HIGH TECH
MARSEILLE

28-30
JANVIER
2026

MARSEILLE
PALAIS DU PHARO

Les nouveautés du TAVI

Eric Durand, Rouen

Conflits d’intérêt

Consultant pour Edwards Lifesciences

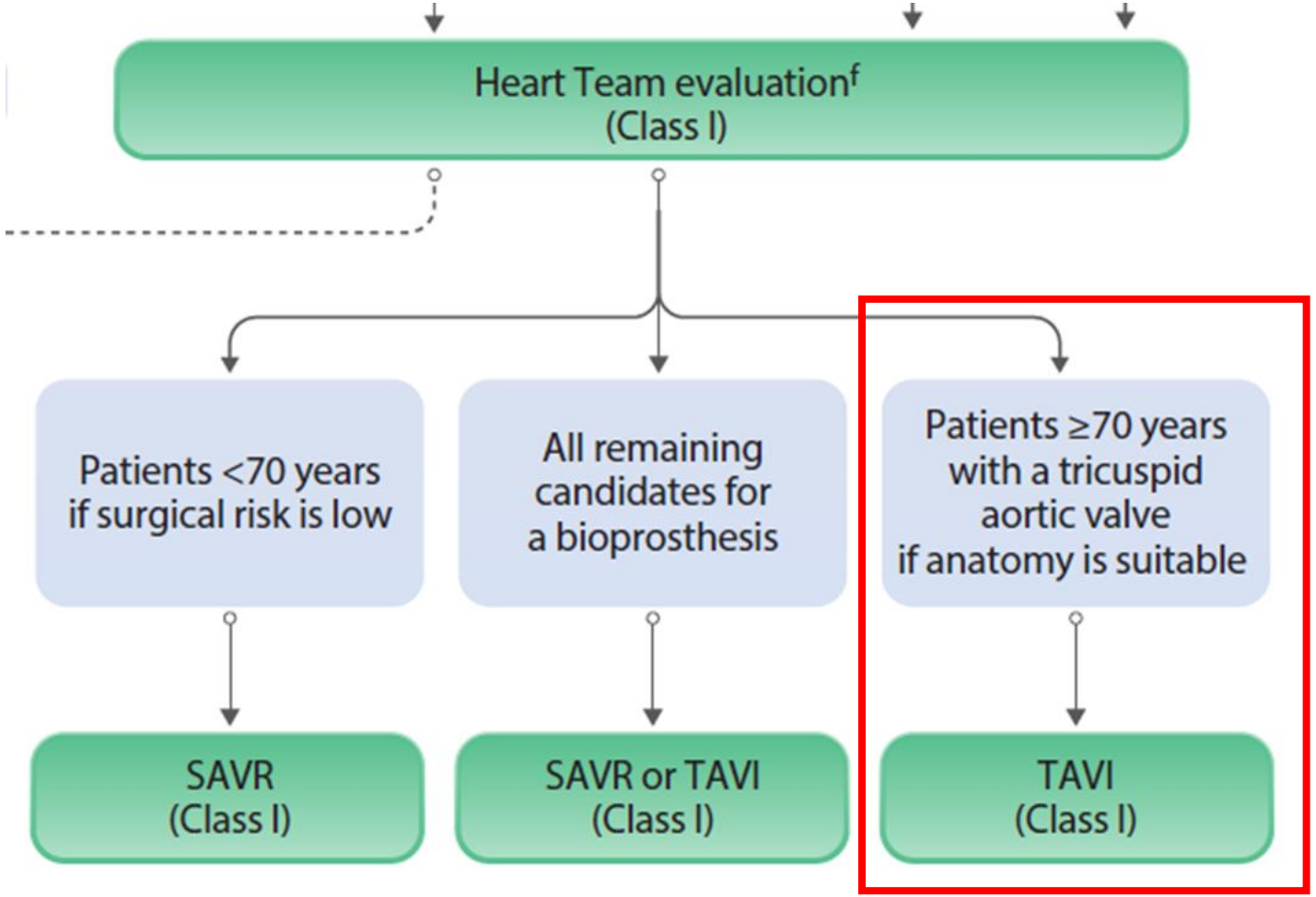

TOP
50
LE BEST OF


TOP
14
RUGBY


TOP8
shutterstock


TOP D'OR
89

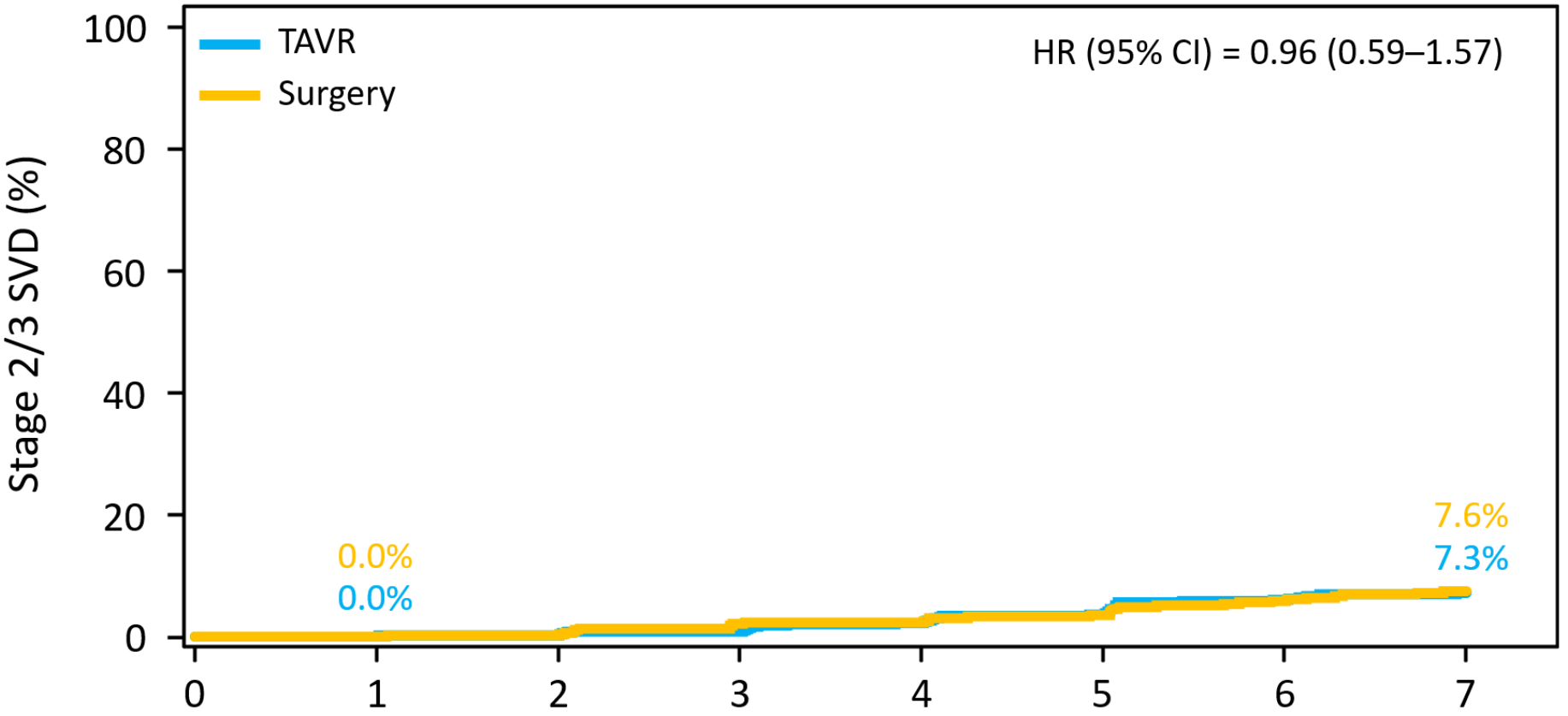
