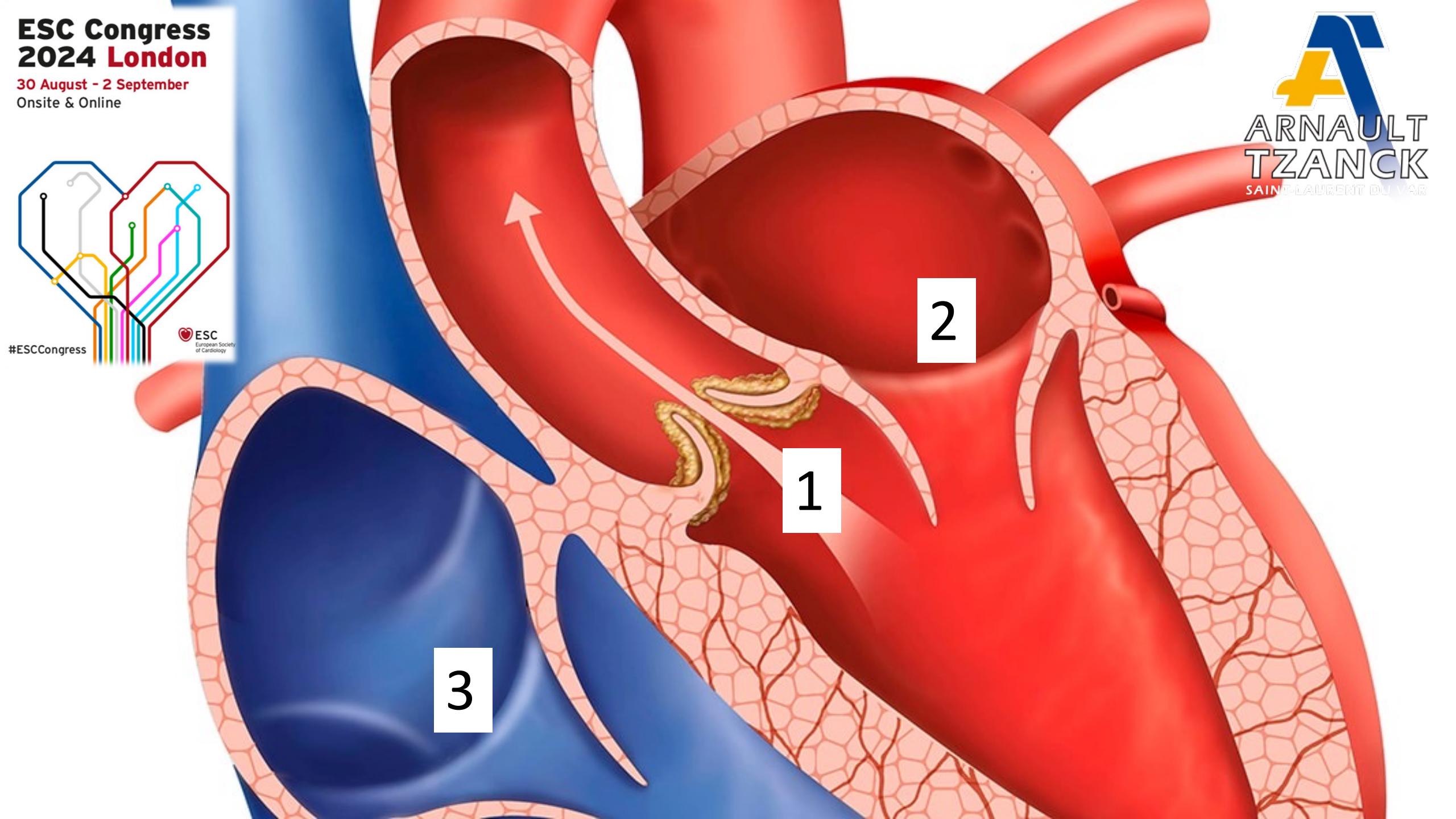
Nouveautés dans les Cardiopathies Structurelles

JAT 14 septembre 2024

Dr Léo CUENIN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3

1- Quoi de neuf dans le TAVI ?

NOTION 3

The NEW ENGLAND JOURNAL of MEDICINE

PCI in Patients Undergoing Transcatheter Aortic-Valve Implantation

Authors: Jacob Lønborg, M.D., Ph.D., D.M.Sc., Reza Jabbari, M.D., Ph.D., Muhammad Sabbah, M.D., Ph.D., Karsten T. Veien, M.D., Matti Niemelä, M.D., Phillip Freeman, M.D., Ph.D., Rickard Linder, M.D., Ph.D., +24, for the NOTION-3 Study Group* Author Info & Affiliations

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1- Quoi de neuf dans le TAVI ?

