CARDIO RUN 2023

TAVI… INTRODUCTION…
RESULTATS des 200 Iers TAVI CSC

☺

27 septembre 2023

Dr C. POUILLOT

TAVI

Trans-catheter Aortique Valve Implantation

Le rétrécissement aortique du sujet âgé à la Réunion

RAo valvulopathie la plus fréquente du sujet âgé : prévalence 2.8 à 4.6 % > 75 ans (USA).

Longue latence (asymptomatique) puis progression rapide après 1ers symptômes

(50 % patients décédés à 2 ans, 80 % à 3 ans)

France : 67,8 M habitants (INSEE 2021)

6 291 749 > 75 ans (9,2 %)

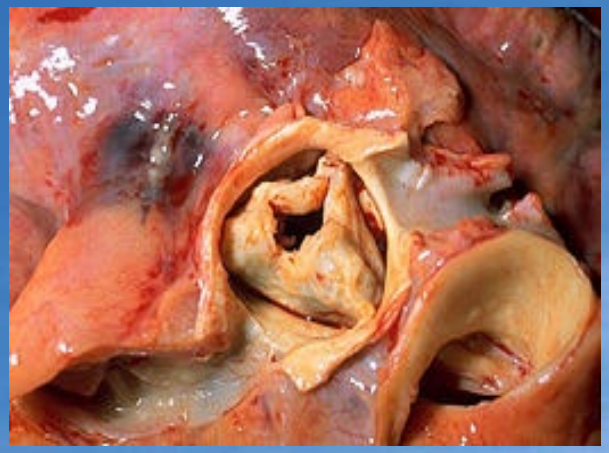
environ 230 000 patient RAo

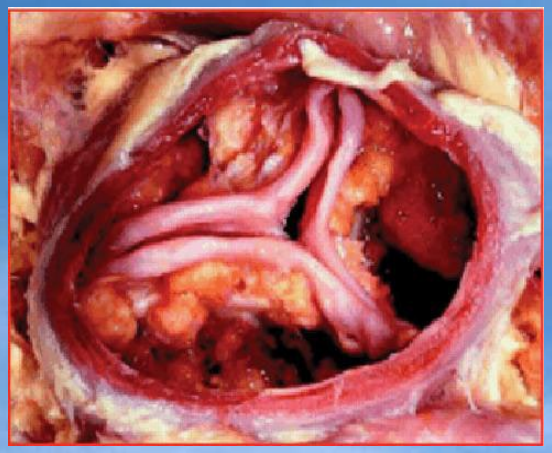
Réunion : 858 450 habitants (INSEE 2021)

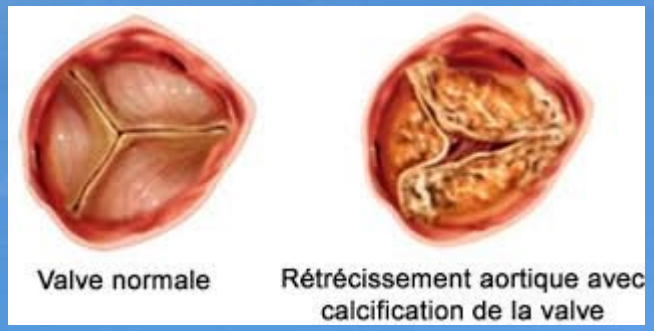
40 355 > 75ans (4,7%) 2018 VS *25 594* (3,2 %) en 2008 :↑ Rapide

environ 1500 patients RAo

Anatomo pathologie







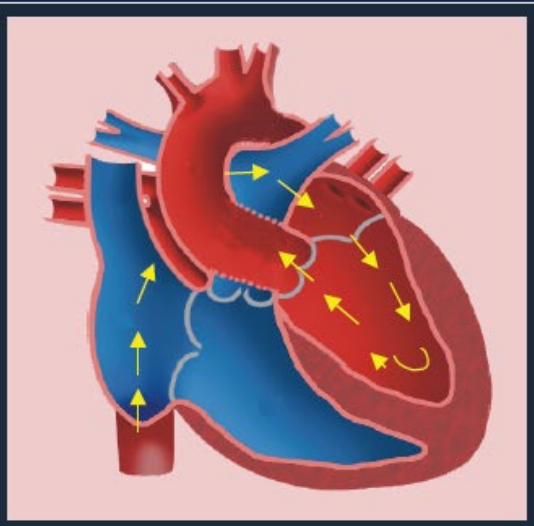
TAVI : Bioprothèse aortique sur structure métallique (stent) implantée à l'intérieur de la valve aortique native

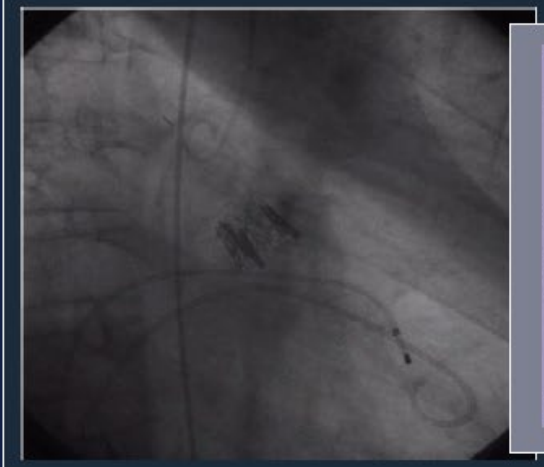
Bioprothèse aortique
Péricarde bovin
Stent cobalt chrome balloon expendable
Sapien 3 Edwards

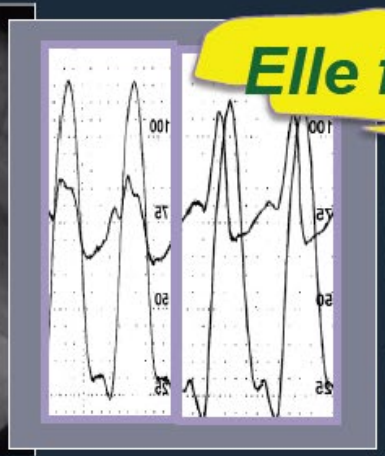
Bioprothèse aortique
Péricarde porcin
Stent Nitinol self expendable
CoreValve evolute R Medtronic

2002, Rouen, F.I.M –TAVI

Du rêve à la réalité







Elle fonctionne!

Circulation. 2002 Dec 10;106(24):3006-8.

Marguerita H. 78 ans, OAP, RAo serré, V max 4.6 , gradient moyen 55 mm Hg, SAo 0.65 cm^2
LES 22.6 %, STS 7.1 % IRC sévère C 9 ml/mn

TAVI CSC 25 octobre 2016 (30 cc Ultravist): bon résultat immédiat

ESC
European Society of Cardiology
European Heart Journal (2021) **00**, 1–72
doi:10.1093/eurheartj/ehab395

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

Developed by the Task Force for the management of valvular heart disease of the European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS)

Authors/Task Force Members: Alec Vahanian * (ESC Chairperson) (France), Friedhelm Beyersdorf*[1] (EACTS Chairperson) (Germany), Fabien Praz (ESC Task Force Coordinator) (Switzerland), Milan Milojevic[1] (EACTS Task Force Coordinator) (Serbia), Stephan Baldus (Germany), Johann Bauersachs (Germany), Davide Capodanno (Italy), Lenard Conradi[1] (Germany), Michele De Bonis[1] (Italy), Ruggero De Paulis[1] (Italy), Victoria Delgado (Netherlands), Nick Freemantle[1] (United Kingdom), Martine Gilard (France), Kristina H. Haugaa (Norway), Anders Jeppsson[1] (Sweden), Peter Jüni (Canada), Luc Pierard (Belgium), Bernard D. Prendergast (United Kingdom), J. Rafael Sádaba[1] (Spain), Christophe Tribouilloy (France), Wojtek Wojakowski (Poland), ESC/EACTS Scientific Document Group

A) Symptomatic aortic stenosis	Class[b]	Level[c]
Intervention is recommended in symptomatic patients with severe, high-gradient aortic stenosis [mean gradient ≥40 mmHg, peak velocity ≥4.0 m/s, and valve area ≤1.0 cm^2 (or ≤0.6 cm^2/m^2)].[235,236]	I	B
Intervention is recommended in symptomatic patients with severe low-flow (SVi ≤35 mL/m^2), low-gradient (<40 mmHg) aortic stenosis with reduced ejection fraction (<50%), and evidence of flow (contractile) reserve.[32,237]	I	B
Intervention should be considered in symptomatic patients with low-flow, low-gradient (<40 mmHg) aortic stenosis with normal ejection fraction after careful confirmation that the aortic stenosis is severe[d] (*Figure 3*).	IIa	C
Intervention should be considered in symptomatic patients with low-flow, low-gradient severe aortic stenosis and reduced ejection fraction without flow (contractile) reserve, particularly when CCT calcium scoring confirms severe aortic stenosis.	IIa	C
Intervention is not recommended in patients with severe comorbidities when the intervention is unlikely to improve quality of life or prolong survival >1 year.	III	C

B) Asymptomatic patients with severe aortic stenosis		
Intervention is recommended in asymptomatic patients with severe aortic stenosis and systolic LV dysfunction (LVEF <50%) without another cause.[9,238,239]	I	B
Intervention is recommended in asymptomatic patients with severe aortic stenosis and demonstrable symptoms on exercise testing.	I	C
Intervention should be considered in asymptomatic patients with severe aortic stenosis and systolic LV dysfunction (LVEF <55%) without another cause.[9,240,241]	IIa	B
Intervention should be considered in asymptomatic patients with severe aortic stenosis and a sustained fall in BP (>20 mmHg) during exercise testing.	IIa	C

Intervention should be considered in asymptomatic patients with LVEF >55% and a normal exercise test if the procedural risk is low and one of the following parameters is present: • Very severe aortic stenosis (mean gradient ≥60 mmHg or V_{max} >5 m/s).[9,242] • Severe valve calcification (ideally assessed by CCT) and V_{max} progression ≥0.3 m/s/year.[164,189,243] • Markedly elevated BNP levels (>3× age- and sex-corrected normal range) confirmed by repeated measurements and without other explanation.[163,171]	**IIa**	**B**

PARTNER Manuscripts in NEJM (October, 2010 – May, 2012)

THE PARTNER TRIAL

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 OCTOBER 21, 2010 VOL. 363 NO. 17

Transcatheter Aortic-Valve Implantation for Aortic Stenosis in Patients Who Cannot Undergo Surgery

