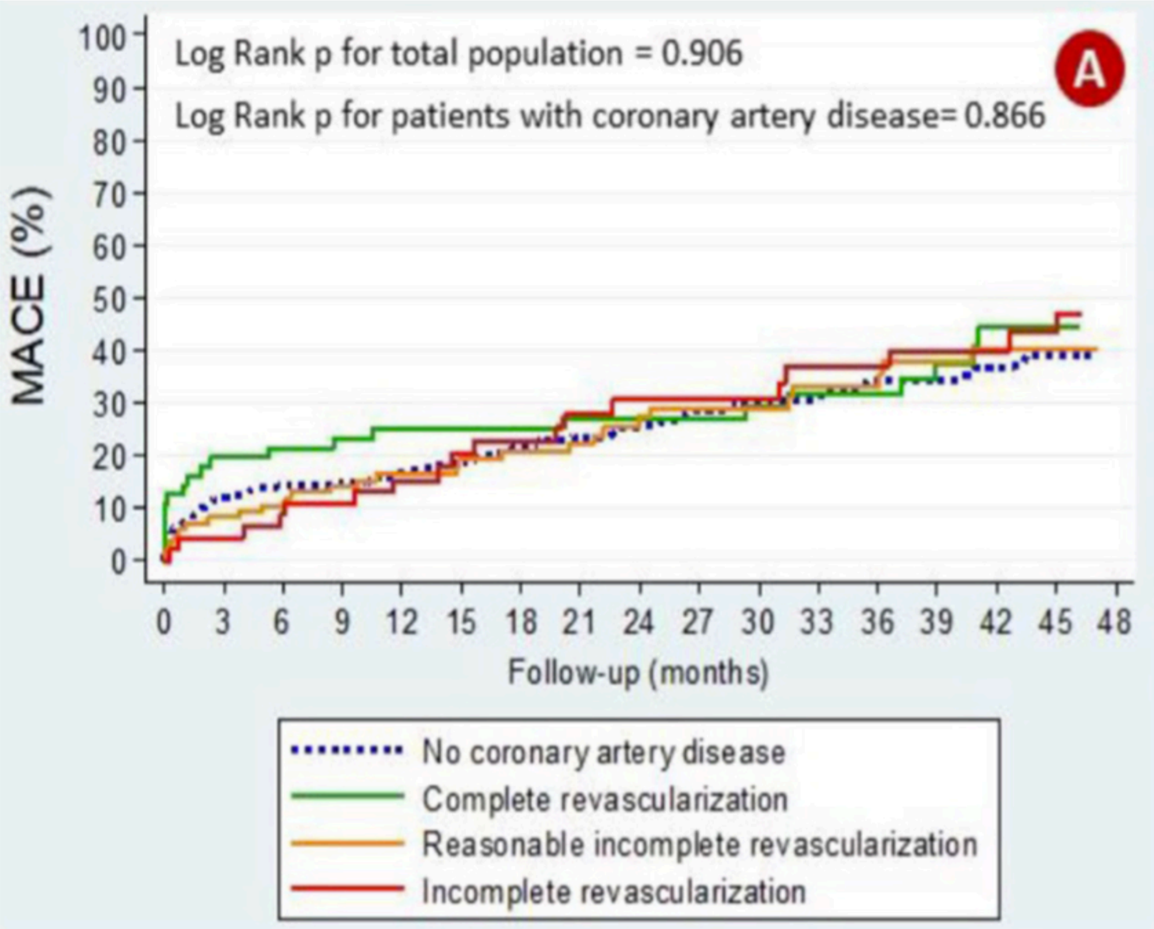


Catheter Cardiovasc Interv. 2019;1–9

Impact of Coronary Revascularization in Patients Who Underwent Transcatheter Aortic Valve Implantation

Diego López Otero, MD, PhD[a], Alejandro Ávila-Carrillo, MD[a], Rocío González Ferreiro, MD[a,b,*], Adrián Cid Menéndez, MD[a], Diego Iglesias Álvarez, MD[a], Leyre Álvarez Rodríguez, MD[a], Pablo Antúnez Muiños, MD[a], Belén Cid Álvarez, MD[a], Xoan Carlos Sanmartín Pena, MD[a], Fernando Gómez Pérez, MD[a], Alfredo Redondo Diéguez, MD[a], Ignacio Cruz-González, MD, PhD[b], Ramiro Trillo Nouche, MD[a], and José Ramón González-Juanatey, MD, PhD[a]

- 349 consecutive patients from 2008 to 2016 with CoreValve or Evolut
- Mean Age : 82.3
- 187 pts had PCI (53.7%)
- CR, rSS=0 : 31.1%
- RIR, 0<rSS<8 : 45.4%
- IR, rSS>8 : 24.5%