Le TAVI dès 70 ans



4000 patients/an
Entre 70-75 ans

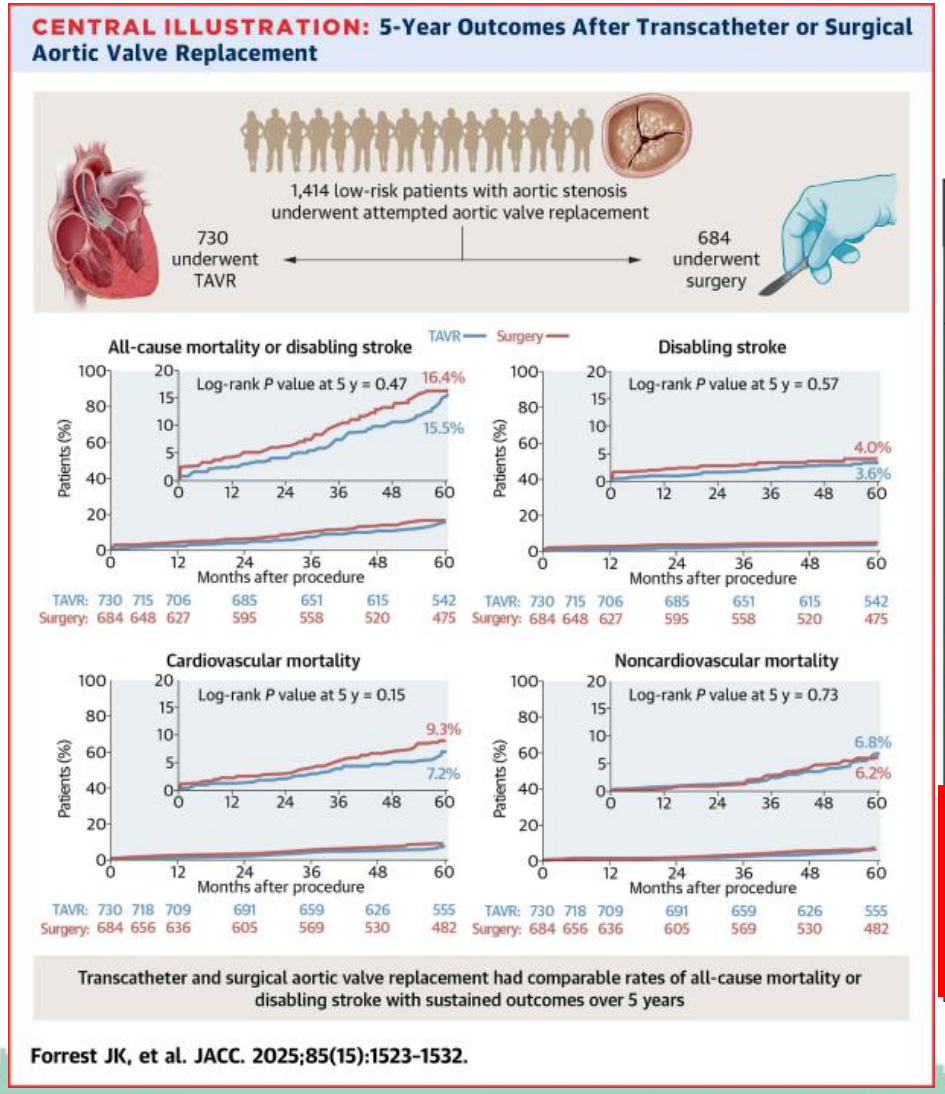
ChatGPT

Durabilité des bioprothèses percutanées à 7 ans



Leon MB et al. N Engl J Med 2025;389:1949-60

Durabilité des bioprothèses percutanées à 5 ans



Forrest JK, et al. JACC. 2025;85(15):1523-1532.