Martin B. Leon, M.D., Craig R. Smith, M.D., Michael Mack, M.D., D. Craig Miller, M.D., Jeffrey W. Moses, M.D., Lars G. Svensson, M.D., Ph.D., E. Murat Tuzcu, M.D., John G. Webb, M.D., Gregory P. Fontana, M.D., Raj R. Makkar, M.D., David L. Brown, M.D., Peter C. Block, M.D., Robert A. Guyton, M.D., Augusto D. Pichard, M.D., Joseph E. Bavaria, M.D., Howard C. Herrmann, M.D., Pamela S. Douglas, M.D., John L. Petersen, M.D., Jodi J. Akin, M.S., William N. Anderson, Ph.D., Duolao Wang, Ph.D., and Stuart Pocock, Ph.D., for the PARTNER Trial Investigators*

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JUNE 9, 2011 VOL. 364 NO. 23

Transcatheter and Surgical Aortic-Valve Replacement in High-Risk Patients

Craig R. Smith, M.D., Martin B. Leon, M.D., Michael J. Mack, M.D., D. Craig Miller, M.D., Jeffrey W. Moses, M.D., Lars G. Svensson, M.D., Ph.D., E. Murat Tuzcu, M.D., John G. Webb, M.D., Gregory P. Fontana, M.D., Raj R. Makkar, M.D., Mathew Williams, M.D., Todd Dewey, M.D., Samir Kapadia, M.D., Vasilis Babaliaros, M.D., Vinod H. Thourani, M.D., Paul Corso, M.D., Augusto D. Pichard, M.D., Joseph E. Bavaria, M.D., Howard C. Herrmann, M.D., Jodi J. Akin, M.S., William N. Anderson, Ph.D., Duolao Wang, Ph.D., and Stuart J. Pocock, Ph.D., for the PARTNER Trial Investigators*

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Transcatheter Aortic-Valve Replacement for Inoperable Severe Aortic Stenosis

Raj R. Makkar, M.D., Gregory P. Fontana, M.D., Hasan Jilaihawi, M.D., Samir Kapadia, M.D., Augusto D. Pichard, M.D., Pamela S. Douglas, M.D., Vinod H. Thourani, M.D., Vasilis C. Babaliaros, M.D., John G. Webb, M.D., Howard C. Herrmann, M.D., Joseph E. Bavaria, M.D., Susheel Kodali, M.D., David L. Brown, M.D., Bruce Bowers, M.D., Todd M. Dewey, M.D., Lars G. Svensson, M.D., Ph.D., Murat Tuzcu, M.D., Jeffrey W. Moses, M.D., Matthew R. Williams, M.D., Robert J. Siegel, M.D., Jodi J. Akin, M.S., William N. Anderson, Ph.D., Stuart Pocock, Ph.D., Craig R. Smith, M.D., and Martin B. Leon, M.D., for the PARTNER Trial Investigators*

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Two-Year Outcomes after Transcatheter or Surgical Aortic-Valve Replacement

Susheel K. Kodali, M.D., Mathew R. Williams, M.D., Craig R. Smith, M.D., Lars G. Svensson, M.D., Ph.D., John G. Webb, M.D., Raj R. Makkar, M.D., Gregory P. Fontana, M.D., Todd M. Dewey, M.D., Vinod H. Thourani, M.D., Augusto D. Pichard, M.D., Michael Fischbein, M.D., Wilson Y. Szeto, M.D., Scott Lim, M.D., Kevin L. Greason, M.D., Paul S. Teirstein, M.D., S. Chris Malaisrie, M.D., Pamela S. Douglas, M.D., Rebecca T. Hahn, M.D., Brian Whisenant, M.D., Alan Zajarias, M.D., Duolao Wang, Ph.D., Jodi J. Akin, M.S., William N. Anderson, Ph.D., and Martin B. Leon, M.D., for the PARTNER Trial Investigators*

The NEW ENGLAND JOURNAL of MEDICINE

Transcatheter Aortic-Valve Replacement with a Self-Expanding Prosthesis

David H. Adams, M.D., Jeffrey J. Popma, M.D., Michael J. Reardon, M.D., Steven J. Yakubov, M.D., Joseph S. Coselli, M.D., G. Michael Deeb, M.D., Thomas G. Gleason, M.D., Maurice Buchbinder, M.D., James Hermiller, Jr., M.D., Neal S. Kleiman, M.D., Stan Chetcuti, M.D., John Heiser, M.D., William Merhi, D.O., George Zorn, M.D., Peter Tadros, M.D., Newell Robinson, M.D., George Petrossian, M.D., G. Chad Hughes, M.D., J. Kevin Harrison, M.D., John Conte, M.D., Brijeshwar Maini, M.D., Mubashir Mumtaz, M.D., Sharla Chenoweth, M.S., and Jae K. Oh, M.D., for the U.S. CoreValve Clinical Investigators*

Votre texte ici

High Risk

8 Mai 2014

Medtronic

CoreValve®

TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI) PLATFORM

The NEW ENGLAND JOURNAL of MEDICINE

Transcatheter or Surgical Aortic-Valve Replacement in Intermediate-Risk Patients

Martin B. Leon, M.D., Craig R. Smith, M.D., Michael J. Mack, M.D., Raj R. Makkar, M.D., Lars G. Svensson, M.D., Ph.D., Susheel K. Kodali, M.D., Vinod H. Thourani, M.D., E. Murat Tuzcu, M.D., D. Craig Miller, M.D., Howard C. Herrmann, M.D., Darshan Doshi, M.D., David J. Cohen, M.D., Augusto D. Pichard, M.D., Samir Kapadia, M.D., Todd Dewey, M.D., Vasilis Babaliaros, M.D., Wilson Y. Szeto, M.D., Mathew R. Williams, M.D., Dean Kereiakes, M.D., Alan Zajarias, M.D., Kevin L. Greason, M.D., Brian K. Whisenant, M.D., Robert W. Hodson, M.D., Jeffrey W. Moses, M.D., Alfredo Trento, M.D., David L. Brown, M.D., William F. Fearon, M.D., Philippe Pibarot, D.V.M., Ph.D., Rebecca T. Hahn, M.D., Wael A. Jaber, M.D., William N. Anderson, Ph.D., Maria C. Alu, M.M., and John G. Webb, M.D., for the PARTNER 2 Investigators*

N Engl J Med 2016; 374:1609-1620 | April 28, 2016 | DOI: 10.1056/NEJMoa1514616

SURTAVI

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Surgical or Transcatheter Aortic-Valve Replacement in Intermediate-Risk Patients

Michael J. Reardon, M.D., Nicolas M. Van Mieghem, M.D., Ph.D., Jeffrey J. Popma, M.D., Neal S. Kleiman, M.D., Lars Søndergaard, M.D., Mubashir Mumtaz, M.D., David H. Adams, M.D., G. Michael Deeb, M.D., Brijeshwar Maini, M.D., Hemal Gada, M.D., Stanley Chetcuti, M.D., Thomas Gleason, M.D., John Heiser, M.D., Rüdiger Lange, M.D., Ph.D., William Merhi, D.O., Jae K. Oh, M.D., Peter S. Olsen, M.D., Nicolo Piazza, M.D., Ph.D., Mathew Williams, M.D., Stephan Windecker, M.D., Ph.D., Steven J. Yakubov, M.D., Eberhard Grube, M.D., Ph.D., Raj Makkar, M.D., Joon S. Lee, M.D., John Conte, M.D., Eric Vang, Ph.D., M.P.H., Hang Nguyen, B.S., Yanping Chang, M.S., Andrew S. Mugglin, Ph.D., Patrick W.J.C. Serruys, M.D., Ph.D., and Arie P. Kappetein, M.D., Ph.D., for the SURTAVI Investigators*

N Engl J Med 2017; 376:1321-1331April 6, 2017 DOI: 10.1056/NEJMoa1700456

The NEW ENGLAND JOURNAL of MEDICINE

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Transcatheter Aortic-Valve Replacement with a Balloon-Expandable Valve in Low-Risk Patients

M.J. Mack, M.B. Leon, V.H. Thourani, R. Makkar, S.K. Kodali, M. Russo, S.R. Kapadia, S.C. Malaisrie, D.J. Cohen, P. Pibarot, J. Leipsic, R.T. Hahn, P. Blanke, M.R. Williams, J.M. McCabe, D.L. Brown, V. Babaliaros, S. Goldman, W.Y. Szeto, P. Genereux, A. Pershad, S.J. Pocock, M.C. Alu, J.G. Webb, and C.R. Smith, for the PARTNER 3 Investigators*

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Transcatheter Aortic-Valve Replacement with a Self-Expanding Valve in Low-Risk Patients

Jeffrey J. Popma, M.D., G. Michael Deeb, M.D., Steven J. Yakubov, M.D., Mubashir Mumtaz, M.D., Hemal Gada, M.D., Daniel O'Hair, M.D., Tanvir Bajwa, M.D., John C. Heiser, M.D., William Merhi, D.O., Neal S. Kleiman, M.D., Judah Askew, M.D., Paul Sorajja, M.D., Joshua Rovin, M.D., Stanley J. Chetcuti, M.D., David H. Adams, M.D., Paul S. Teirstein, M.D., George L. Zorn III, M.D., John K. Forrest, M.D., Didier Tchétché, M.D., Jon Resar, M.D., Antony Walton, M.D., Nicolo Piazza, M.D., Ph.D., Basel Ramlawi, M.D., Newell Robinson, M.D., George Petrossian, M.D., Thomas G. Gleason, M.D., Jae K. Oh, M.D., Michael J. Boulware, Ph.D., Hongyan Qiao, Ph.D., Andrew S. Mugglin, Ph.D., and Michael J. Reardon, M.D., for the Evolut Low Risk Trial Investigators*

Transcatheter aortic valve implantation vs. surgical aortic valve replacement for treatment of symptomatic severe aortic stenosis: an updated meta-analysis

George C.M. Siontis[1†], Pavel Overtchouk [1†], Thomas J. Cahill[2†], Thomas Modine[3], Bernard Prendergast [4], Fabien Praz [1], Thomas Pilgrim [1], Tatjana Petrinic[5], Adriani Nikolakopoulou[6], Georgia Salanti[6], Lars Søndergaard[7], Subodh Verma[8], Peter Jüni[9], and Stephan Windecker [1*]