Lésions coronaires = <u>50% des patients TAVI</u>

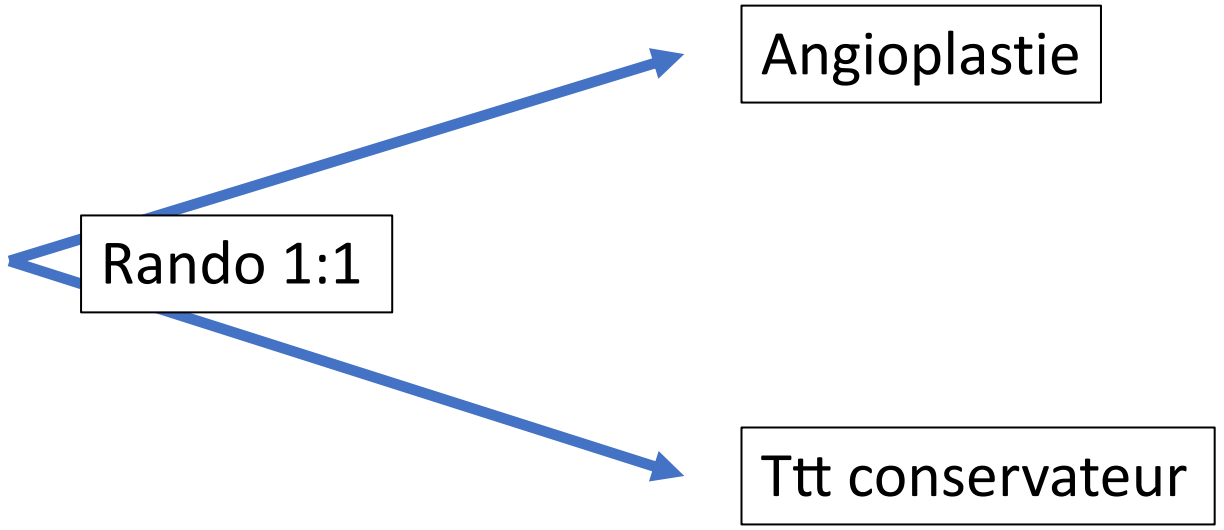
Pas de preuve du bénéfice de la revascularisation coronaire avant/après TAVI

Inclusion : 455 patients

RAC serré symptomatique

<u>ET</u> ≥ 1 lésion coronaire significative

(sténose > 90% <u>ou</u> FFR < 0,80)