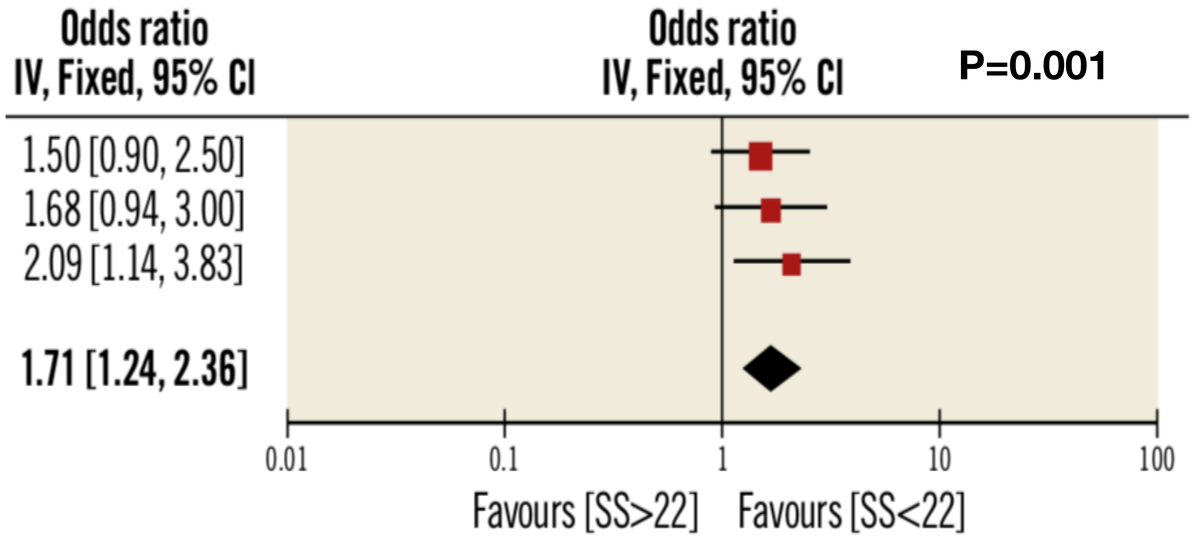


Lopez Otero et al. Am J Cardiol 2019;123:948–9

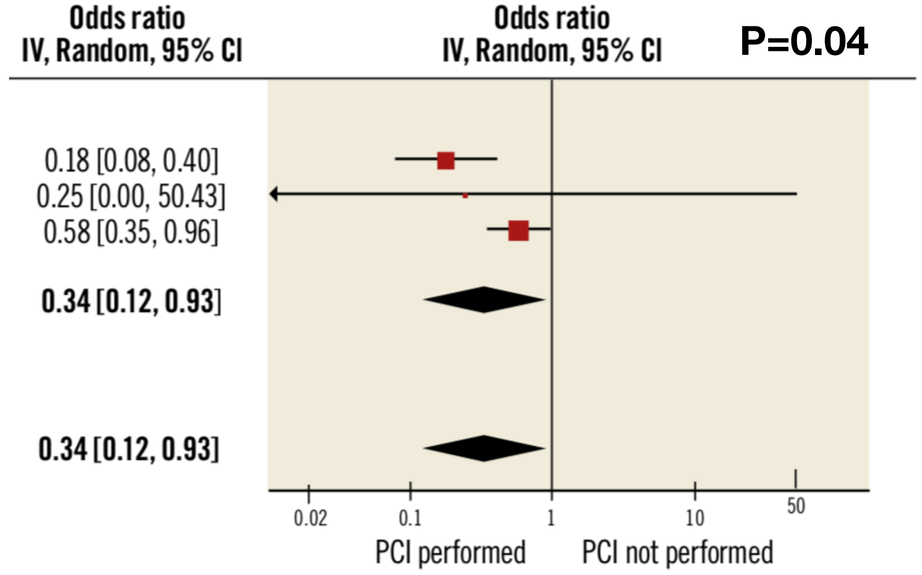
Independent impact of extent of coronary artery disease and percutaneous revascularisation on 30-day and one-year mortality after TAVI: a meta-analysis of adjusted observational results

3994 Pts with CAD and 4192 Pts without CAD in 13 studies

Impact of severity of CAD stratified with SS on one-year mortality at multivariable analysis



Impact of PCI assessed with rSS <8 on one-year mortality after TAVI

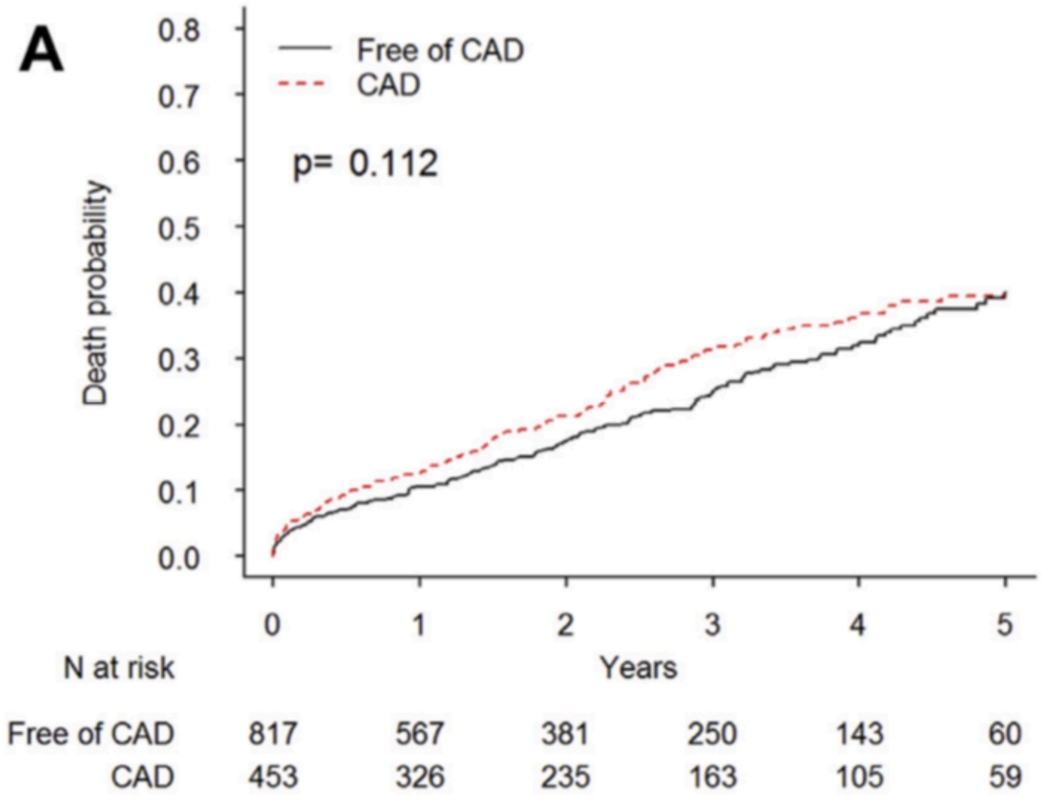


F. D'Ascenzo et al. EuroIntervention 2018;14

The Prognostic Effects of Coronary Disease Severity and Completeness of Revascularization on Mortality in Patients Undergoing Transcatheter Aortic Valve Replacement

Guy Witberg, MD,[a,b] Ehud Regev, MD,[b,c] Shmuel Chen, MD,[d] Abbid Assali, MD,[a,b] Israel M. Barbash, MD,[b,c] David Planer, MD,[d] Hana Vaknin-Assa, MD,[a,b] Victor Guetta, MD,[b,c] Vojislav Vukasinovic, MD,[d] Katia Orvin, MD,[a,b] Haim D. Danenberg, MD,[d] Amit Segev, MD,[b,c] Ran Kornowski, MD[a,b]

- 1270 consecutive patients
- 817 Pts (64%) no CAD
- 331 Pts (26%) with SS <22
- 122 Pts (10%) with SS >22



J Am Coll Cardiol Intv 2017;10:1428–35

The Prognostic Effects of Coronary Disease Severity and Completeness of Revascularization on Mortality in Patients Undergoing Transcatheter Aortic Valve Replacement

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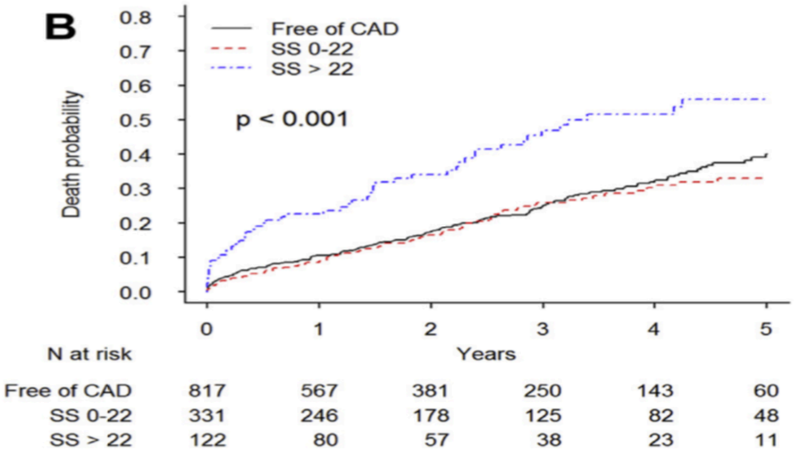