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Aims

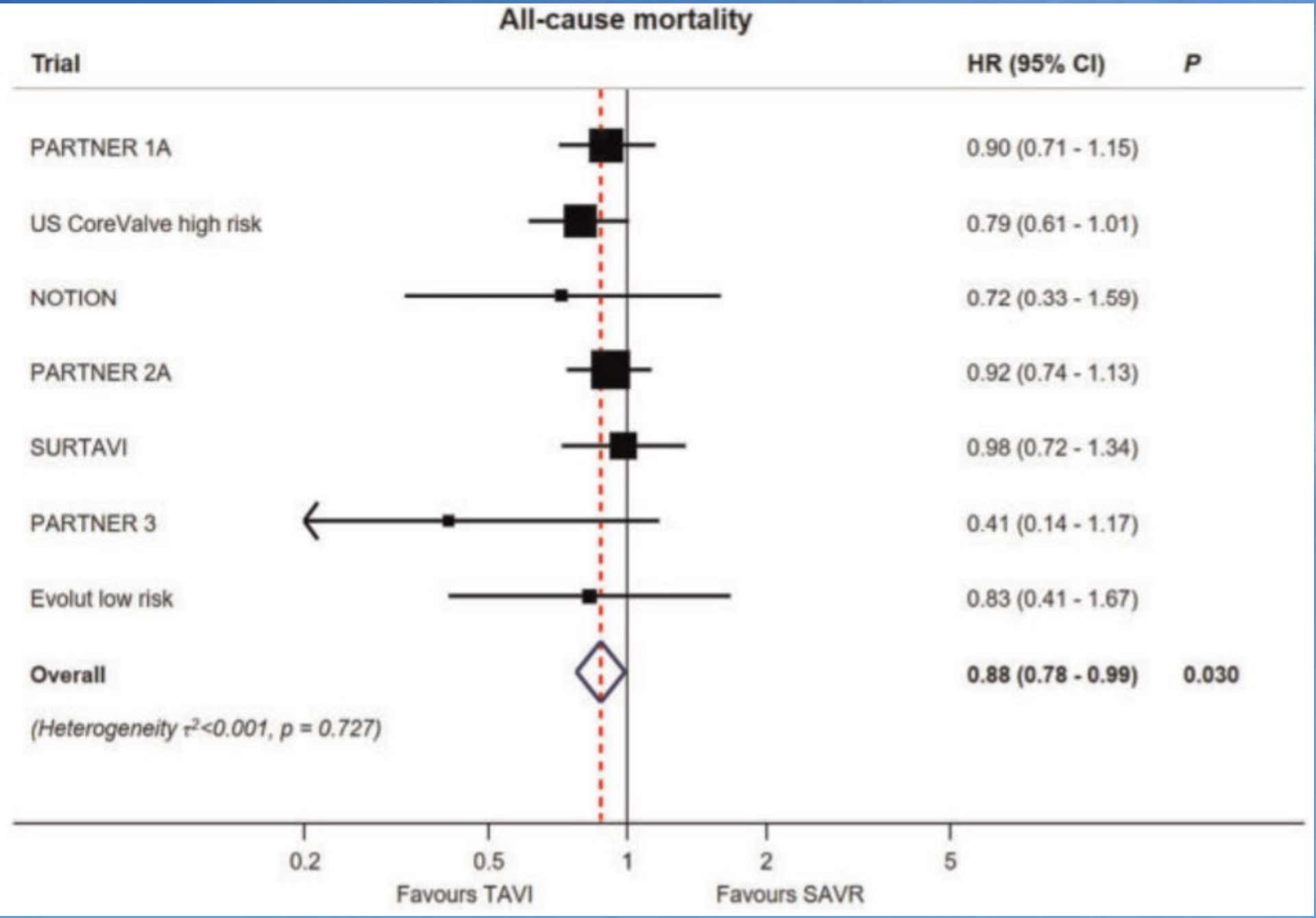
Owing to new evidence from randomized controlled trials (RCTs) in low-risk patients with severe aortic stenosis, we compared the collective safety and efficacy of transcatheter aortic valve implantation (TAVI) vs. surgical aortic valve replacement (SAVR) across the entire spectrum of surgical risk patients.

Methods and results

The meta-analysis is registered with PROSPERO (CRD42016037273). We identified RCTs comparing TAVI with SAVR in patients with severe aortic stenosis reporting at different follow-up periods. We extracted trial, patient, intervention, and outcome characteristics following predefined criteria. The primary outcome was all-cause mortality up to 2 years for the main analysis. Seven trials that randomly assigned 8020 participants to TAVI (4014 patients) and SAVR (4006 patients) were included. The combined mean STS score in the TAVI arm was 9.4%, 5.1%, and 2.0% for high-, intermediate-, and low surgical risk trials, respectively. Transcatheter aortic valve implantation was associated with a significant reduction of all-cause mortality compared to SAVR {hazard ratio [HR] 0.88 [95% confidence interval (CI) 0.78–0.99], $P = 0.030$}; an effect that was consistent across the entire spectrum of surgical risk (P-for-interaction = 0.410) and irrespective of type of transcatheter heart valve (THV) system (P-for-interaction = 0.674). Transcatheter aortic valve implantation resulted in lower risk of strokes [HR 0.81 (95% CI 0.68–0.98), $P = 0.028$]. Surgical aortic valve replacement was associated with a lower risk of major vascular complications [HR 1.99 (95% CI 1.34–2.93), $P = 0.001$] and permanent pacemaker implantations [HR 2.27 (95% CI 1.47–3.64), $P < 0.001$] compared to TAVI.

Conclusion

Compared with SAVR, TAVI is associated with reduction in all-cause mortality and stroke up to 2 years irrespective of baseline surgical risk and type of THV system.


All-cause mortality
Trial
HR (95% CI)
P
PARTNER 1A
0.90 (0.71 - 1.15)
US CoreValve high risk
0.79 (0.61 - 1.01)
NOTION
0.72 (0.33 - 1.59)
PARTNER 2A
0.92 (0.74 - 1.13)
SURTAVI
0.98 (0.72 - 1.34)
PARTNER 3
0.41 (0.14 - 1.17)
Evolut low risk
0.83 (0.41 - 1.67)
Overall
0.88 (0.78 - 0.99)
0.030
(Heterogeneity τ^2<0.001, p = 0.727)
0.2
0.5
1
2
5
Favours TAVI
Favours SAVR

RESULTATS DES 200 PREMIERS TAVI À LA CSC

- 1er cas de TAVI à La Réunion en octobre 2014 (Dr C.Pouillot)

- 200 TAVI à la CSC entre 10/2014 et 10/2022. Drs C.Pouillot ,G.Rambaud et Y.Gadri..

- Clinique Sainte Clotilde en 2023 environ 60 TAVI trans femoraux et 6 TAVI chirurgicaux (trans aortique et trans apical) .

FRANCE TAVI
REGISTRE MIS EN PLACE EN 2013 POUR 5 ANS.. ACTUELLEMENT TOUJOURS EN COURS..)

Société Française de Cardiologie

France TAVI

GACI

OBSERVATOIRE SUR LES BIOPROTHÈSES VALVULAIRES AORTIQUES IMPLANTABLES PAR CATHÉTER

Centre : Clinique Sainte Clotilde Principal Investigateur : DR C. POUILLOT

Nombre de patients TAVI pris en charge : 33
Nombre d'inclusions dans l'observatoire : 29 (1 décès per procédure non inclus)

Tous centres : 10264 patients (17/11/2015)

La CSC a integré France TAVI des 2015

AMIENS	HOPITAL SUD - CHU AMIENS	1
ANGERS	C.H.U. D' ANGERS	2
BESANCON	C.H.U	3
BOIS-BERNARD	HOPITAL PRIVE DE BOIS-BERNARD-LENS	4
BORDEAUX	CLINIQUE SAINT-AUGUSTIN	5
BREST	CHU HOPITAL CAVALE BLANCHE	6
BRON	Hôpital Cardiologique Louis Pradel	7
CAEN	CENTRE HOSPITALIER PRIVE ST MARTIN	8
CAEN	CHU COTE DE NACRE - CAEN	9
CALUIRE ET CUIRE	INFIRMERIE PROTESTANTE DE LYON	10
CLERMONT-FERRAND	C.H.U. - HOPITAL G. MONTPIED	11
CRETEIL	GROUPE HOSPITALIER HENRI MONDOR - ALBERT CHENEVIER	12
DIJON	CHU HOPITAL DU BOCAGE	13
GRENOBLE	CHU GRENOBLE - MICHALLON	14
LE CHESNAY	CENTRE MEDICO CHIRURGICAL DE PARLY II	15
LE PLESSIS-ROBINSON	CENTRE CHIRURGICAL MARIE LANNELONGUE	16
LILLE	CHRU de Lille - Hôpital Cardiologique	17
LILLE	POLYCLINIQUE DU BOIS	18
LIMOGES	CHU DUPUYTREN LIMOGES	19
LYON	CLINIQUE DE LA SAUVEGARDE	20
MARSEILLE	HOPITAL PRIVE CLAIRVAL	21
MARSEILLE	HOPITAL LA TIMONE - CHU	22
MARSEILLE	HOPITAL SAINT-JOSEPH	23
MASSY	INSTITUT HOSPITALIER JACQUES CARTIER - ICPS	24
METZ	HOPITAL-CLINIQUE CLAUDE BERNARD	25
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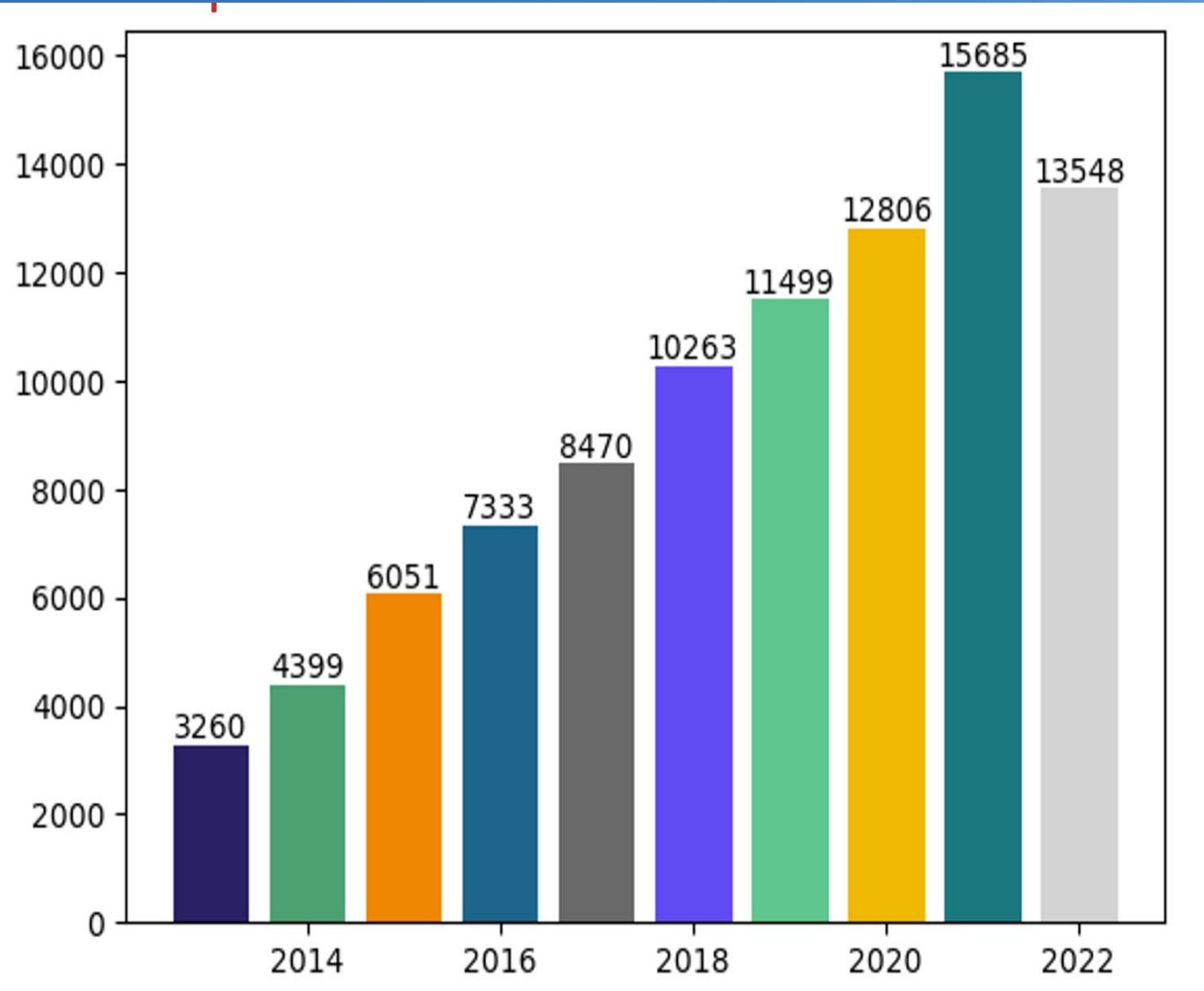
PATIENTS INCLUS DANS FRANCE-TAVI