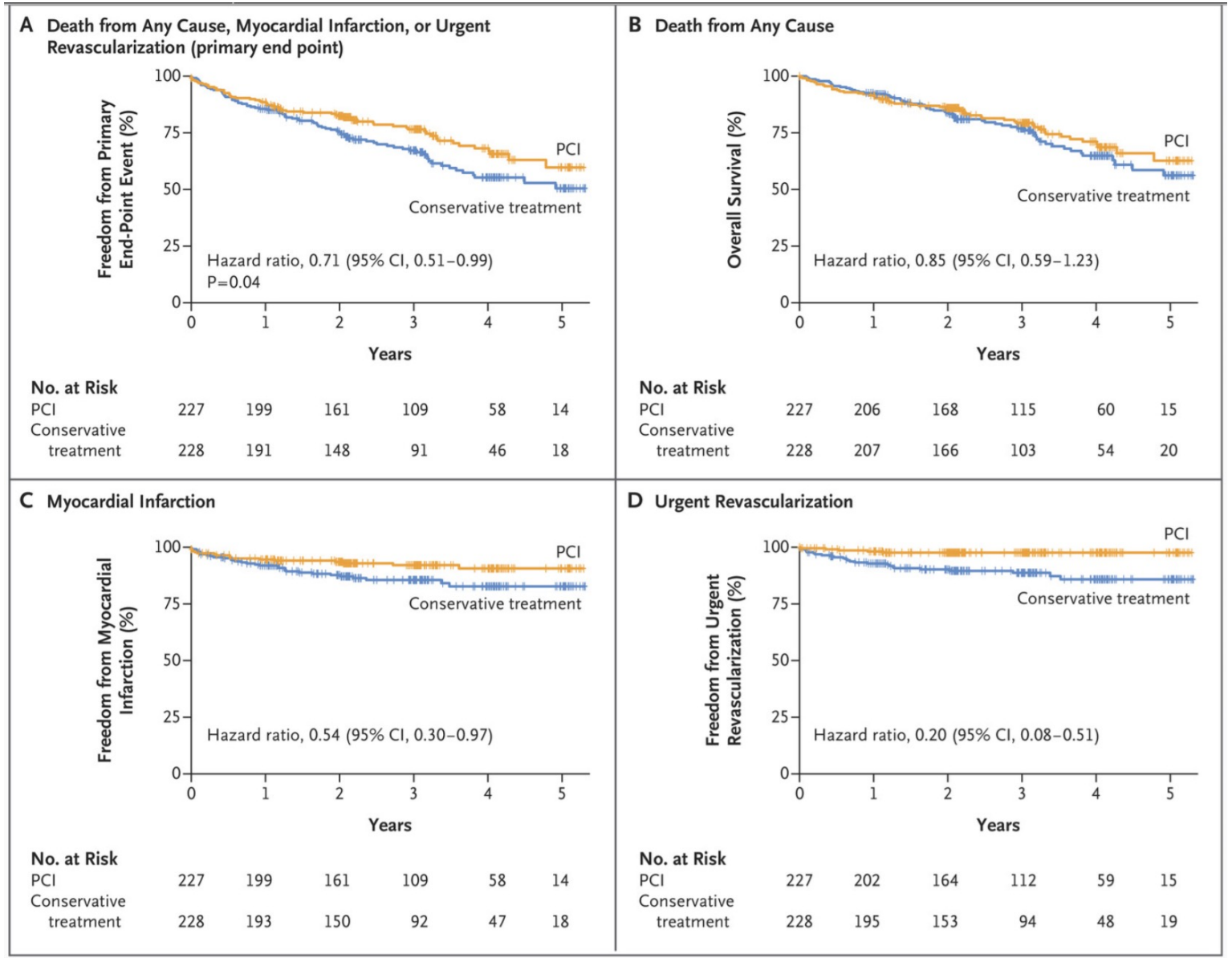


1- Quoi de neuf dans le TAVI ?

Table 2. Angiographic Findings and Characteristics of the PCI and TAVI Procedures.*

Variable	PCI (N = 227)	Conservative Treatment (N = 228)
Angiographic findings		
Median no. of physiologically significant lesions per patient (IQR)†	1 (1–2)	1 (1–2)
No. of lesions with fractional flow reserve ≤0.80	167	155
No. of lesions with diameter stenosis ≥90%	184	162
Median largest diameter stenosis (IQR) — %	90 (80–90)	90 (71–90)
Median SYNTAX score (IQR)‡	9 (6–14)	9 (5–14)
PCI procedure†		
Median no. of days from randomization to PCI (IQR)	9 (1–26)	—
Timing of PCI — no./total no. (%)		
Before TAVI	163/219 (74)	—
Concomitant with TAVI	37/219 (17)	—
After TAVI	19/219 (9)	—
Complete revascularization achieved — no./total no. (%)§	194/219 (89)	—
TAVI procedure		
Median no. of days from randomization to TAVI (IQR)	34 (7–62)	25 (2–54)
Balloon-expandable heart valve — no. (%)	90 (40)	95 (42)

1- Quoi de neuf dans le TAVI ?



1- Quoi de neuf dans le TAVI ?

Table 3. Primary and Secondary End Points.*

End Point	PCI (N=227)	Conservative Treatment (N=228)	Hazard Ratio (95% CI)	P Value
	number (percent)			
Primary end point: MACE†	60 (26)	81 (36)	0.71 (0.51–0.99)	0.04
Secondary end points				
Death from any cause	53 (23)	62 (27)	0.85 (0.59–1.23)	
Myocardial infarction‡	17 (7)	31 (14)	0.54 (0.30–0.97)	
Urgent revascularization§	5 (2)	25 (11)	0.20 (0.08–0.51)	
Death from cardiovascular causes¶	20 (9)	30 (13)	0.67 (0.38–1.19)	
Any revascularization	6 (3)	48 (21)	0.12 (0.05–0.27)	
Stroke	23 (10)	35 (15)	0.67 (0.39–1.14)	
Safety end points				
Any bleeding event‖	64 (28)	45 (20)	1.51 (1.03–2.22)	
Life-threatening or disabling	23 (10)	16 (7)		
Major	26 (11)	22 (10)		
Minor	53 (23)	36 (16)		
Stent thrombosis	1 (<1)	2 (1)	—	
Acute kidney failure	12 (5)	26 (11)	0.45 (0.23–0.89)	

2- Quoi de neuf dans l'IM secondaire ?

RESHAPE-HF2

The NEW ENGLAND JOURNAL of MEDICINE

Transcatheter Valve Repair in Heart Failure with Moderate to Severe Mitral Regurgitation

Authors: Stefan D. Anker, M.D., Tim Friede, Ph.D. , Ralph-Stephan von Bardeleben, M.D., Javed Butler, M.D., Muhammad-Shahzeb Khan, M.D., Monika Diek, M.A., Jutta Heinrich, M.Sc., +50 , for the RESHAPE-HF2 Investigators* Author Info & Affiliations