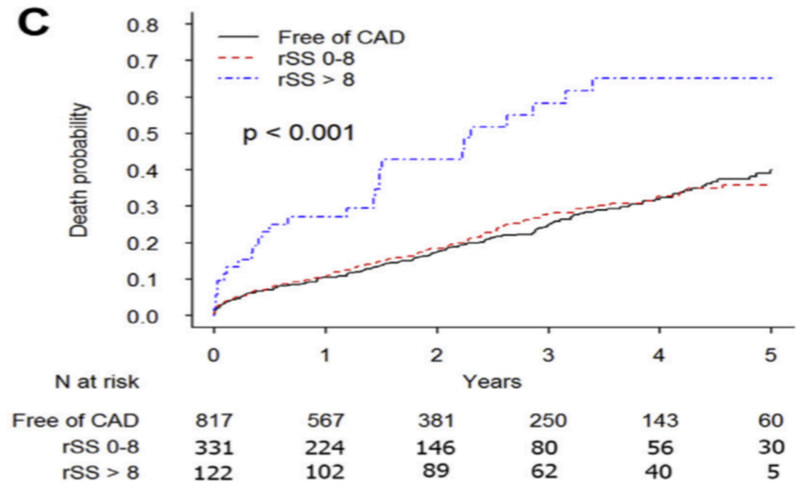
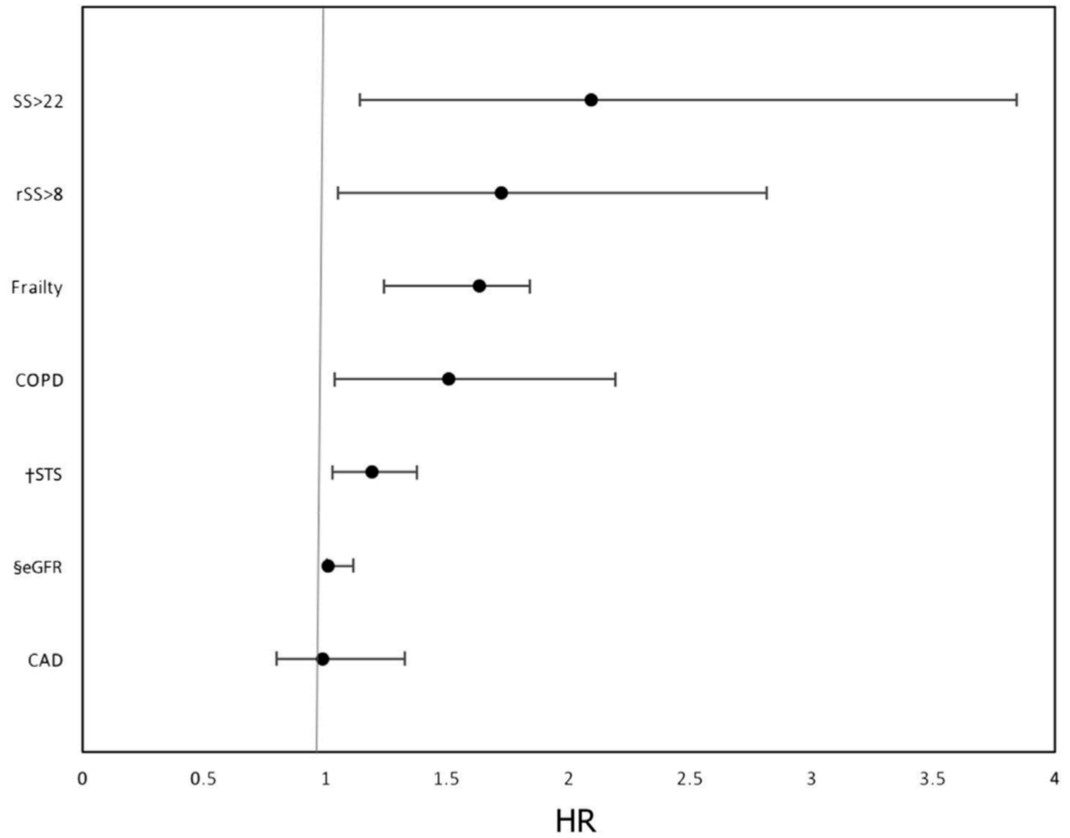
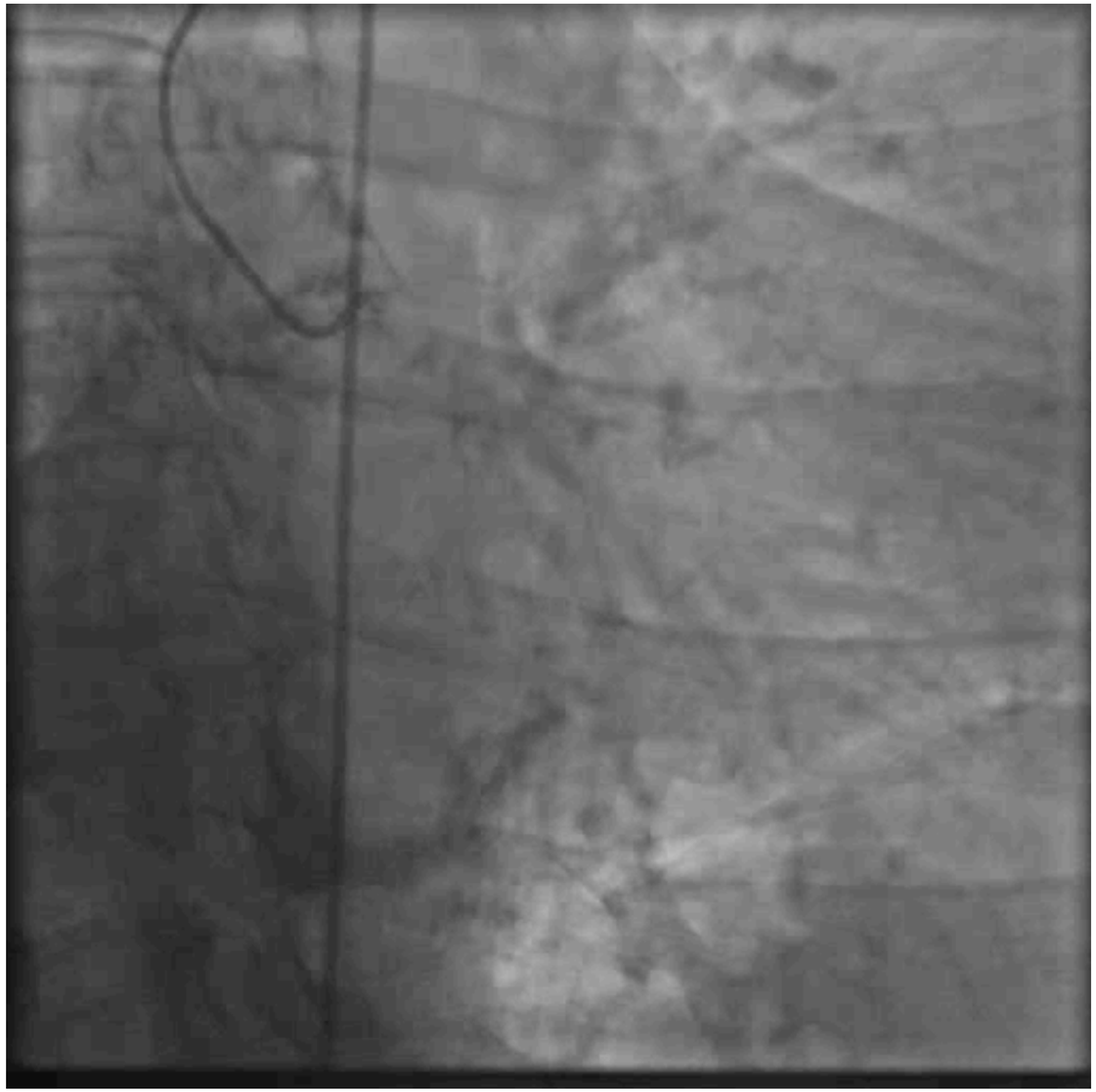