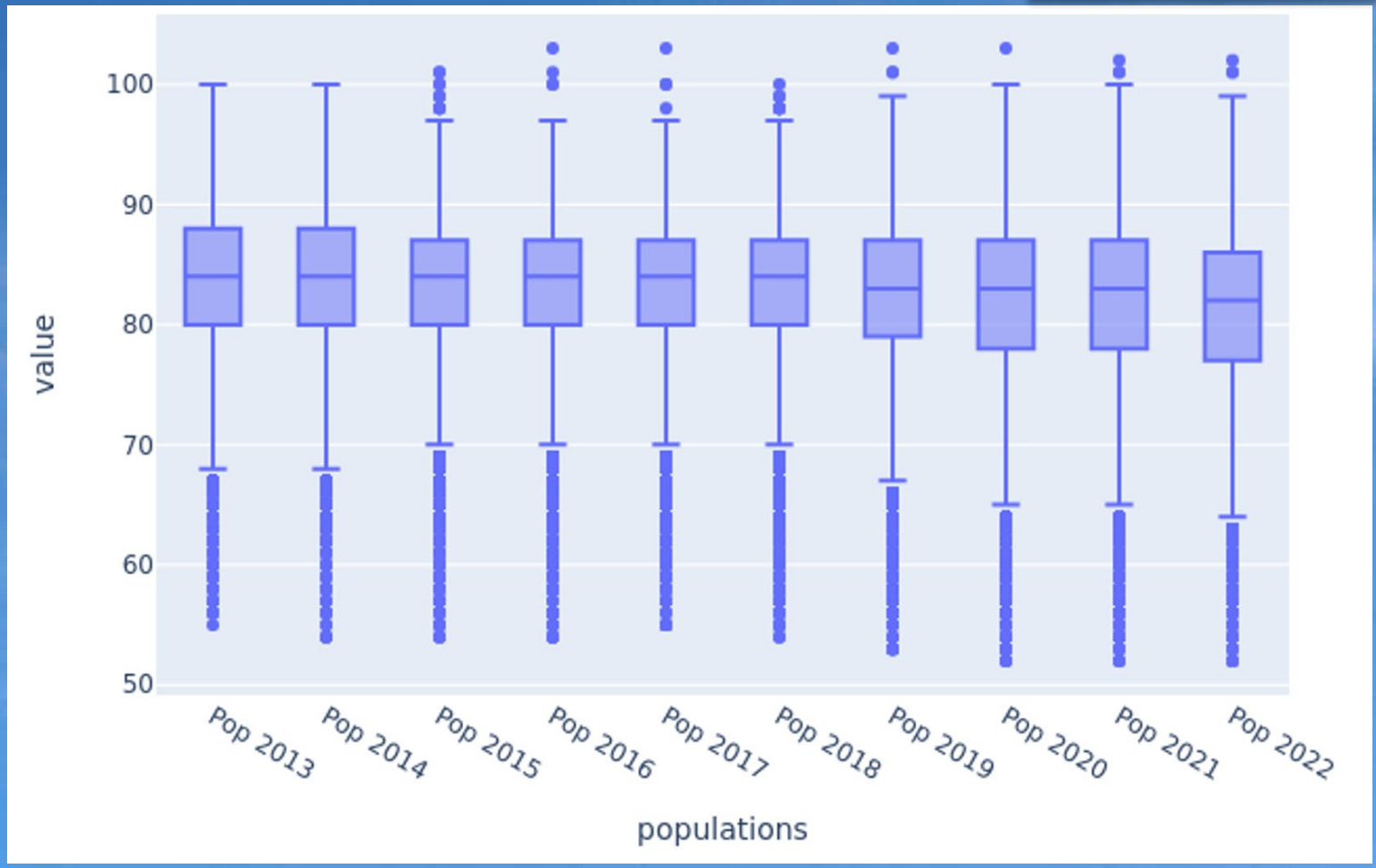
Année 2013-2022



AGES DES PATIENTS

Evolution 2013-2022

Age moy > 80 ans

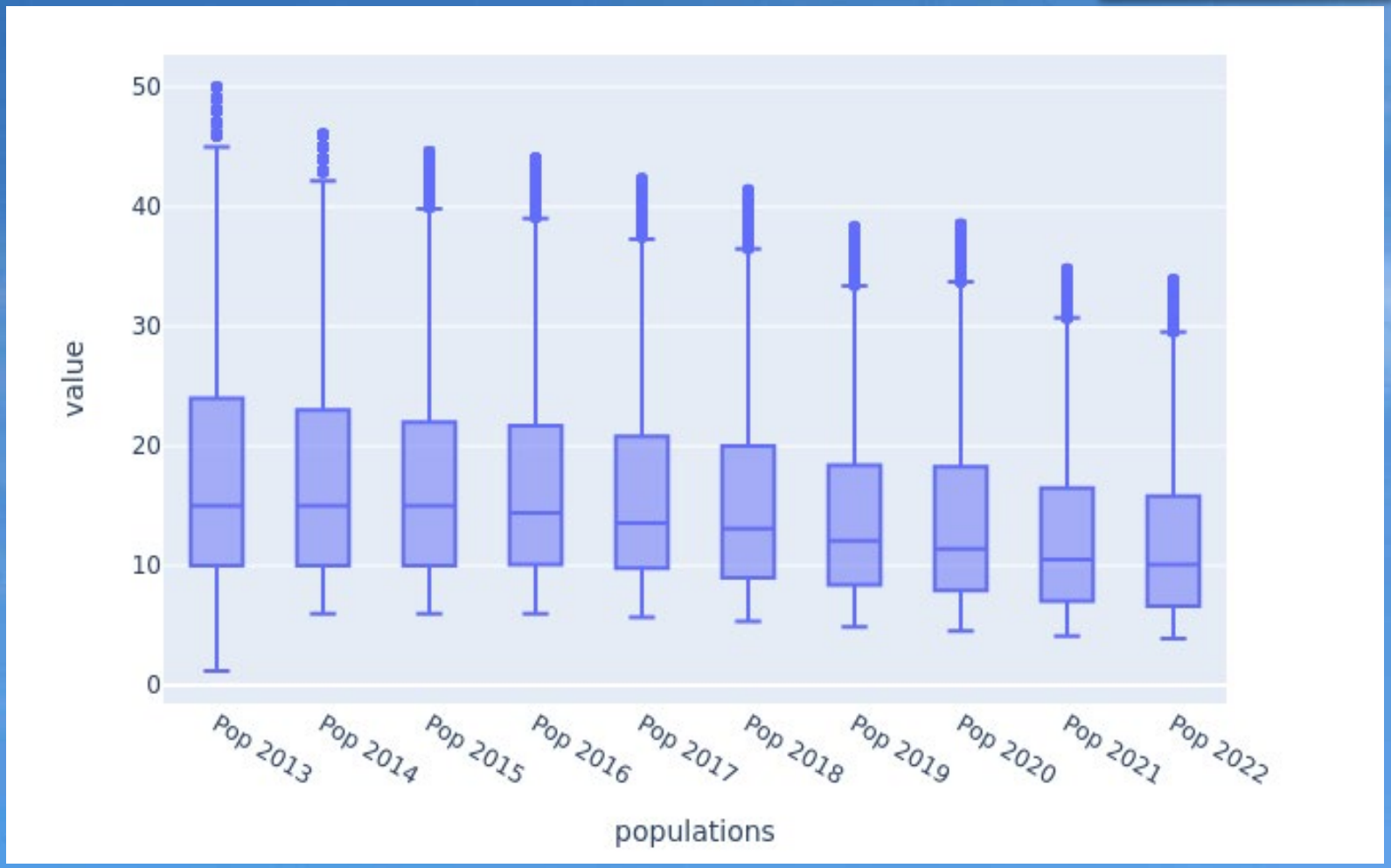


France TAVI

LOGISTIC EUROSCORE

Evolution 2013-2022

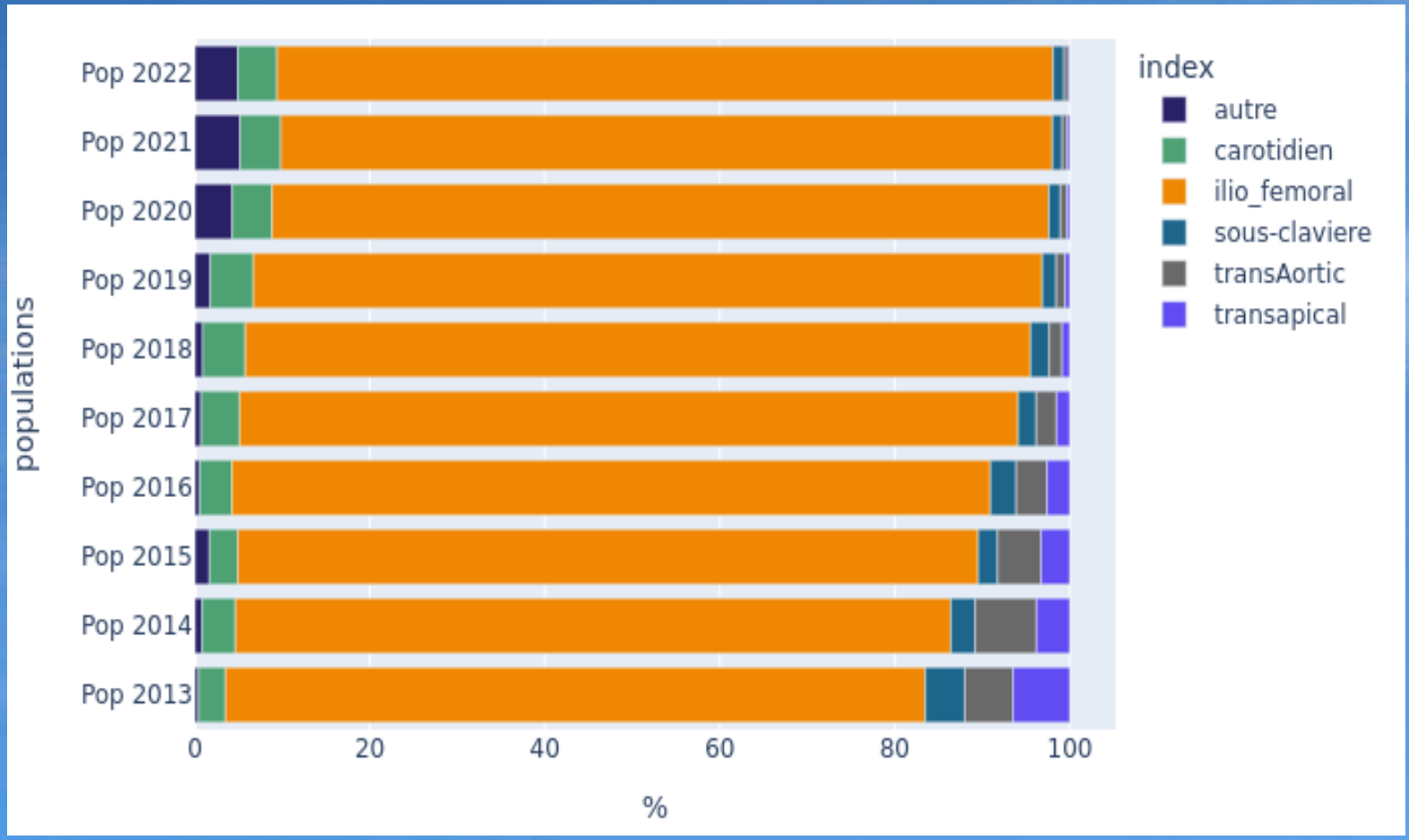
Euroscore > 10



France TAVI

VOIE D'ABORD

Evolution 2013-2022

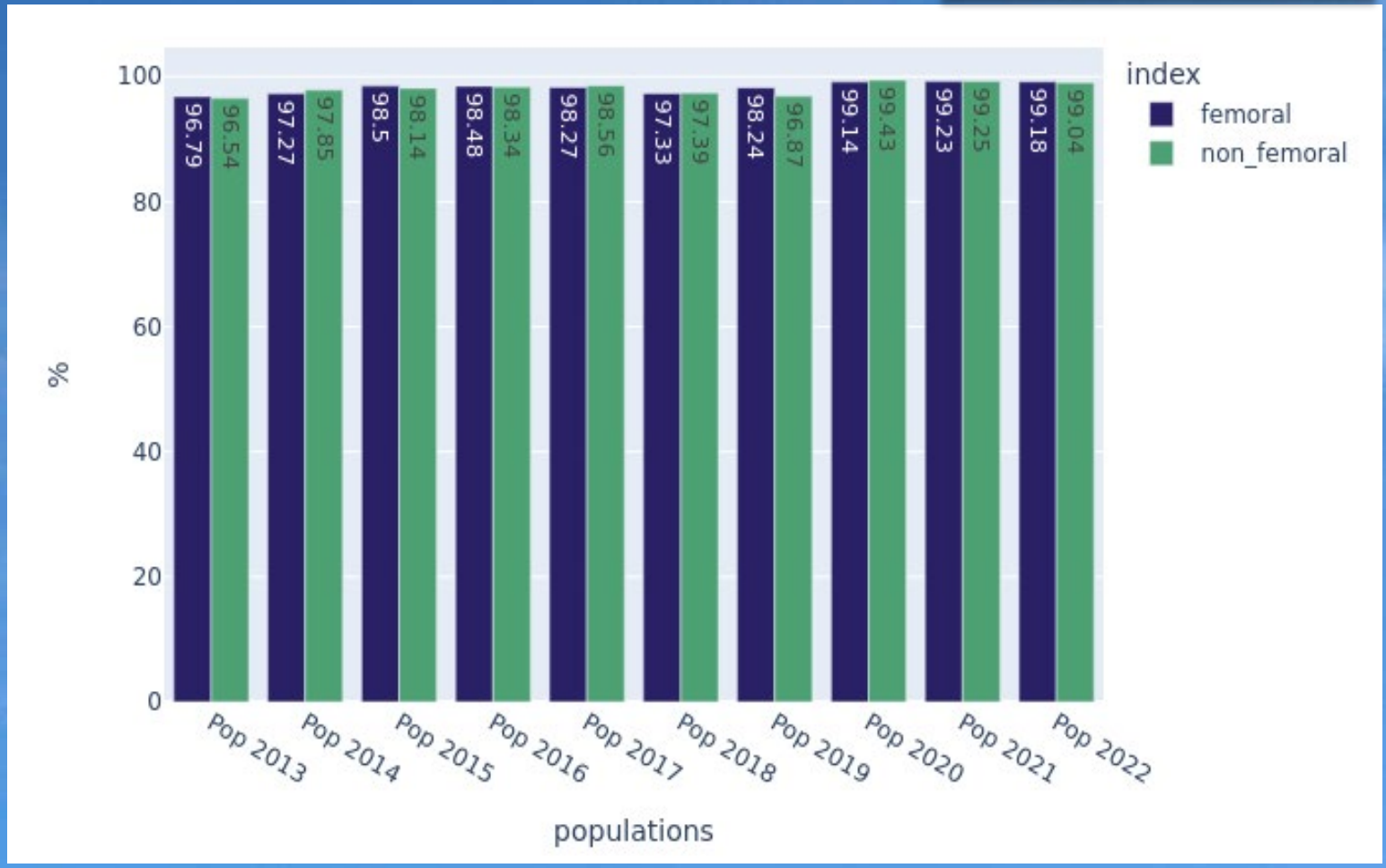


France TAVI

TAUX DE SUCCÈS IMMÉDIAT

Evolution 2013-2022

99.2 % de succès