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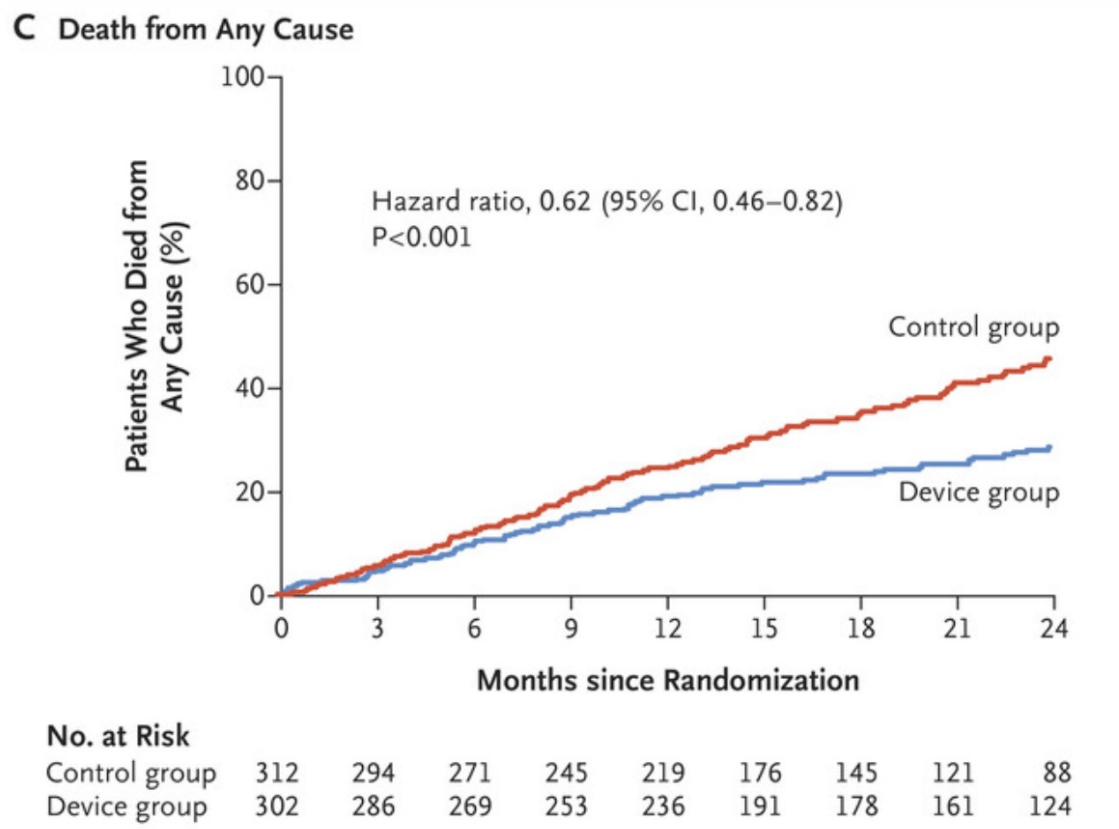
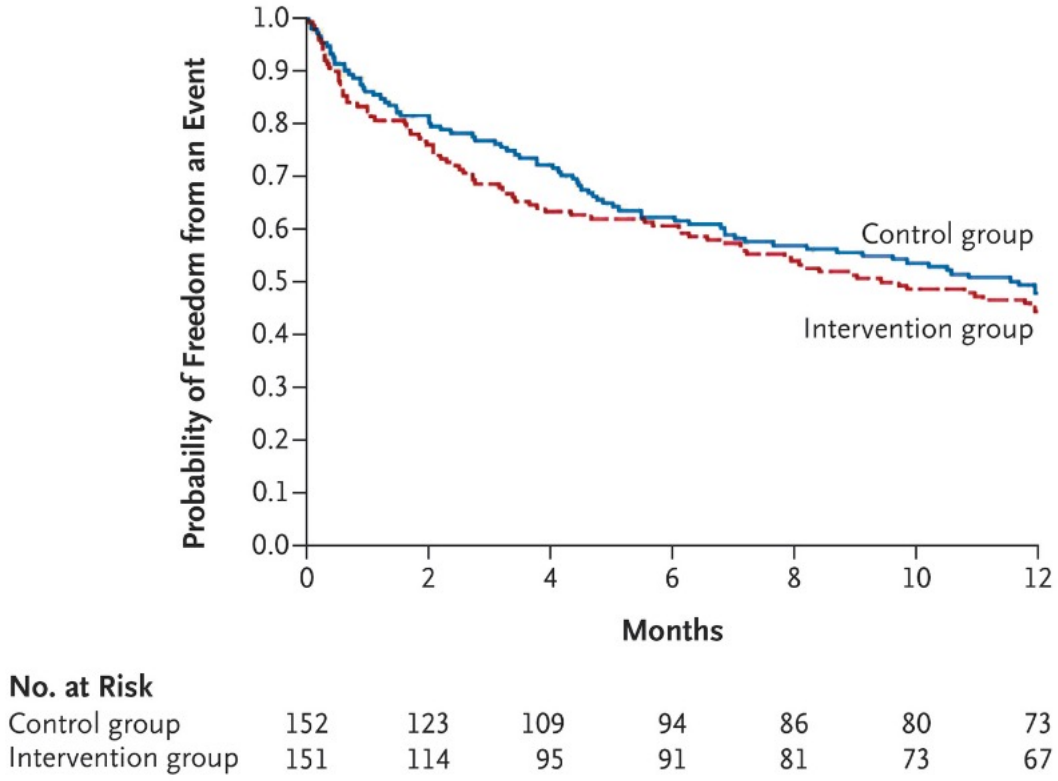
2- Quoi de neuf dans l'IM secondaire ?