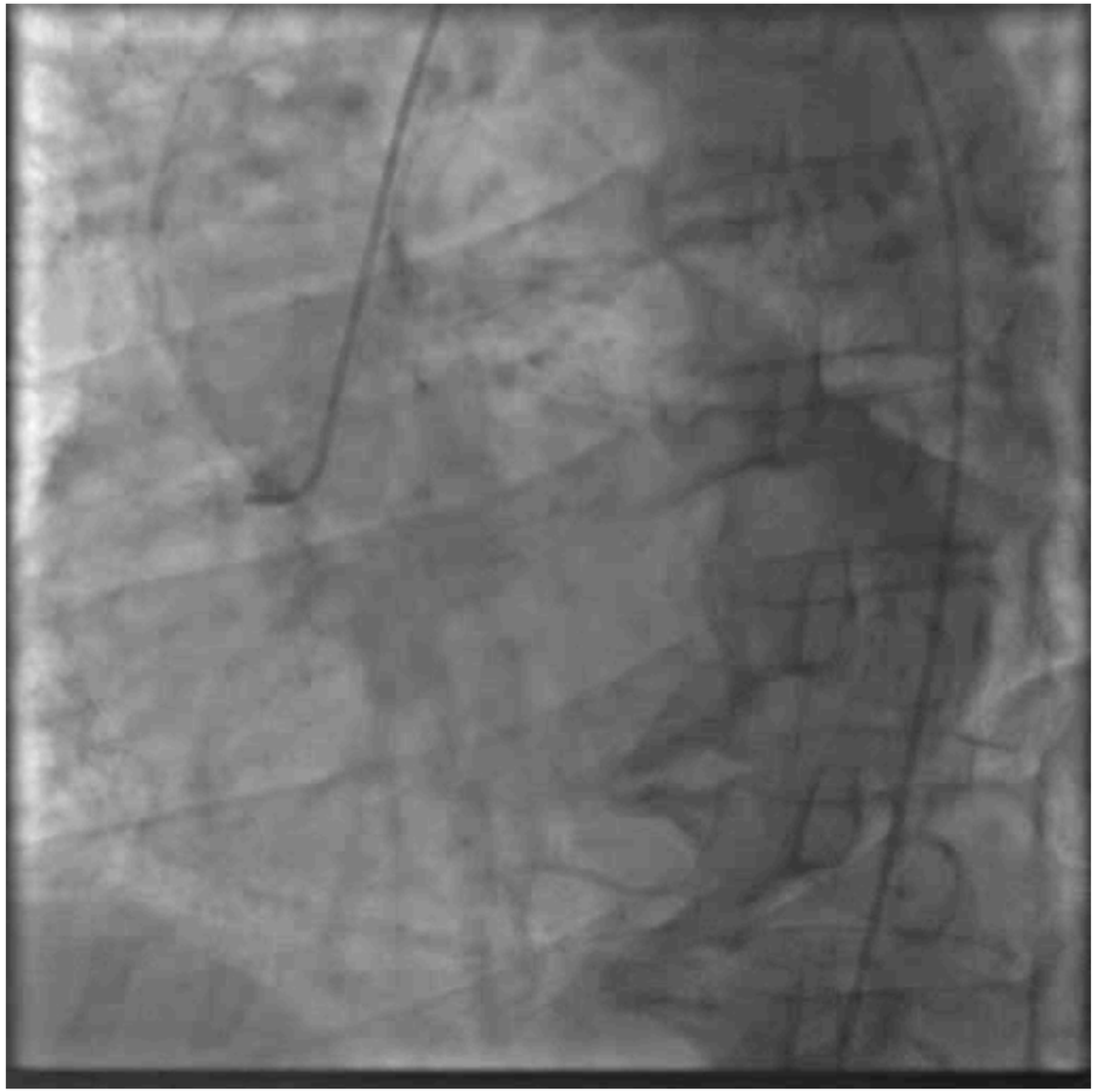
FIGURE 3 Independent Predictors of Post-TAVR Mortality*