Par voie Fém.

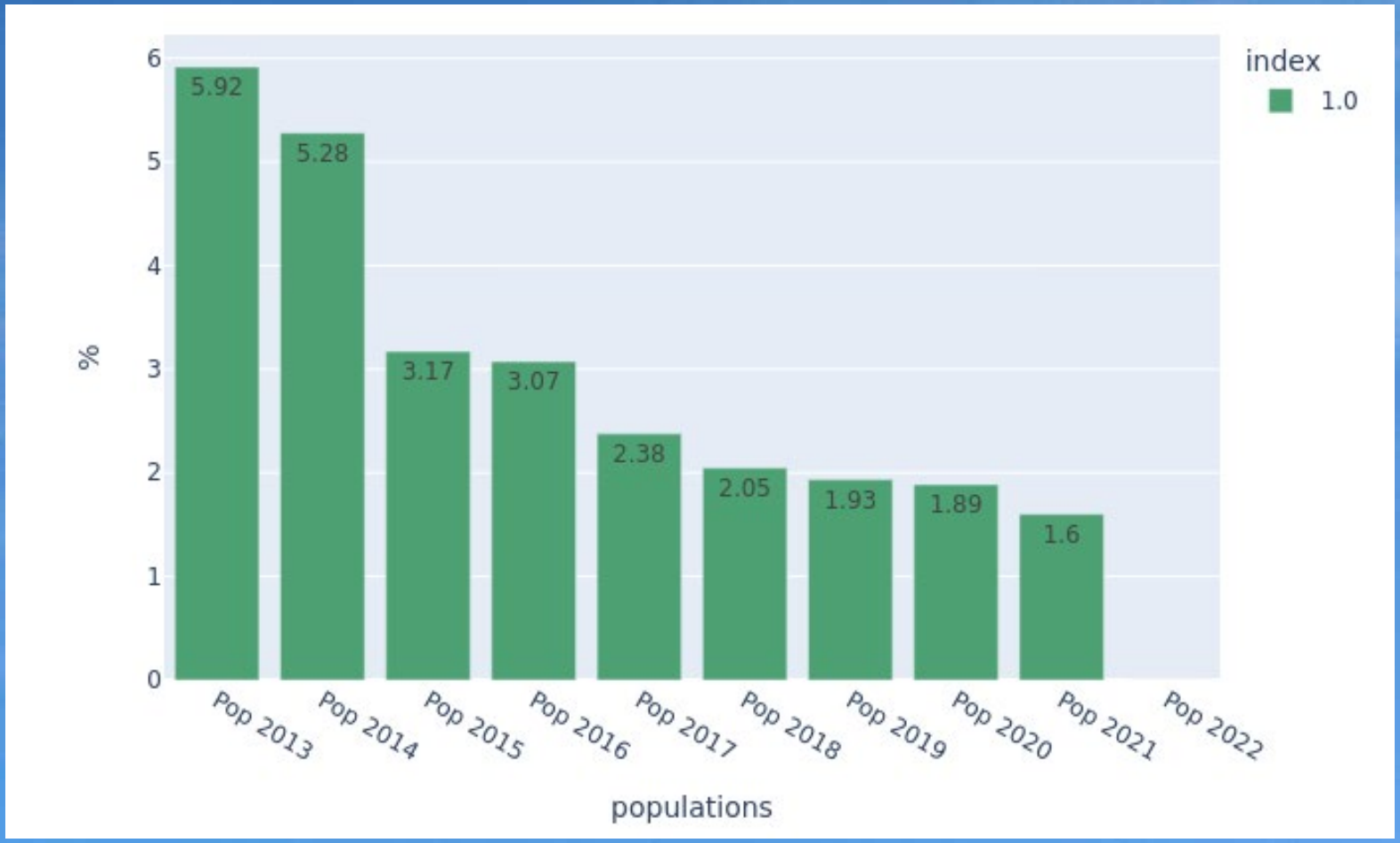


France TAVI

MORTALITÉ HOSPITALIÈRE

Evolution 2013-2022

Mortalité Hosp. 1,6 %



France TAVI

Les résultats CSC TAVI vs France TAVI

	Clinique Sainte Clotilde		France TAVI 2021		Reunion
	n =200	%	n =13081	%	
Genre					
Hommes	82	41%		55,3%	
Femmes	118	59%		44,7%	+ de femmes
Age					
Minimum	54		-		
Moyenne +/- écart-type	81	+/- 7,19	81,79		≈Un an + jeune
Maximum	101		103		