2018



COAPT



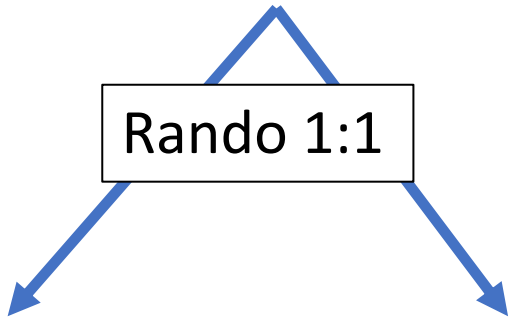
MITRA-FR

2- Quoi de neuf dans l'IM secondaire ?

505 patients

IM secondaire grade ≥ 3+

FEVG 20-50%



Ttt med optimal + Mitraclip

Ttt med optimal

Suivi 24 mois

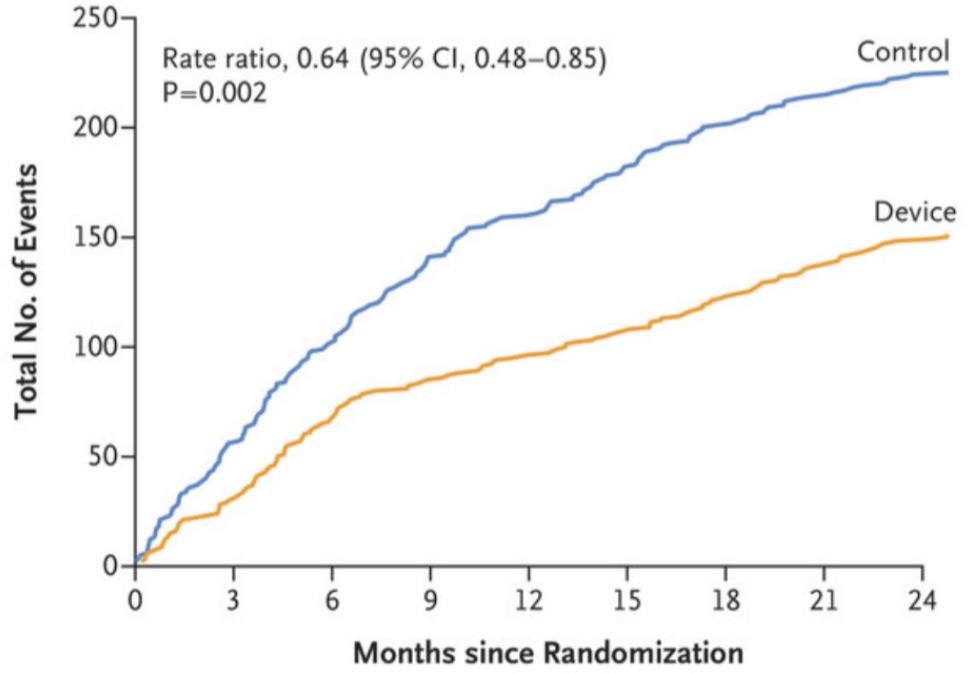
Population « COAPT-like »

Table 1. Baseline Demographic and Clinical Characteristics of the Patients with Heart Failure and Moderate-to-Severe Functional Mitral Regurgitation.*

Characteristic	Device Group (N=250)	Control Group (N=255)
Age — yr	70.0±10.4	69.4±10.7
Male sex — no. (%)	195 (78.0)	211 (82.8)
Diabetes — no. (%)	91 (36.4)	85 (33.3)
Hypertension — no. (%)	141 (56.4)	127 (49.8)
Previous myocardial infarction — no. (%)	144 (57.6)	135 (52.9)
Previous PCI — no. (%)	118 (47.2)	125 (49.0)
Previous CABG — no. (%)	69 (27.6)	64 (25.1)
Previous stroke or TIA — no. (%)	29 (11.6)	30 (11.8)
Peripheral vascular disease — no. (%)	38 (15.2)	27 (10.6)
History of atrial fibrillation or flutter — no. (%)	118 (47.2)	125 (49.0)
Body-mass index†	27.0±4.3	26.7±4.3
Nonischemic cause of cardiomyopathy — no. (%)	88 (35.2)	88 (34.5)
NYHA functional class — no. (%)		
II	59 (23.6)	65 (25.5)
III	150 (60.0)	153 (60.0)
IV	41 (16.4)	36 (14.1)
Hospitalization for heart failure within previous year — no. (%)	165 (66.0)	168 (65.9)
Systolic blood pressure — mm Hg	112±16	113±16
Median NT-proBNP level (IQR) — pg/ml‡	2651 (1630–4918)	2816 (1306–5496)
Median BNP level (IQR) — pg/ml§	556 (312–1018)	406 (231–874)
Median 6-minute walk distance (IQR) — m	300 (220–382)	310 (200–378)
Estimated glomerular filtration rate — ml/min/1.72 cm²	54.9±19.0	56.7±23.3
Median KCCQ-OS score (IQR) — points¶	42.2 (28.3–62.0)	44.3 (25.8–64.2)
Median left ventricular ejection fraction (IQR) — %	32 (26–37)	31 (25–37)
Median left ventricular end-diastolic volume (IQR) — ml	200 (153–249)	206 (158–250)
Severity of mitral regurgitation — no. (%)		
Grade 3+	141 (56.4)	141 (55.3)
Grade 4+	109 (43.6)	114 (44.7)
Median effective regurgitant orifice area (IQR) — cm²	0.23 (0.20–0.30)	0.23 (0.19–0.29)
Median regurgitant volume (IQR) — ml	35.4 (28.9–43.9)	35.6 (28.2–42.5)