TABLE 1 5-Year Clinical Outcomes

	TAVR (n = 730)	Surgery (n = 684)	HR (95% CI)	*P* Value (Log-Rank)
All-cause mortality or disabling stroke	108 (15.5)	104 (16.4)	0.90 (0.69-1.18)	0.47
All-cause mortality	94 (13.5)	93 (14.9)	0.88 (0.66-1.17)	0.39
Cardiovascular death	49 (7.2)	57 (9.3)	0.75 (0.51-1.11)	0.15
Noncardiovascular death	45 (6.8)	36 (6.2)	1.08 (0.70-1.67)	0.73
All-cause mortality with vital status sweep	106 (14.7)	99 (15.2)	0.96 (0.73-1.26)	0.74
All-stroke	66 (9.5)	54 (8.6)	1.11 (0.77-1.59)	0.58
Disabling stroke	24 (3.6)	25 (4.0)	0.85 (0.49-1.49)	0.57
Aortic valve hospitalization	93 (13.9)	91 (15.1)	0.89 (0.67-1.19)	0.44
Major vascular complication	30 (4.1)	26 (3.9)	1.07 (0.64-1.82)	0.79
Myocardial infarction	40 (6.0)	22 (3.6)	1.63 (0.97-2.75)	0.06
Permanent pacemaker implant	185 (27.0)	69 (11.3)	2.70 (2.04-3.55)	<0.001
Atrial fibrillation	114 (16.3)	278 (41.2)	0.32 (0.25-0.39)	<0.001
Valve endocarditis	9 (1.4)	15 (2.5)	0.52 (0.23-1.20)	0.12
Reintervention	21 (3.3)	14 (2.5)	1.30 (0.66-2.56)	0.44
Total valve thrombosis	6 (0.9)	4 (0.6)	1.36 (0.38-4.82)	0.63
Clinical[a]	2 (0.3)	1 (0.2)	1.84 (0.17-20.24)	0.61
Subclinical[b]	4 (0.6)	3 (0.5)	1.20 (0.27-5.37)	0.81

HIGHTECH

Ra serré asymptomatique et fibrose myocardique

JAMA

QUESTION Is early aortic valve intervention superior to guideline-directed conservative management in asymptomatic patients with severe aortic stenosis and myocardial fibrosis?

CONCLUSION In asymptomatic patients with severe aortic stenosis and myocardial fibrosis, early aortic valve intervention had no demonstrable effect on all-cause death or unplanned aortic stenosis-related hospitalization.

POPULATION

161 Men
63 Women

Asymptomatic patients with severe aortic stenosis and myocardial fibrosis

Mean age: 73 years

LOCATION

24
Cardiac centers
in Australia and the UK

INTERVENTION

224 Patients randomized

113
Early intervention
Early valve intervention with transcatheter or surgical aortic valve replacement

111
Conservative management
Guideline-directed conservative management

PRIMARY OUTCOME

Composite of all-cause death or unplanned aortic stenosis-related hospitalization

FINDINGS

Occurrence of composite primary outcome

Early intervention	Conservative management
18%	23%
20 of 113 patients	25 of 111 patients

The difference was not statistically significant:

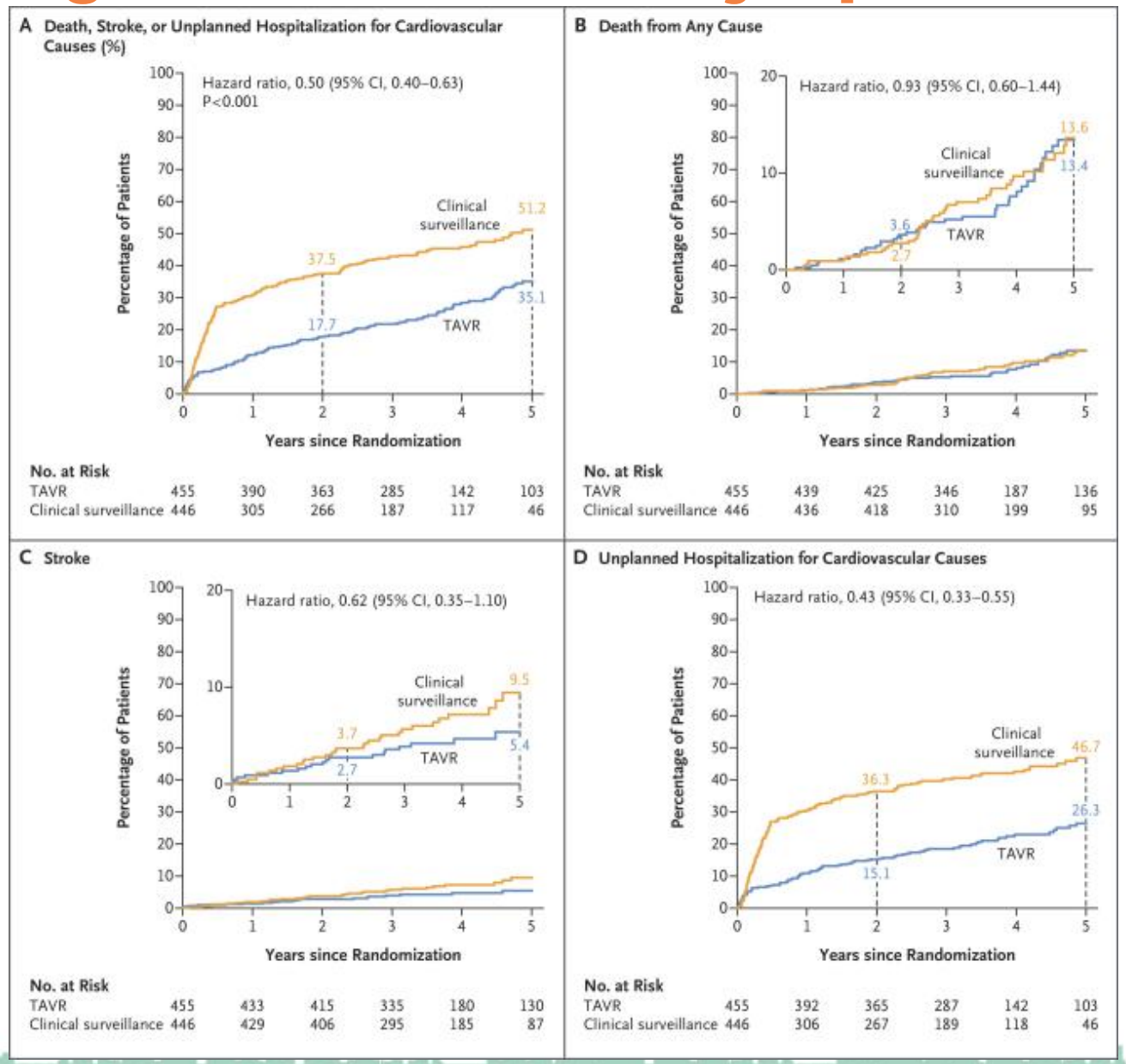
Between-group difference, −4.82%
(95% CI, −15.31% to 5.66%); *P* = .37