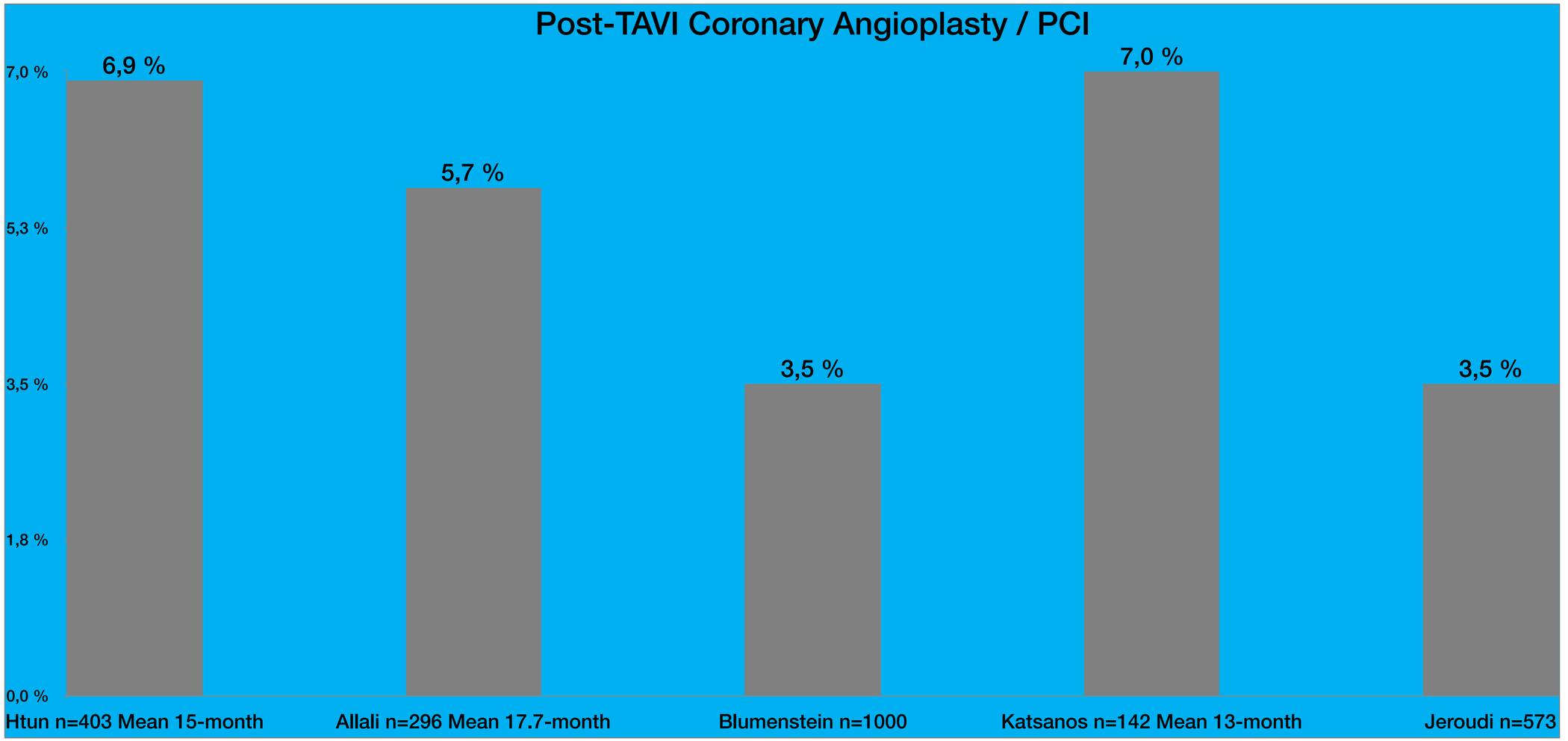
J Am Coll Cardiol Intv 2017;10:1428–35

Mr F. 85 ans

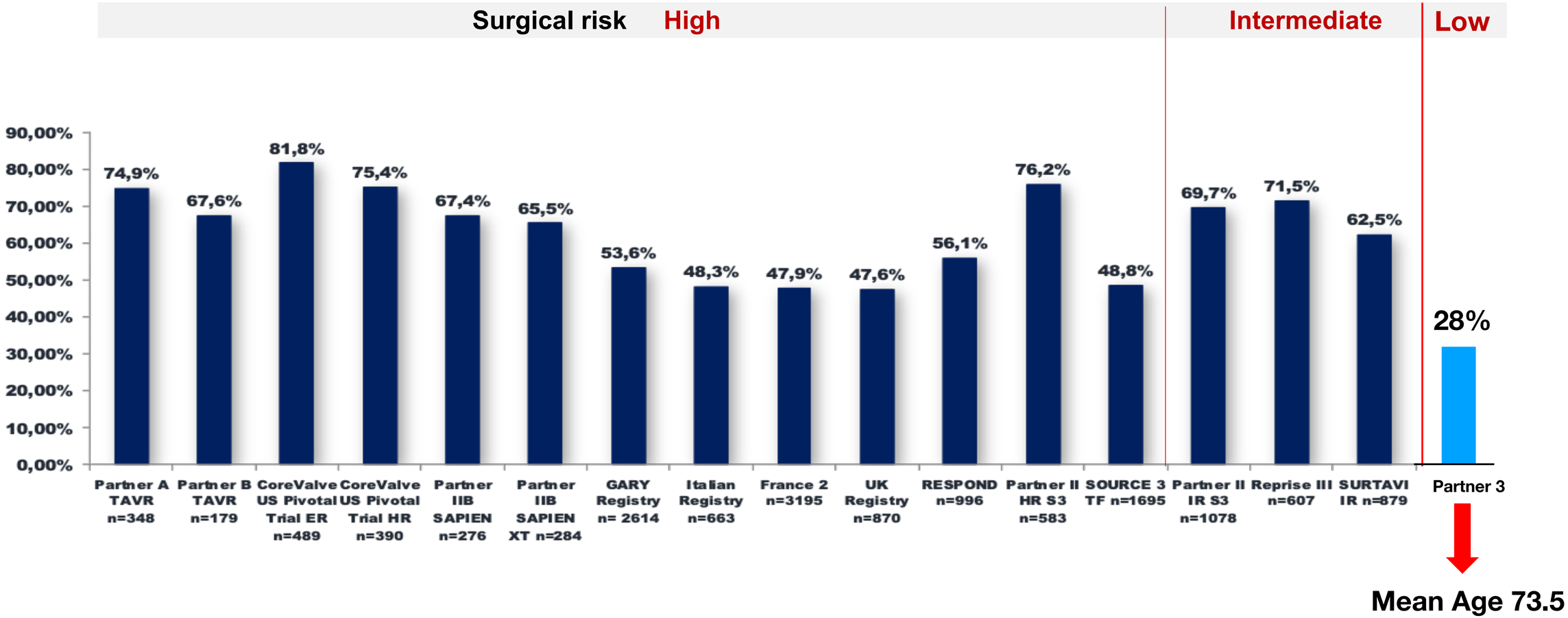




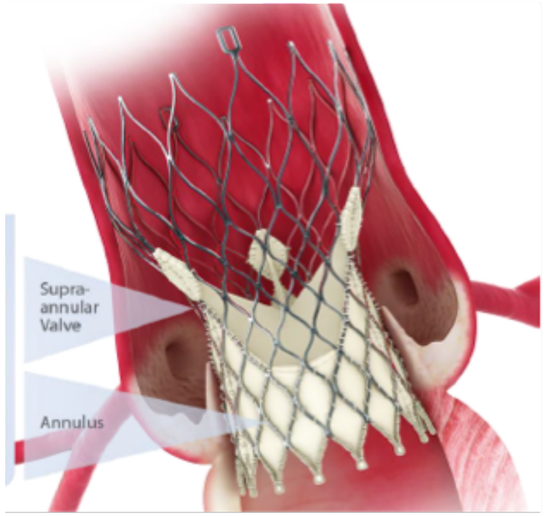
Fréquence de l’angioplastie après TAVI

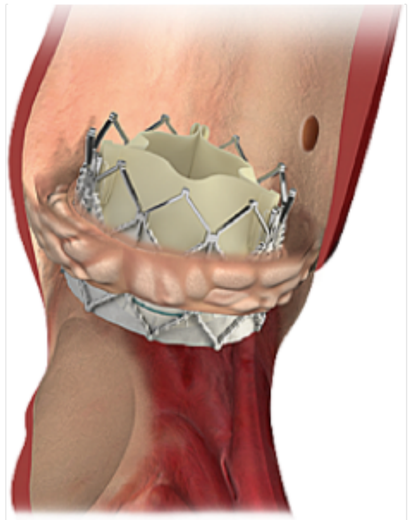


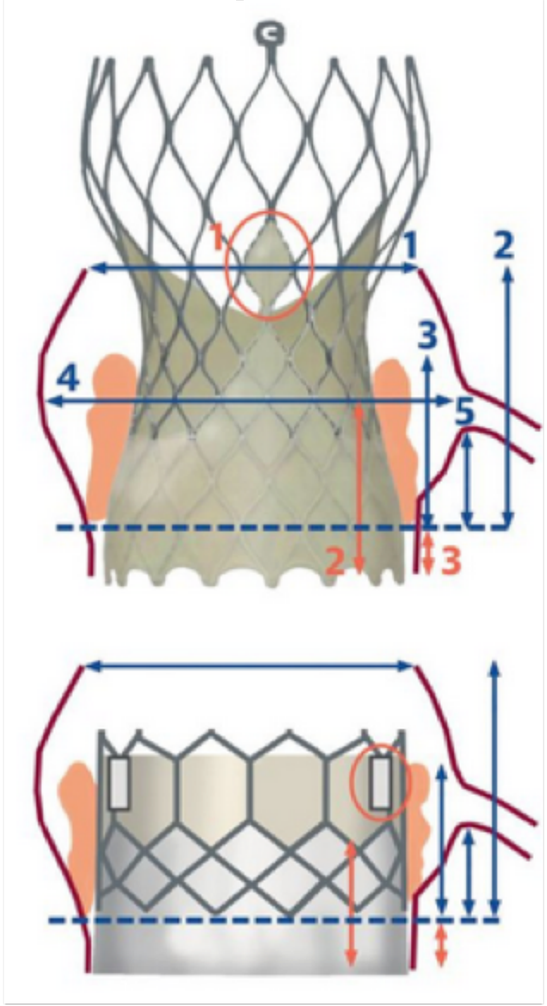
Maladie coronaire chez les patients « faible risque »