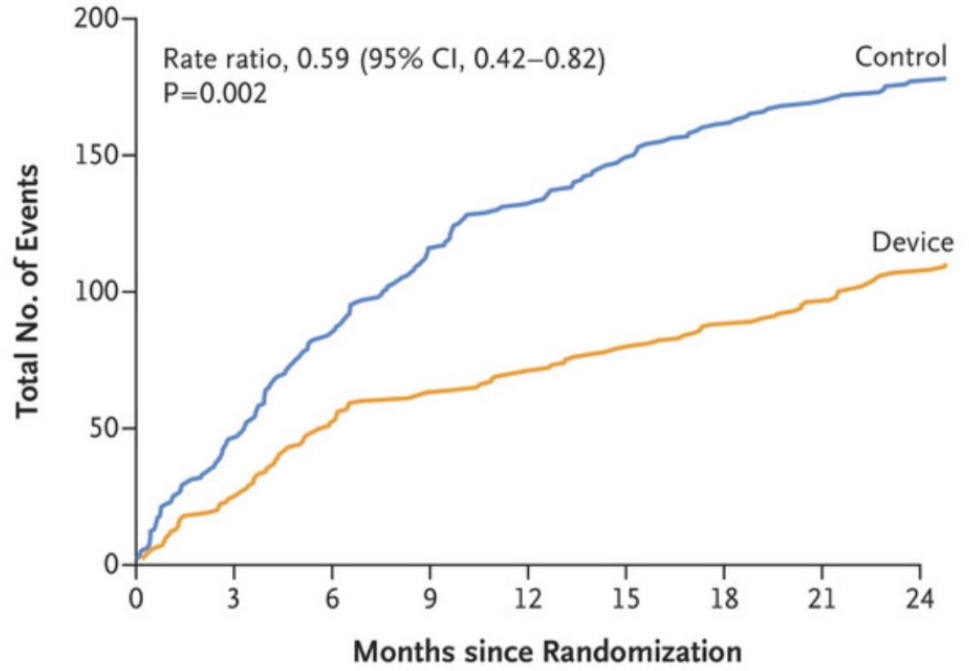
2- Quoi de neuf dans l'IM secondaire ?

A Composite of Hospitalization for Heart Failure or Death from Cardiovascular Causes



No. at Risk									
Control	255	240	223	204	189	179	165	155	146
Device	250	241	222	207	197	191	179	170	163

B Hospitalization for Heart Failure



No. at Risk									
Control	255	240	223	204	189	179	165	155	146
Device	250	241	222	207	197	191	179	170	163

2- Quoi de neuf dans l'IM secondaire ?

Table 3. Adverse Events of Interest during 24 Months in the Intention-to-Treat Population.*

Event	Device Group (N=250)	Control Group (N=255)	Hazard or Rate Ratio (95% CI)†	P Value
	no. of patients with event (estimate of event rate)			
Death from any cause‡	51 (22.3)	67 (29.6)	0.73 (0.51–1.05)	0.09
Death from cardiovascular causes§	41 (17.8)	47 (20.4)	0.84 (0.55–1.28)	0.43
Death from noncardiovascular causes§	10 (4.5)	20 (9.3)	0.46 (0.22–0.99)	0.04
Unplanned MitraClip implantation¶	8 (2.0)	25 (6.5)	0.32 (0.14–0.70)	0.004
All unplanned transcatheter mitral-valve repair¶	8 (2.0)‖	38 (10.0)**	0.21 (0.10–0.44)	<0.001
Mitral-valve surgery††	1 (0.004)	2 (0.008)	0.51 (0.05–5.58)	0.57
PCI§	6 (0.026)	8 (0.034)	0.74 (0.26–2.12)	0.57
CABG	0	0	—	—
Stroke§	5 (0.022)	2 (0.008)	2.5 (0.48–12.9)	0.25
Myocardial infarction¶	3 (0.007)	3 (0.008)	1.02 (0.14–7.52)	0.99
LVAD implantation††	1 (0.008)	2 (0.02)	0.5 (0.05–5.49)	0.56
Heart transplantation	1	0	—	—
Implantation of ICD or CRT-D§	7 (1.8)	7 (1.7)	0.96 (0.35–2.66)	0.93

3- Quoi de neuf dans l'IT secondaire ?

TRI.Fr

PHRC Français (Rennes)

Tri.fr trial - Multicentric randomised evaluation of the transcatheter edge-to-edge repair in the treatment of severe isolated secondary tricuspid regurgitation

Reported from ESC Congress 2024

3- Quoi de neuf dans l'IT secondaire ?