Hazard ratio, 0.79
(95% CI, 0.44 to 1.43); *P* = .44

Loganath K, Craig NJ, Everett RJ, et al; EVOLVED Investigators. Early intervention in patients with asymptomatic severe aortic stenosis and myocardial fibrosis: the EVOLVED randomized clinical trial. *JAMA*. Published online October 28, 2024. doi:10.1001/jama.2024.22730

Prise en charge du RA serré asymptomatique

EARLY TAVR



Généreux P et al. NEJM 2025;392:217-27

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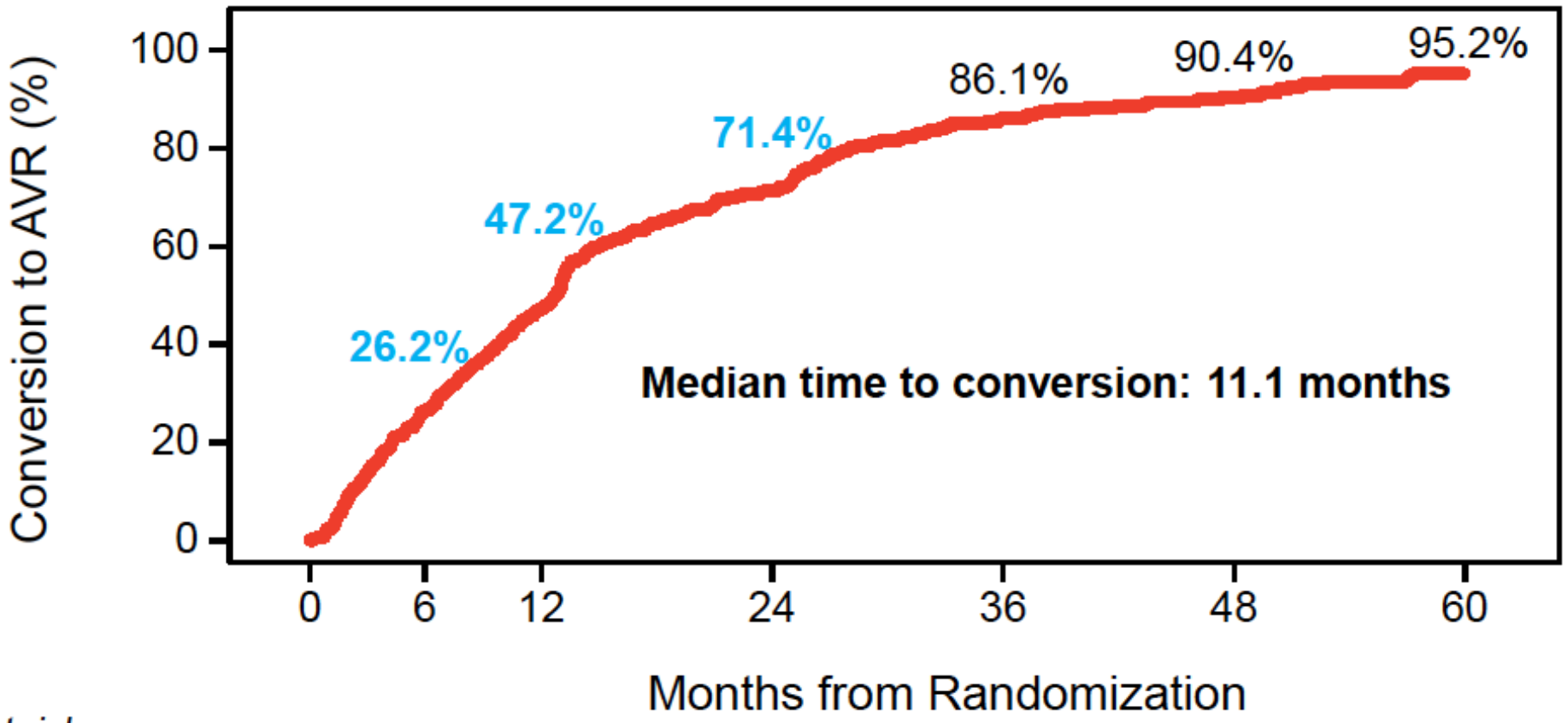
Prise en charge du RA serré asymptomatique



No. at risk:

Clinical Surveillance	446	326	231	119	45	22	9

Généreux P et al. NEJM 2025;392:217-27

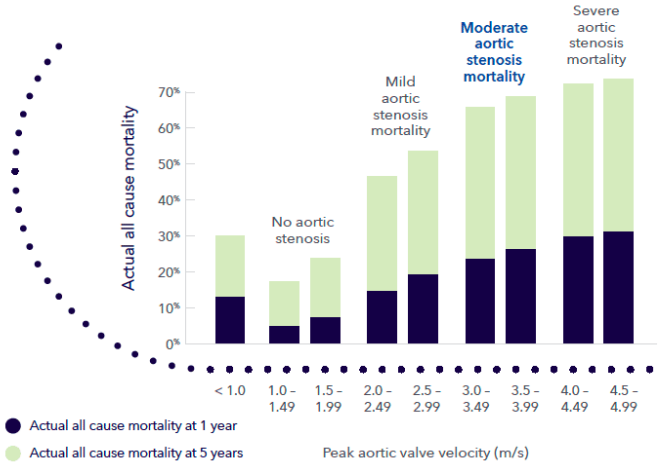
Prise en charge du RA asymptomatique

Intervention is recommended in asymptomatic patients with severe AS and LVEF <50% without another cause.[14,354–359]	I	B
Intervention should be considered in asymptomatic patients (confirmed by a normal exercise test, if feasible) with severe, high-gradient AS and LVEF ≥50% as an alternative to close active surveillance, if the procedural risk is low.[360–363,367,368]	IIa	A
Intervention should be considered in asymptomatic patients with severe AS and LVEF ≥50% if the procedural risk is low and one of the following parameters is present: • Very severe AS (mean gradient ≥60 mmHg or V_{max} >5.0 m/s).[14,362,363,482–484] • Severe valve calcification (ideally assessed by CCT) and V_{max} progression ≥0.3 m/s/year.[303,353,364] • Markedly elevated BNP/NT-proBNP levels (more than three times age- and sex-corrected normal range, confirmed on repeated measurement without other explanation).[97,365] • LVEF <55% without another cause.[14,354,356–359]	IIa	B
Intervention should be considered in asymptomatic patients with severe AS and a sustained fall in BP (>20 mmHg) during exercise testing.	IIa	C

Généreux P et al. NEJM 2025;392:217-27

Prise en charge du RA modéré

Surveillance



Pelacarsen

PCSK9 INHIBITOR

HIGHTECH

Prise en charge du RA modéré et IC

Study Design

Erasmus MC

Investigator-initiated, international, randomized controlled, open label, superiority trial

TAVR UNLOAD

R

Symptomatic patients with HFrEF on GDMT & moderate AS

TF TAVR (n=89)

CASS (n=89)

Clinical AS surveillance and AVR upon progression to severe AS

Primary Endpoint

Hierarchical * occurrence of:

1. All-cause death
2. Disabling stroke
3. Hospitalizations and equivalents
4. Change in KCCQ

1st Key Secondary EP

Time-to-event analysis of:

Major adverse cardiac or cerebrovascular events (MACCE) defined as the composite of:

- All-cause death
- All stroke
- Hospitalizations and equivalents

Van Mieghem et al. JACC 2024

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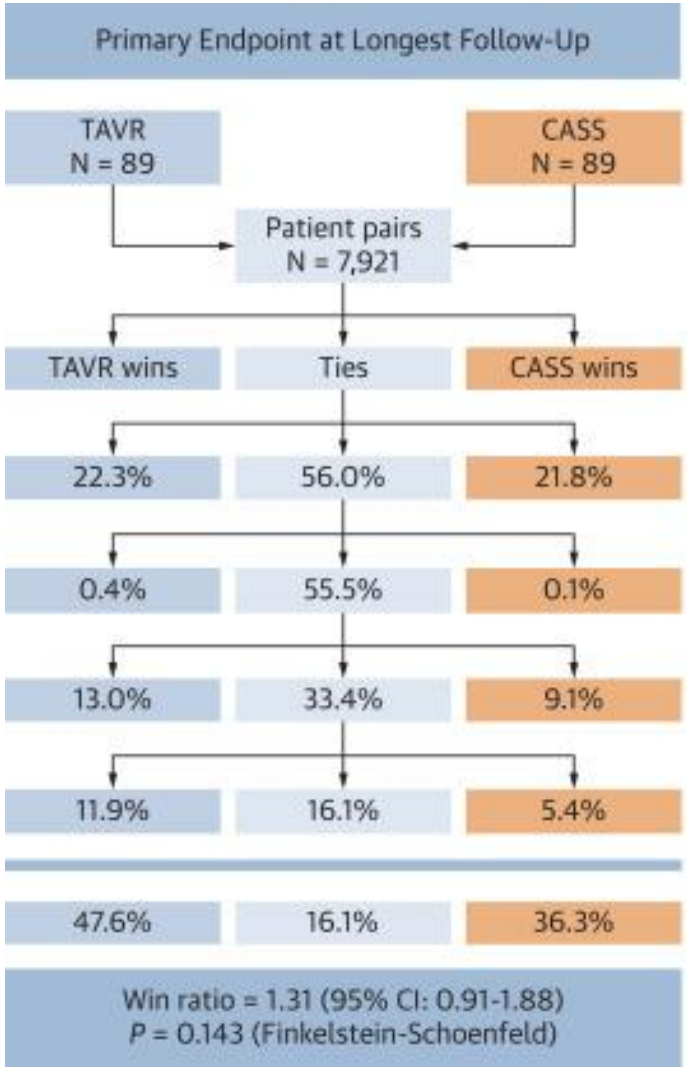
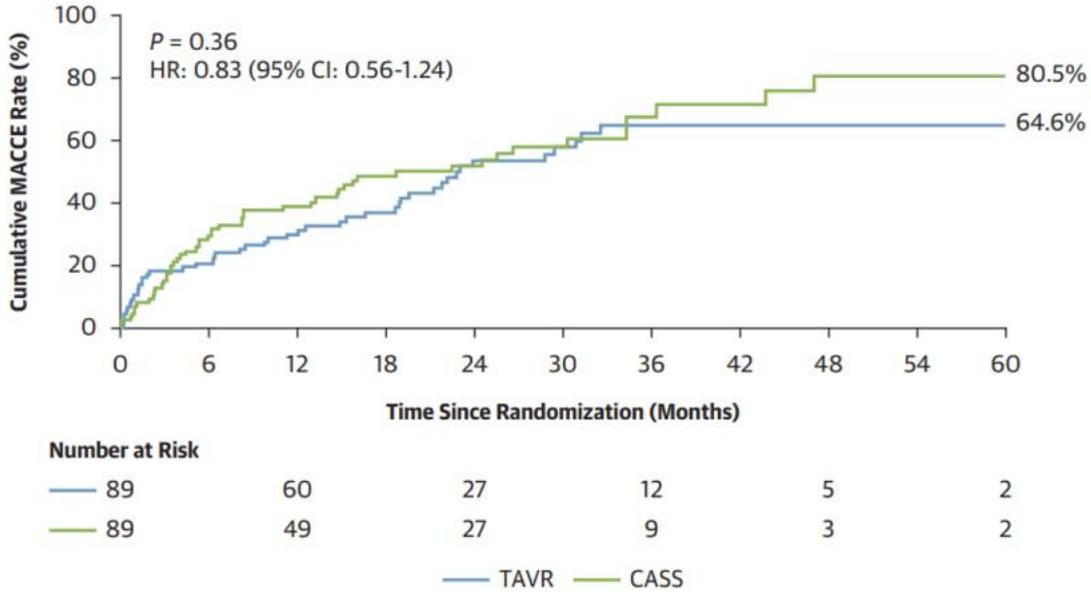
Prise en charge du RA modéré et IC