INDICATION ET CALCUL SCORES

Indication principale	Clinique Sainte Clotilde		France TAVI 2021		Run
	n	%		%	
Chirurgie contre indiquée	21	10,5%		3,27%	
Haut risque opératoire	51	25.5%		22,01%	
Fragilité	27	13.5%		17,82%	
Autre (refus RVAo)	8	4%		0,64%	+ pts refus RVAo
Symptomatique	191	90%		87,87%	
Logistic Euroscore					
Minimum					
Moyenne +/- écart-type	18.72		13.84		< 0.01 patients plus sévères
Maximum					

HISTOIRE MÉDICALE ET ANTÉCÉDENTS

	Clinique Sainte Clotilde		France TAVI 2021		Run
		%		%	
Diabète					
Oui	91	45,5		33.54%	+ de diabétiques
Insuffisance rénale chronique					
Non	105	52,5		67.11%	+ IRC
Modérée	59	29,5		23.31%	
Sévère	25	12,5%		7,89%	+ IRC sévères
Dialyse	11	5,5%		1.69%	+ hémodialyse

BILAN ECHO PRÉ IMPLANTATION

	Clinique Sainte Clotilde	France TAVI 2021		Run
	%		%	
Echographie : Gradient moyen (mm Hg)				
Moyenne	45,76	48,0		Gdt moyen -2
Echographie : Surface valvulaire (cm²)				
Moyenne +/- écart-type	0,69	0,75		SAo - 0.06
Echographie : FEVG (%)				
Moyenne +/- écart-type	58.85 %	52.92 %		FE + 5%
HTAP				
Non	13,5%		35.04 %	
Modérée (30-55)	65%		56.88 %	+ HTAP
Sévère (>55)	12,5%		8.08 %	+ HTAP sévère

CARACTÉRISTIQUES PROCÉDURES

	Clinique Sainte Clotilde	France TAVI 2022	Run
	%	%	
Abord			
Ilio-fémoral	100%	# 90%	<0.001
Anesthésie			
Locale et/ou sédation	100%	88,3%	minimal invasive TAVI

TYPES DE VALVES

	Clinique Sainte Clotilde		France TAVI 2021	Run
	n	%	%	
Type de la valve 1				
Corevalve Evolut R Evolut Pro Evolut Pro +	13	6,5%	28.33 %	
Edwards Sapien 3 + XT	185	92.5%	64.98 %	Sapien 3
Diamètre de la valve 1				
23	108	50,2%	25,8%	Plus petites valves
26	73	34%	39,8%	
29	24	11,2%	26,9%	
20	4	1,9%		

PROCÉDURES

Succès procédure (définition VARC)	CSC		France TAVI 2022		Run
Oui	197	98,5%	12139	99,2%	Id 2019..

COMPLICATIONS PER PROCEDURES

Complications	CSC		France TAVI 2021	Run
	Nombre	%	%	
AVC	2	1%	2.09 %	- AVC
Tamponnade	4	2%	< 1 %	+ tamponnade
Troubles conductifs avec implantation d'un pacemaker (durant hospitalisation)	28	14%	16.21 %	Un peu - PM
Rupture d'anneau	1	0,5%	< 1 %	id
Occlusion coronaire	0	0%	< 1 %	
Migration de valve	1	0,5%	< 1 %	id
Complication Abord fémoral (stent, réparation chir...)	1		2.63 %	Pas +...

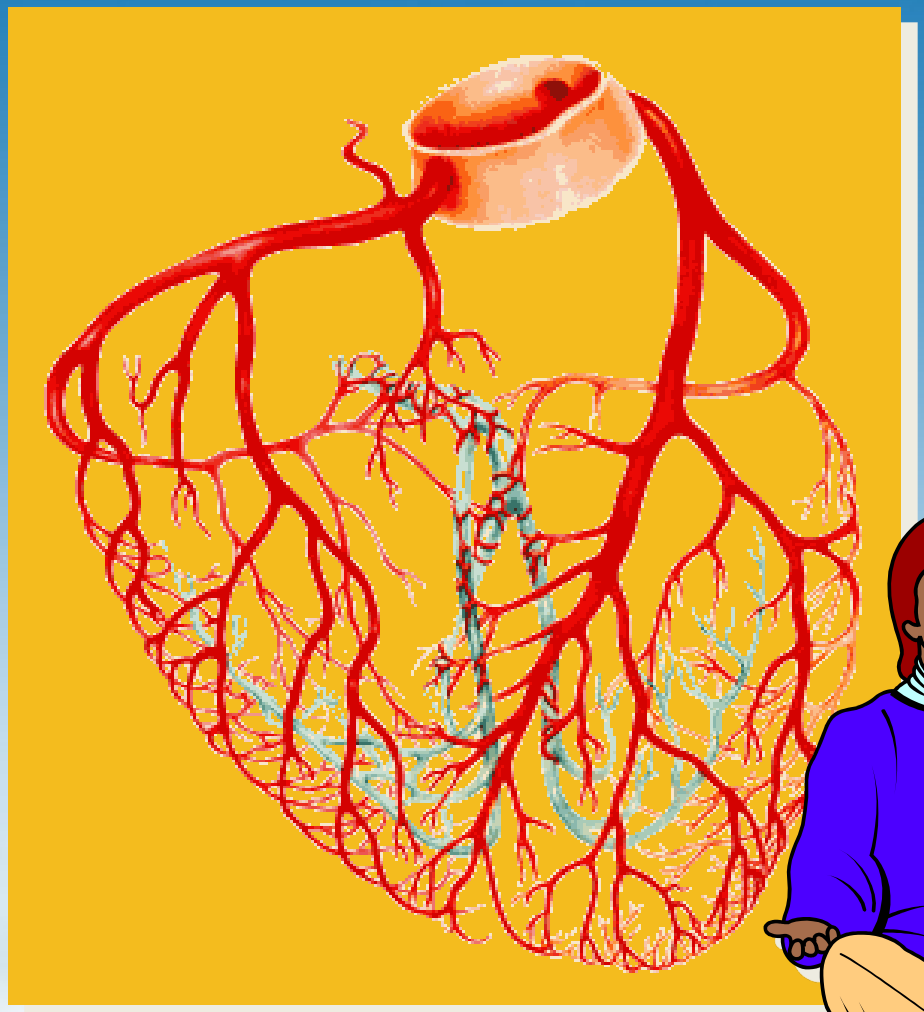
FUITES AORTIQUES

Fuite aortique ≥2 en fin de procédure					
Oui	8	4%	458	4,46 %	id
Non	167	96%	5378	95.54 %	

MORTALITE

CSC			France TAVI 2020 - 2021	Run
Décès	Nombre	Pourcentage	Pourcentage	Pourcentage
Hospitalier	3	1.5 %	1.45 %	id
Décès < J30	9	4,5%		
Décès < 1 an	46	23 % Dans ¾ cas non cardiaque..	11.02 %	+ décès à 1 an (dans 3/4 cas non cardiaques)

Merci



HAUTE AUTORITÉ DE SANTÉ

COMMISSION NATIONALE D'EVALUATION DES DISPOSITIFS MEDICAUX ET DES TECHNOLOGIES DE SANTE

AVIS DE LA CNEDiMTS

16 mars 2021

Faisant suite à l'examen du 19/01/2021, la CNEDiMTS a adopté un projet d'avis le 02/02/2021.
Ce projet d'avis a fait l'objet d'une phase contradictoire le 16/03/2021. La CNEDiMTS a adopté l'avis le 16/03/2021.

CONCLUSIONS

EDWARDS SAPIEN 3, bioprothèse valvulaire aortique implantée par voie transfémorale (système COMMANDER)

Demandeur : EDWARDS LIFESCIENCES SAS (France)