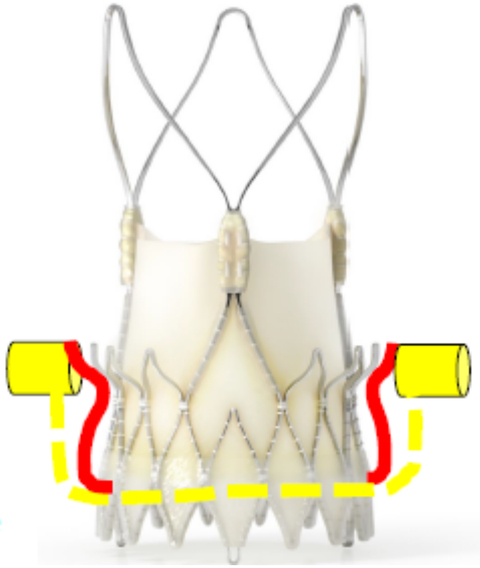
Coronary reaccess after TAVI : Supraannular versus annular position







Yudi MB, et al. JACC 2018;71:1360-78



Schäfer U, Presentation TCT 2017

Anatomical Factors :

- Sinotubular jonction dimension
- Sinus height and width
- Coronary height
- Leaflet lenght

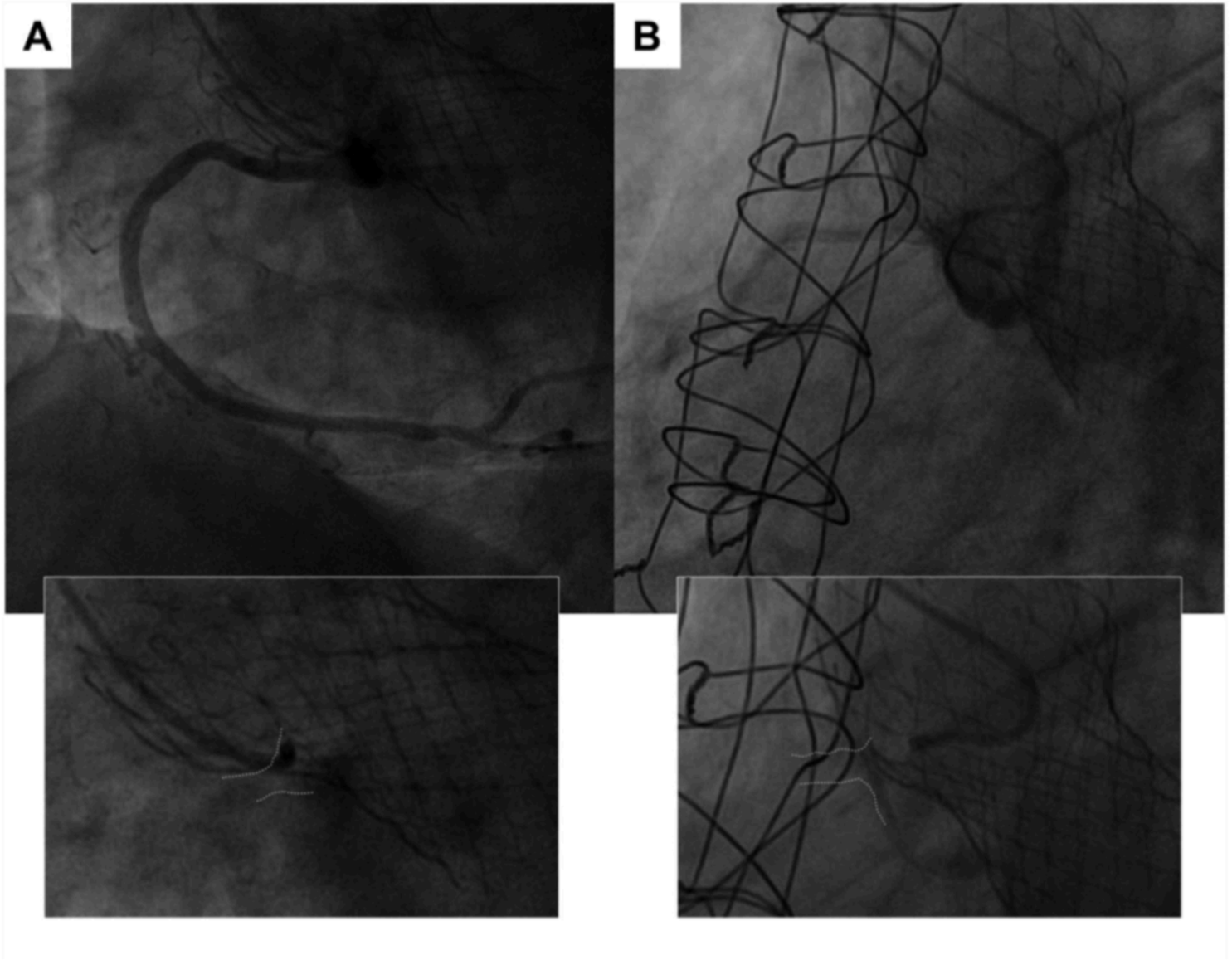
Device/Procedural factors :