Results

Major-adverse cardiovascular and cerebral events



JACC

Van Mieghem et al. JACC 2024

HIGHTECH

Prise en charge du RA modéré:
deux études en cours de recrutement

Local heart team, case review board & core lab assessments

THE PROGRESS TRIAL

Moderate aortic stenosis, cardiac damage/dysfunction, anatomy appropriate for transfemoral access

1:1 Randomization
(up to 750 patients)

TAVR
(SAPIEN 3 platform)

vs.

Clinical surveillance
(until guideline-recommended criteria for the timing of AS intervention is met)

Primary Endpoints:
Effectiveness: Non-hierarchical composite of death, and heart failure (HF) hospitalization or event at 2 years
Safety: Non-hierarchical composite of death, stroke, life-threatening bleeding and other events at 30 days

Follow-up: 30 days then annually through 10 years

EXPAND II Pivotal

Design

- **DESIGN:** Prospective, randomized, parallel-assignment, two-arm, multi-center clinical evaluation of the Medtronic Evolut Pro+ or FX System vs. GDMT alone
- **OBJECTIVE:** To determine safety and effectiveness of Medtronic TAVR in patients with moderate, symptomatic AS
- **PRINCIPAL INVESTIGATORS**
  Josep Rodes-Cabau, Paul Sorajja, Stephan Windecker

650 patients with symptomatic, moderate AS in up to 100 clinical sites in Canada, Europe, Israel, Japan, New Zealand, and U.S.A.