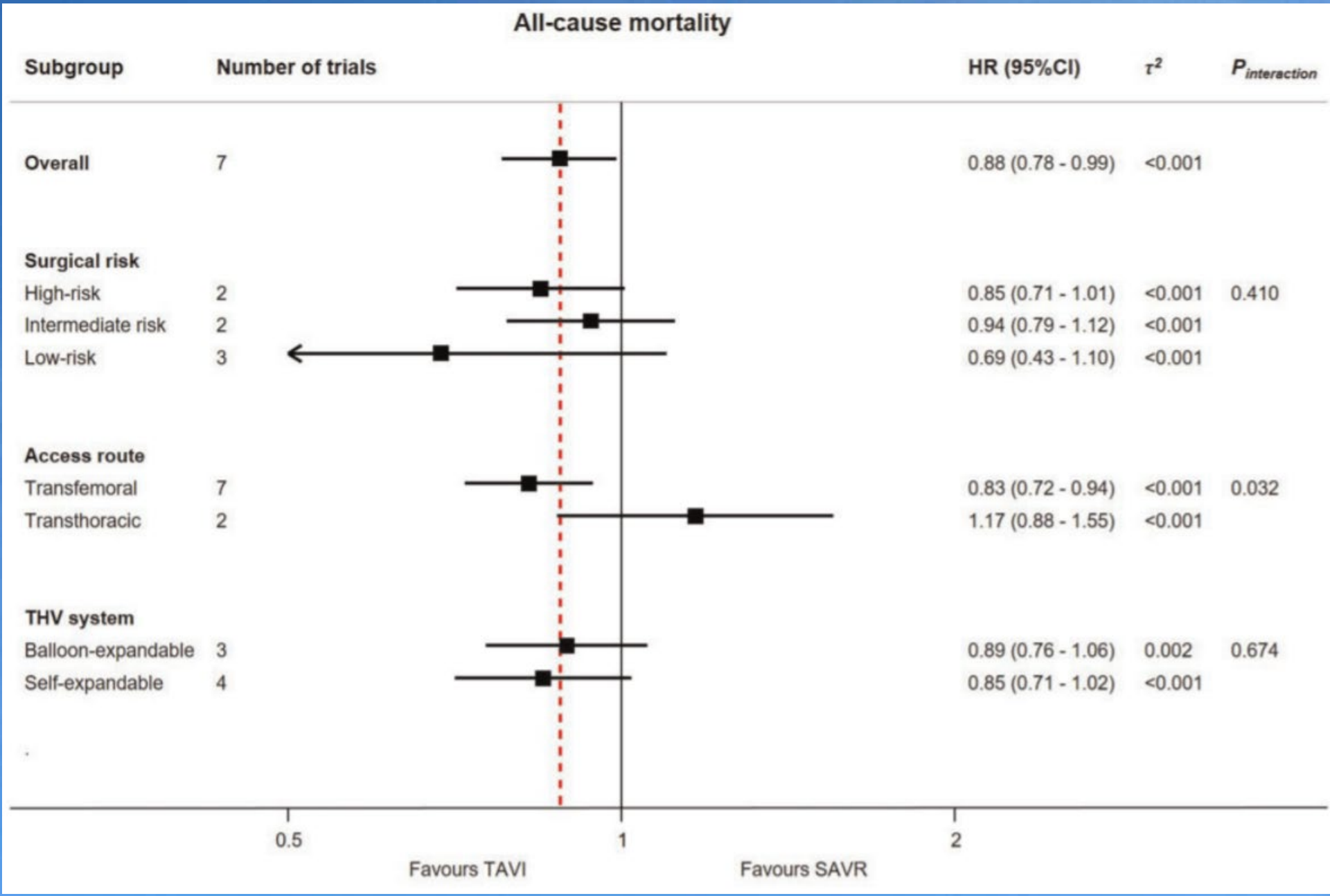
Fabricant : EDWARDS LIFESCIENCES LLC (Etats-Unis)

Les modèles et références retenus sont ceux proposés par le demandeur (cf. page 5)

Indications retenues :	Patients avec sténose aortique native sévère symptomatique (SVAoi < 0,5 cm²/m²). L'indication doit être posée lors d'une réunion multidisciplinaire en prenant en compte les scores de risque et les comorbidités associées. Pour les patients opérables avec un score STS < 4%, l'indication est limitée aux patients de plus de 65 ans, avec un orifice tricuspide, ne pas avoir d'indication de chirurgie valvulaire mitrale ou coronaire (tronc commun et/ou SYNTAX > 32) associée et avec une anatomie favorable à la voie transfémorale. Les patients ayant une espérance de vie inférieure à 1 an compte tenu de facteurs extracardiaques (comorbidités) ou ayant des calcifications importantes dans la chambre de chasse sous aortique ne sont pas éligibles à la technique (non-indication). Il est rappelé la nécessité du respect des contre-indications figurant au marquage CE du dispositif EDWARDS SAPIEN 3.
Service Attendu / Rendu (SA/SR) :	**Suffisant.**
Comparateurs retenus :	Pour les patients avec contre-indication à la chirurgie de remplacement valvulaire aortique ou les patients opérables avec un score STS ≥ 4% : aux autres bioprothèses valvulaires aortiques implantées par voie transcathéter inscrites sur la LPPR dans les indications retenues. Pour les patients opérables avec un score STS < 4% : chirurgie de remplacement valvulaire aortique.

Heart team : qui fait quoi ?

Indications du TAVI	QUI évalue ?
Rétrécissement aortique serré symptomatique	→ Cardiologue
Non opérabilité	→ Heart Team
Espérance de vie > 1 an	→ Score pronostic cardiologique (STS, EuroSCORE) → Cardiologue → Éval. Fragilité et co-morbidités → Gériatre
Possibilité d'amélioration de la qualité de vie	→ Gériatre


All-cause mortality
Subgroup
Number of trials
HR (95%CI)
τ^2
$P_{interaction}$
Overall 7 0.88 (0.78 - 0.99) <0.001
Surgical risk
High-risk 2 0.85 (0.71 - 1.01) <0.001 0.410
Intermediate risk 2 0.94 (0.79 - 1.12) <0.001
Low-risk 3 0.69 (0.43 - 1.10) <0.001
Access route
Transfemoral 7 0.83 (0.72 - 0.94) <0.001 0.032
Transthoracic 2 1.17 (0.88 - 1.55) <0.001
THV system
Balloon-expandable 3 0.89 (0.76 - 1.06) 0.002 0.674
Self-expandable 4 0.85 (0.71 - 1.02) <0.001
0.5
1
2
Favours TAVI
Favours SAVR

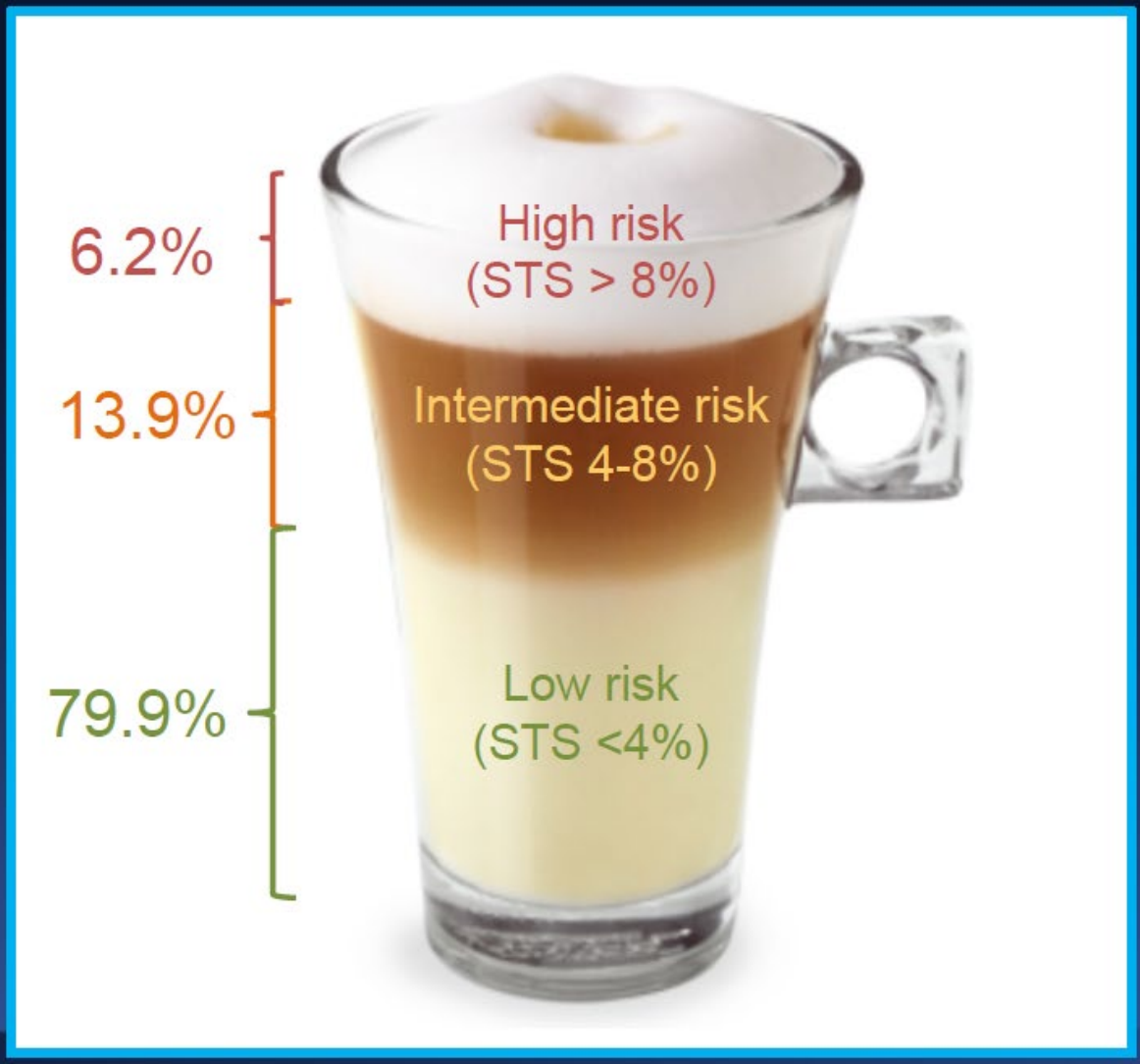
RVAo ? TAVI ?
La discussion Heart team

- Le cardiologue interventionnel
- Le (la) cardiologue correspondant (e), (non invasif)
- Le chirurgien cardiaque
- L' anesthésiste
- La gériatre

C’est quoi le TAVI ?