- Supra versus intra annular valve
- Cell width
- Valve implant depth

Incidence, Technical Safety, and Feasibility of Coronary Angiography and Intervention Following Self-expanding Transcatheter Aortic Valve Replacement

Akih
Mari
Corra
Anto

a Fiorina
rbanti [f],

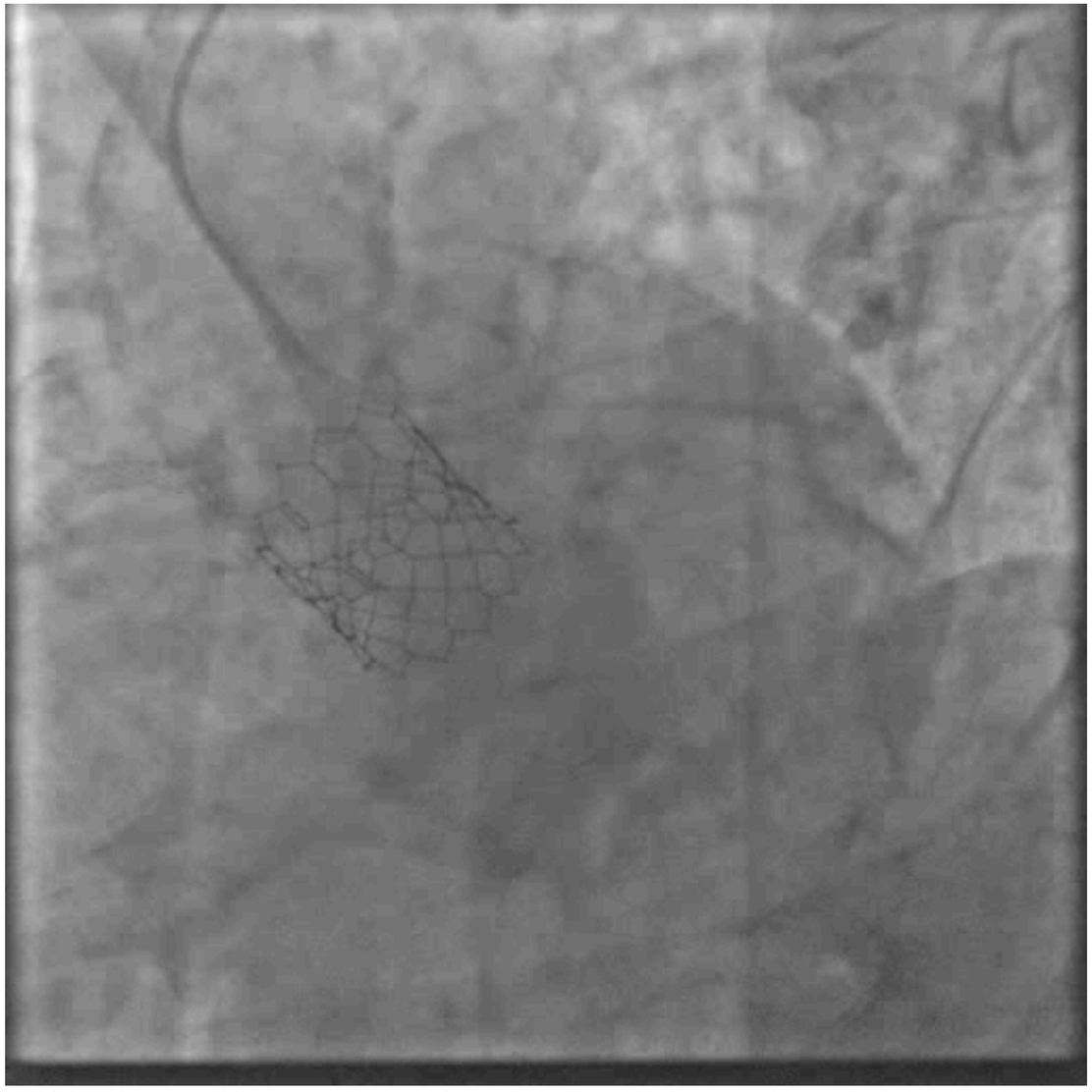


y)