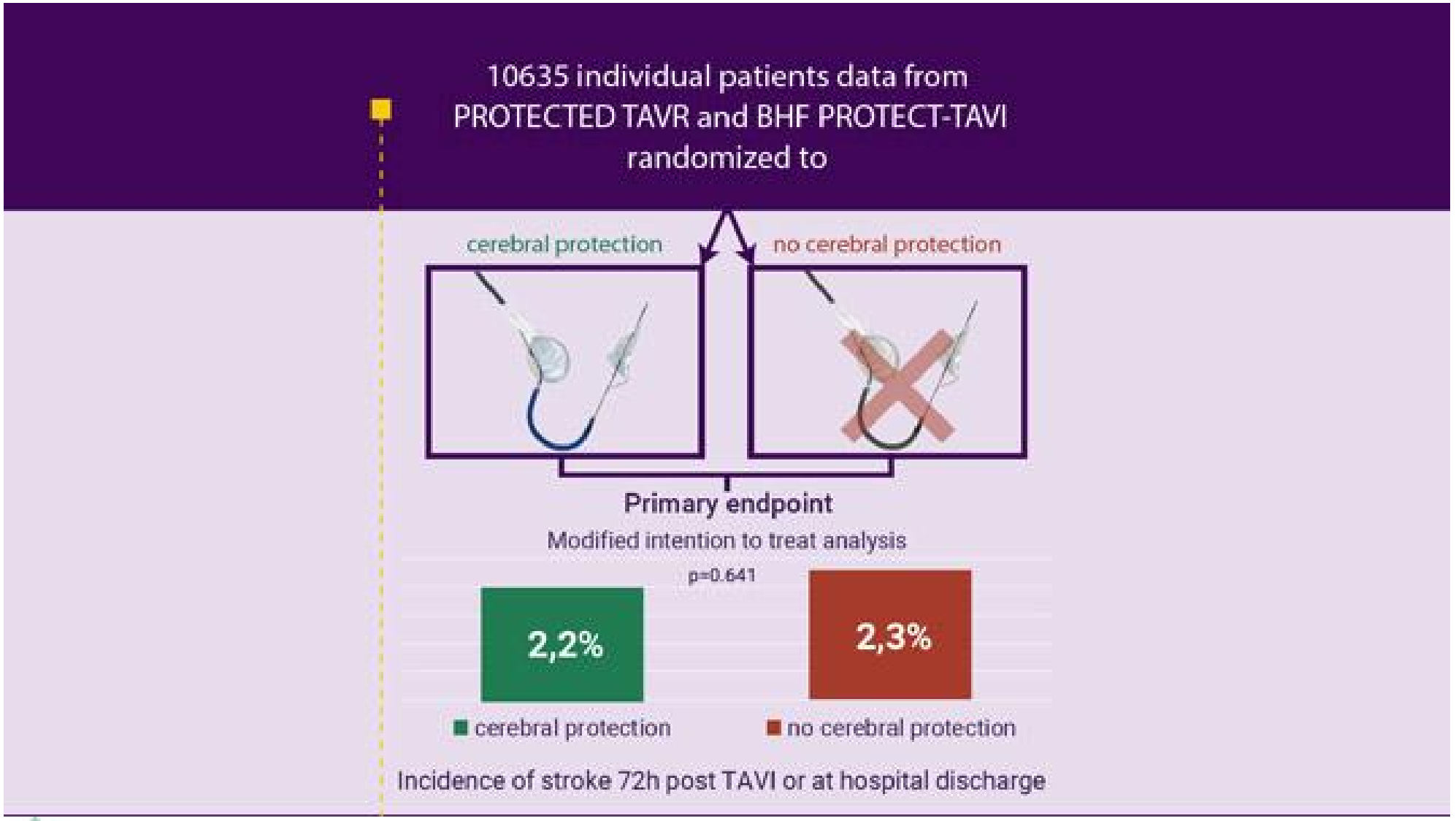
TAVR + GDMT

GDMT alone

Primary outcome for safety at 30 days

Primary outcome for effectiveness at 2 years

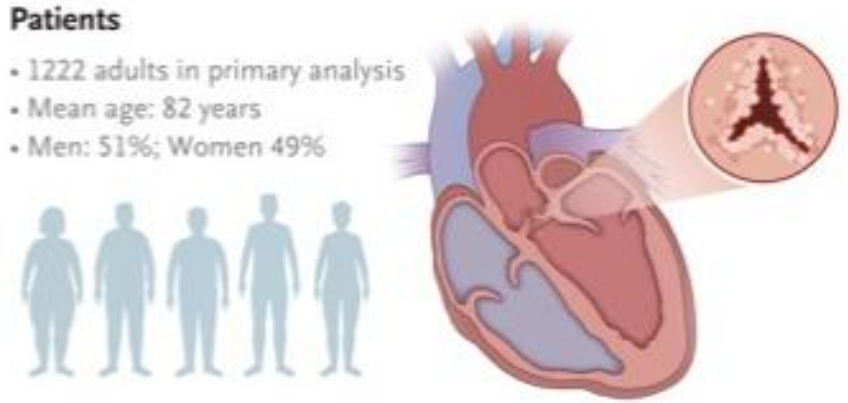
Dispositif de protection embolique cérébral

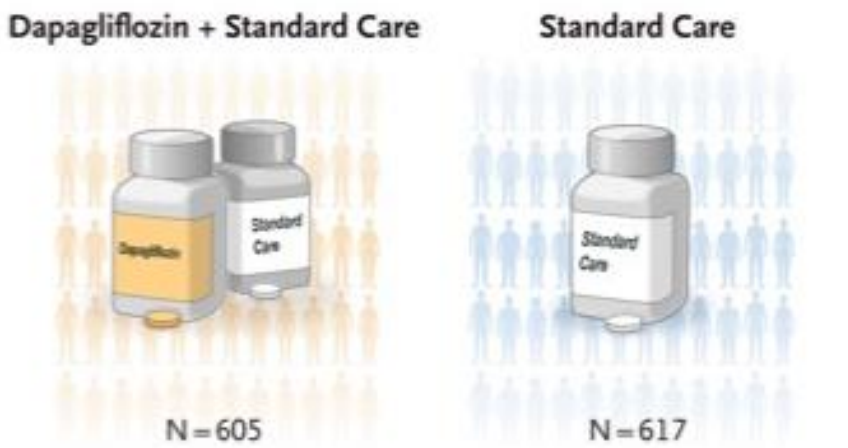


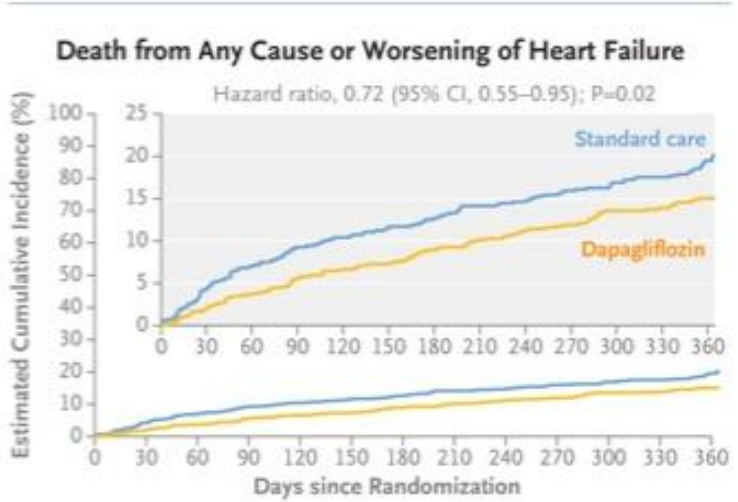
Kharbanda RK et al. N Engl J Med 2025;392:2403-12

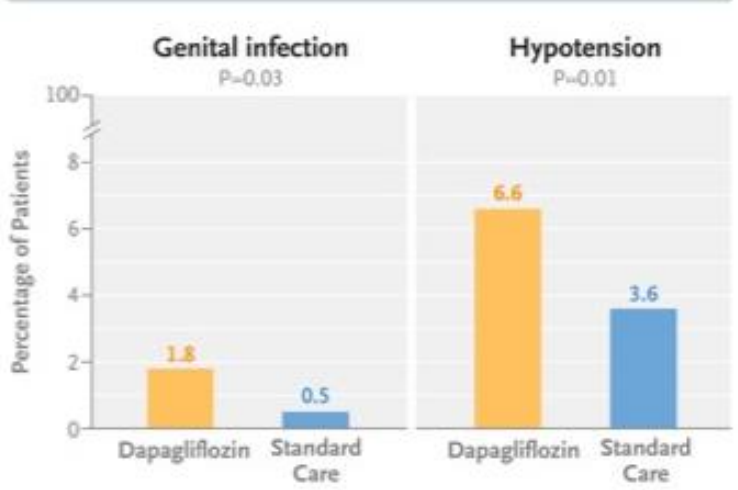
Kapadia Sr et al. N Engl J Med 2022;387:1253-63