2023 TRILUMINATE

Table 2. Primary and Secondary End Points.*

End Point	TEER Group (N=175)	Control Group (N=175)	Difference (95% CI)	P Value
Primary				
Hierarchical composite of death from any cause or tricuspid-valve surgery; hospitalization for heart failure; and improvement of ≥15 points in KCCQ score at 1 yr — no. of wins†	11,348	7643	1.48 (1.06 to 2.13)	0.02
Secondary, listed in hierarchical order				
Kaplan–Meier estimate of percentage of patients with freedom from major adverse events through 30 days after the procedure (lower 95% confidence limit)‡	98.3 (96.3)	—	—	<0.001
Change in KCCQ score from baseline to 1 yr — points§	12.3±1.8	0.6±1.8	11.7 (6.8 to 16.6)	<0.001
Tricuspid regurgitation of no greater than moderate severity at 30-day follow-up — no. of patients/total no. (%)¶	140/161 (87.0)	7/146 (4.8)	—	<0.001
Change in 6-min walk distance from baseline to 1 yr — m‖	−8.1±10.5	−25.2±10.3	17.1 (−12.0 to 46.1)	0.25

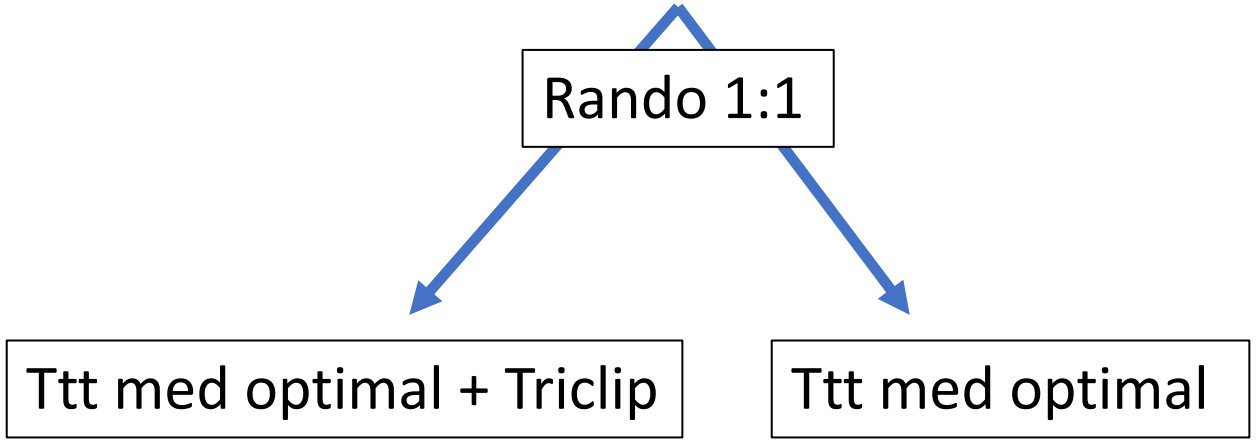
Sorajja et al., March 4, 2023, N Engl J Med 2023;388:1833-1842

3- Quoi de neuf dans l'IT secondaire ?