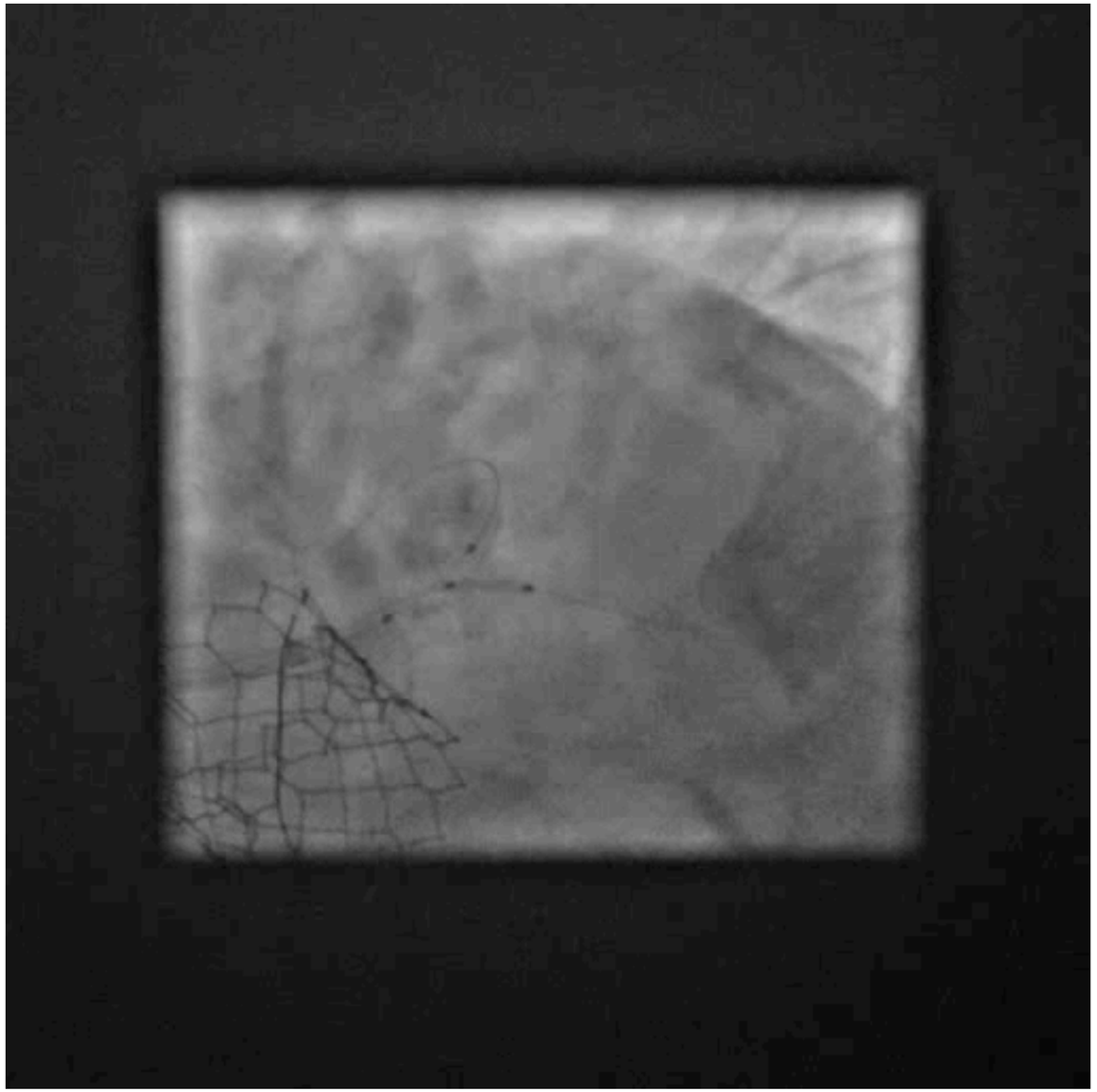
CAG	N = 30
RCA angiography	
Number of used catheters	20
RCA angiography success	3
Final successful catheter (*n*	4
Judkins Right	3
Others	1.9 ± 1.8
Final successful catheter si	93.3% (28/30)
Engaged	
Floating	
Unavailable	
LCA angiography	
Number of used catheters	15
LCA angiography success	11
Final successful catheter (*n*	3
Judkins Left	1
Others	4
Unavailable	9
Final successful catheter si	93.3% (28/30)
Engaged	
Floating	
Unavailable	
Complication related to CAG	0
THV dislodgment	0
Coronary ostial dissection	0
Any other complication	

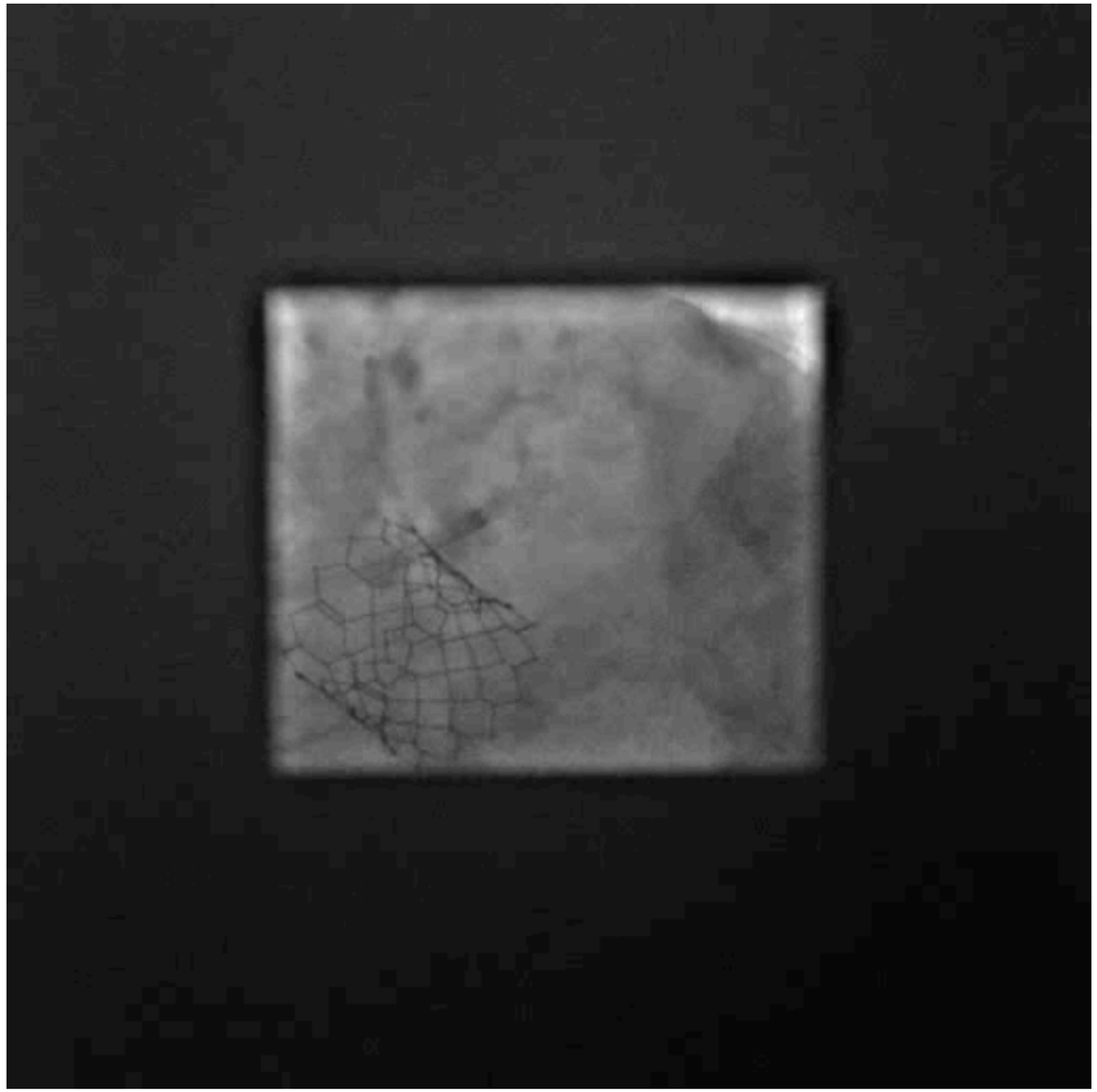
A. Tanaka et al. Cardiovascular Revascularization Medicine 20 (2019) 371–3

Mr F. 86 ans 1 an après Sapien 26mm



T stenting





Conclusion

✓Ne pas en faire trop en Pre TAVI!

✓Syntax score peut influencer l’attitude thérapeutique :

- > 22 : revascularisation
- rSS <8 : objectif après revascularisation

✓Penser au Post TAVI et à l’accès aux coronaires : choix d’autant plus important de la prothèse que l'âge des patients diminue…