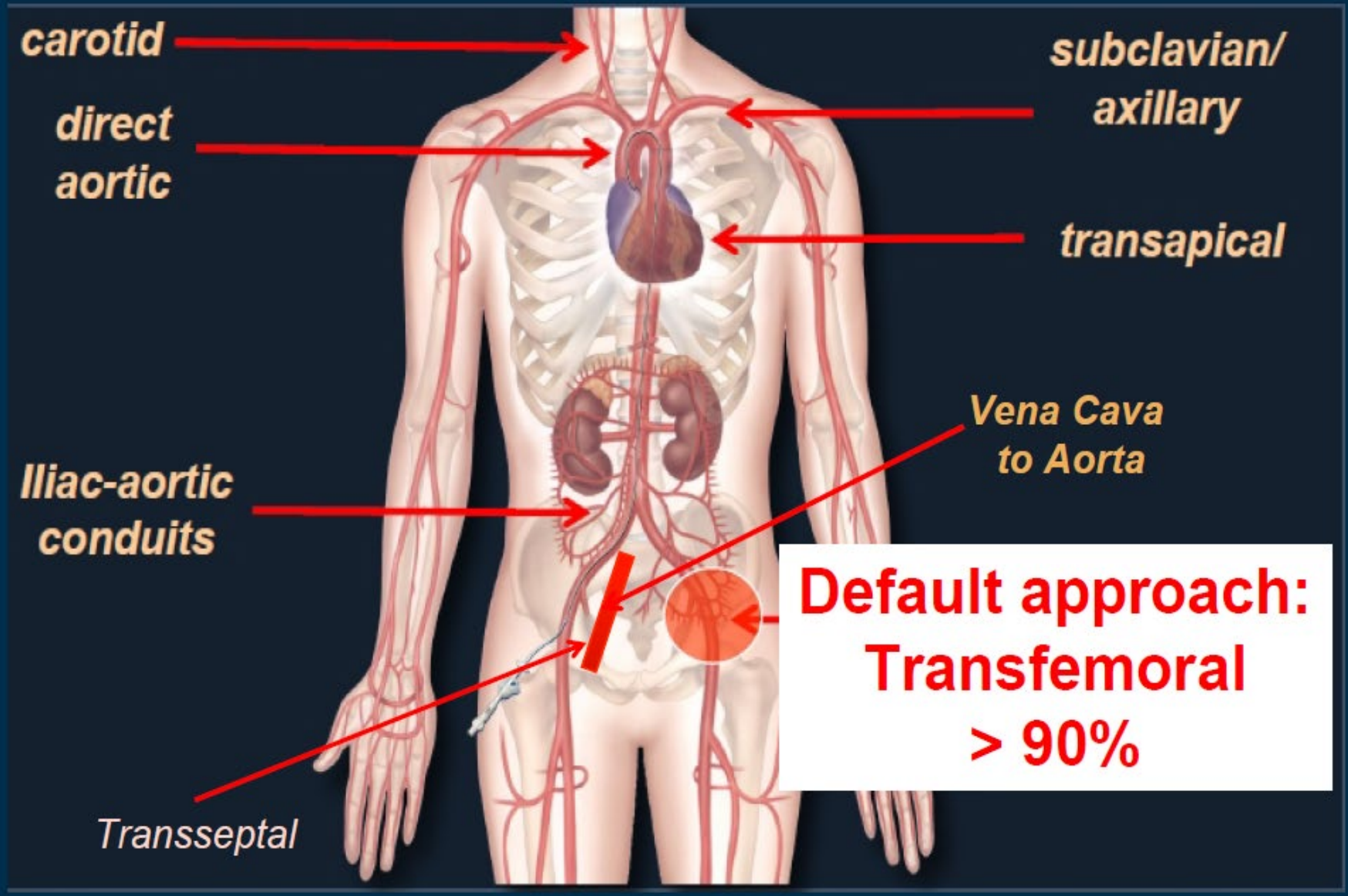
STS database 2002-2010

n=141,905 patients



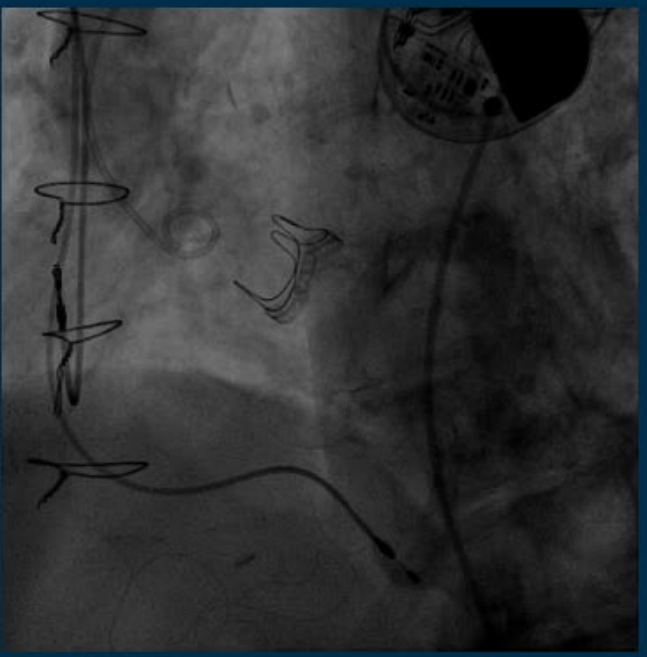
Courtesy of N. Piazza

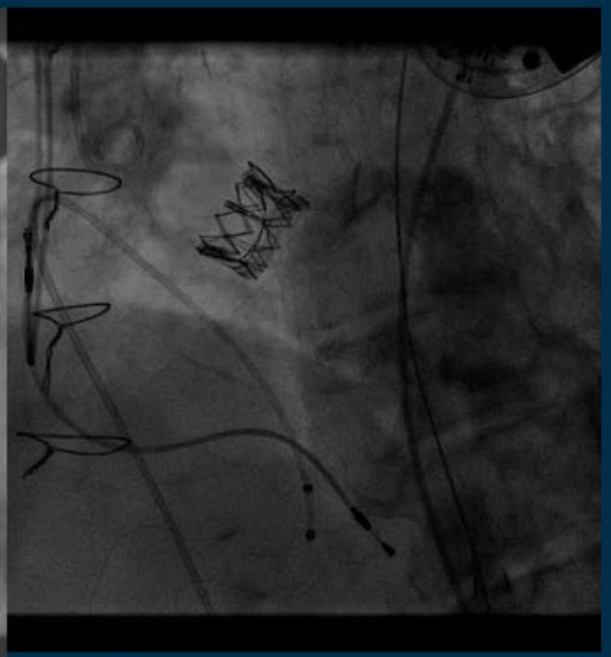
Multiple access sites for improved sa

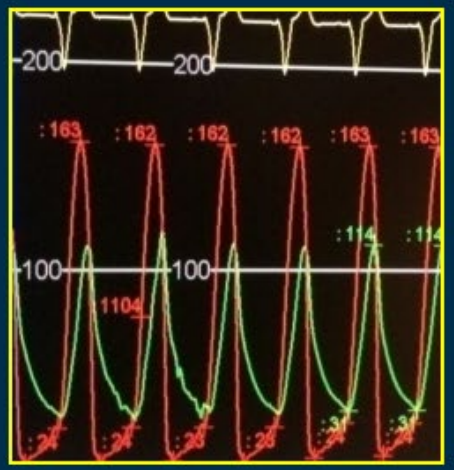


Valve – in –Valve for degenerated bioprosthesis

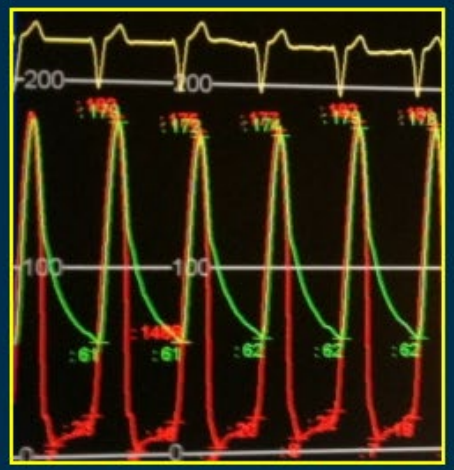
Dvir et al-VIR multicentric Registry, JAMA 2014 : 459 pts







- Importance of Pt selection (type of valve, internal diameter)
- VIV application



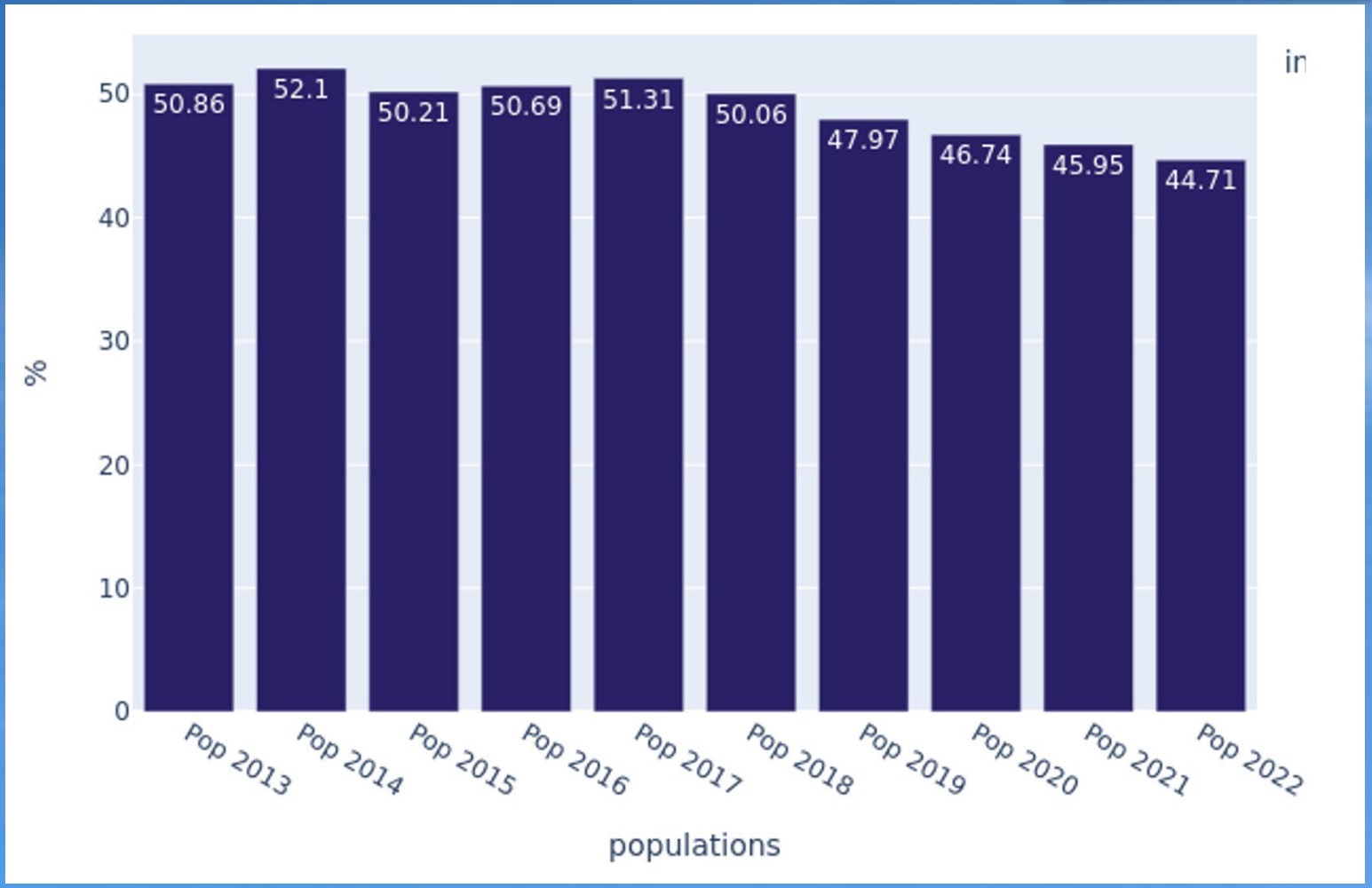
The 3MM strategy in Vancouver

- **Multidisciplinary**
- **Multimodality**
- **Minimalist**
  - ✓ TF access
  - ✓ next day discharge

PROPORTION DE FEMMES

Evolution 2013-2022

44.7 % de femmes



France TAVI