300 patients

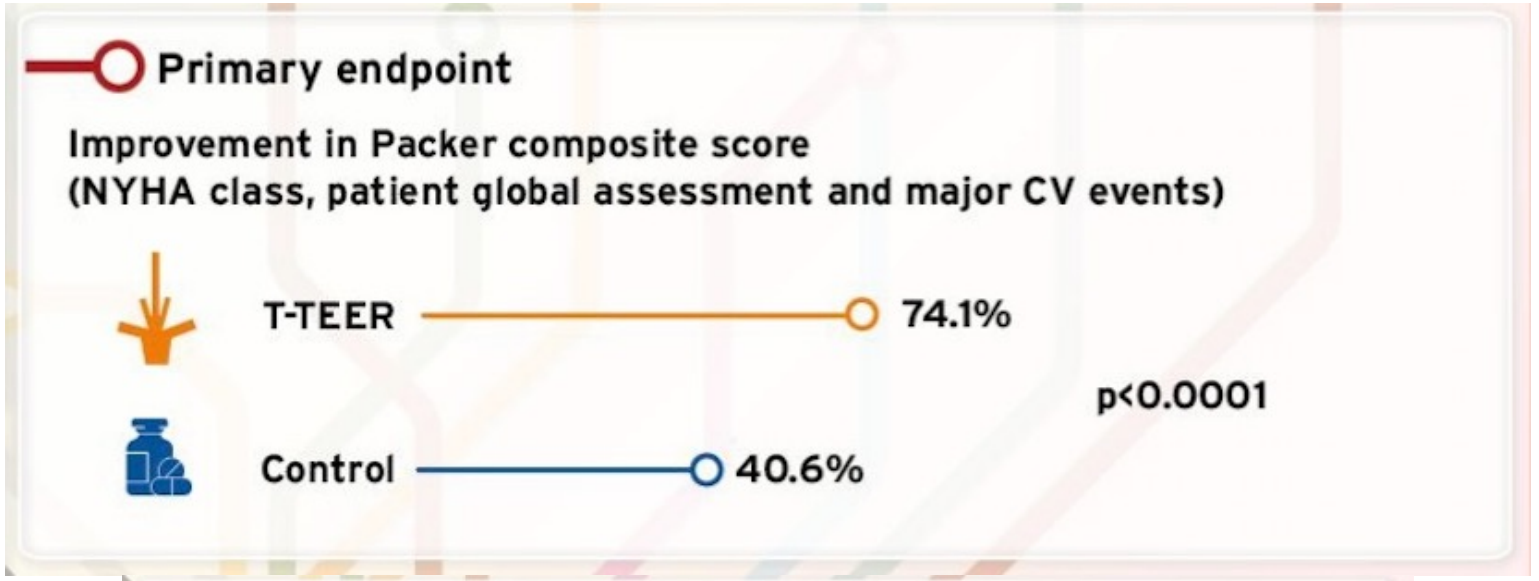
IT secondaire sévère

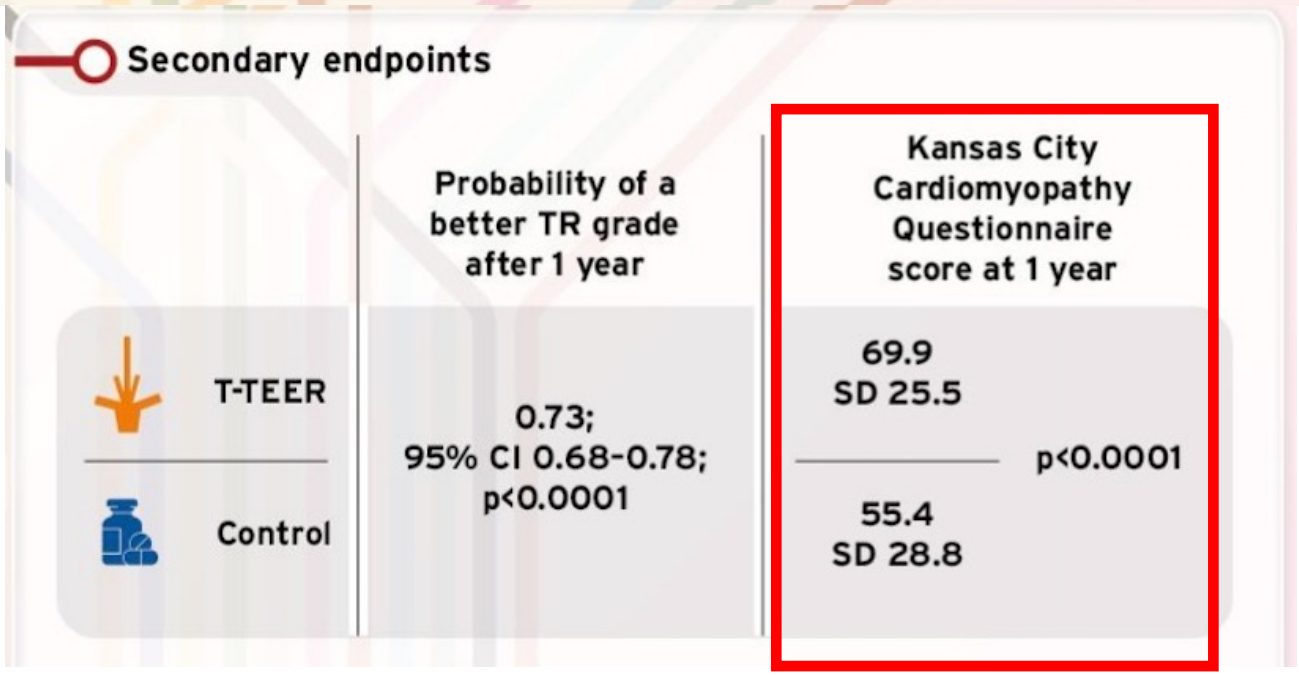
CI chirurgicale



Suivi 12 mois

3- Quoi de neuf dans l'IT secondaire ?





4- Conclusion

Lésions coronaires et TAVI :

- **bénéfice de la revascularisation sur MACE (mortalité -> manque puissance)**
- **↗ saignements**
- **Timing ?**

IM secondaire grade ≥ 3+ :

- **bénéfice Mitraclip sur réhospit°**
- **Sur la mortalité ?**

IT secondaire sévère :

- **Bénéfice Triclip sur score composite (QDV +++)**
- **Sur la mortalité ?**

Screening des patients

Eligibilité Clip IM ou IT ?

ARNAULT TZANCK

SOIRÉE

Rencontre

TRAITEMENT DE LA REGURGITATION MITRALE PAR VOIE PERCUTANEE MITRACLIP

VENDREDI 29 NOVEMBRE

19H30

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