Dapaglifozine et TAVI



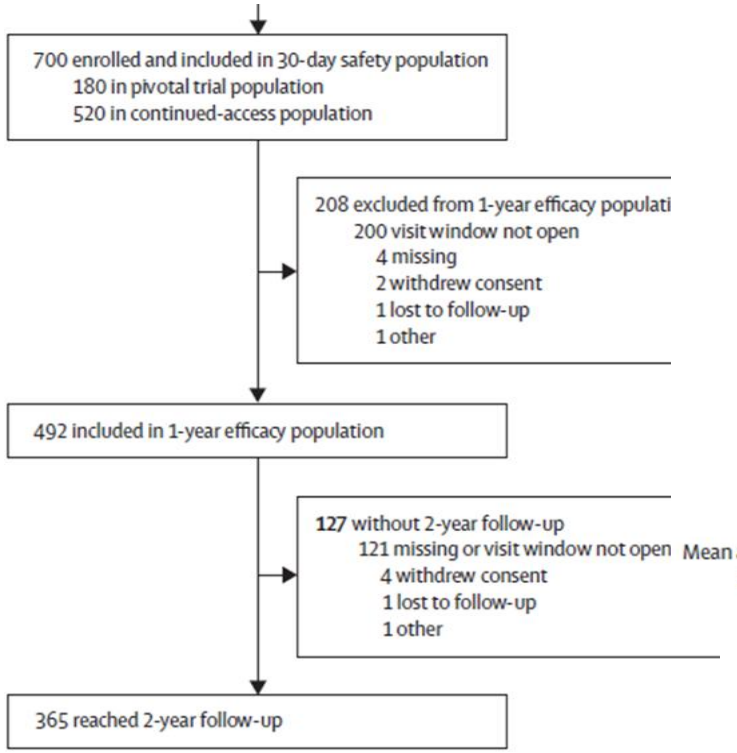


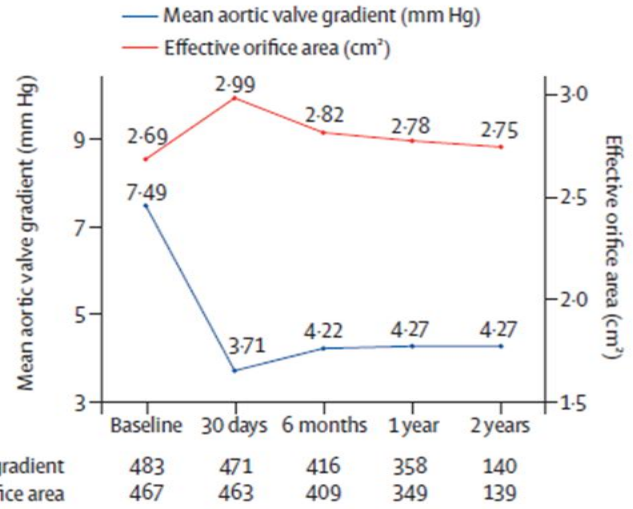


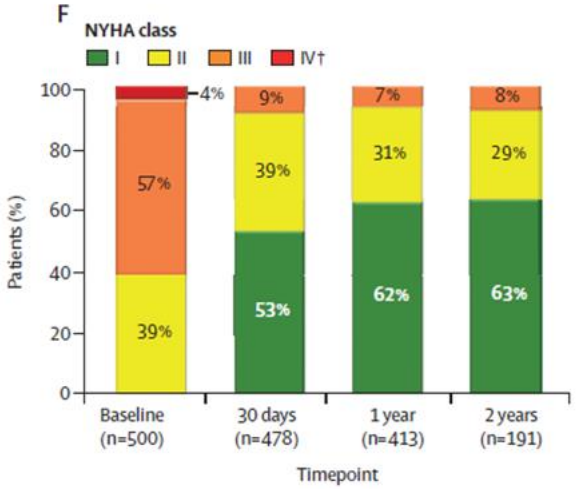


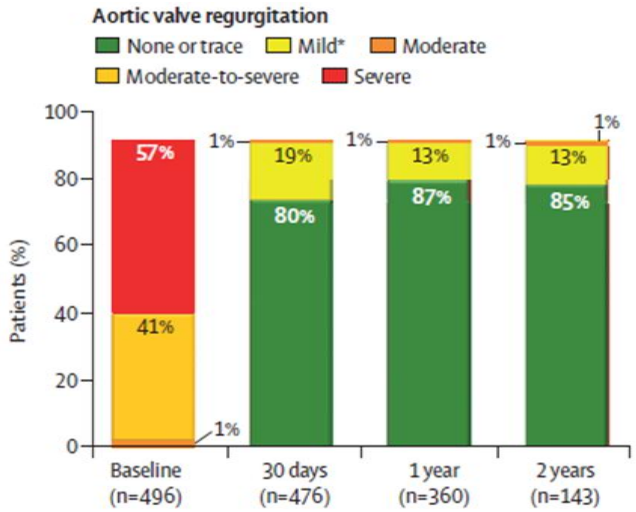
Raposeiras-Roubin S et al. N Engl J Med 2025;392:1396:1405

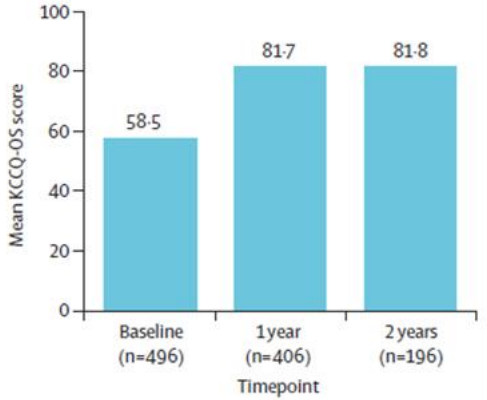
TAVI et insuffisance aortique











Résultats à J30

- Embolisation valvulaire : 1,3%
- AVC : 1,7%
- Mortalité : 1,6%
- Pacemaker : 21,6%

TAVI may be considered for the treatment of severe AR in symptomatic patients ineligible for surgery according to the Heart Team, if the anatomy is suitable.[264,265,268,269]

IIb | B

Makkar RR et al. Lancet 2025;406:2757-71

TAVI vs Chirurgie chez les femmes

Aim

The **RHEIA trial** compared outcomes with TAVI vs surgery for valve replacement in women all-comers with severe aortic stenosis

Study population

443 female patients

TAVI
Third-generation balloon-expandable system

Randomized 1:1

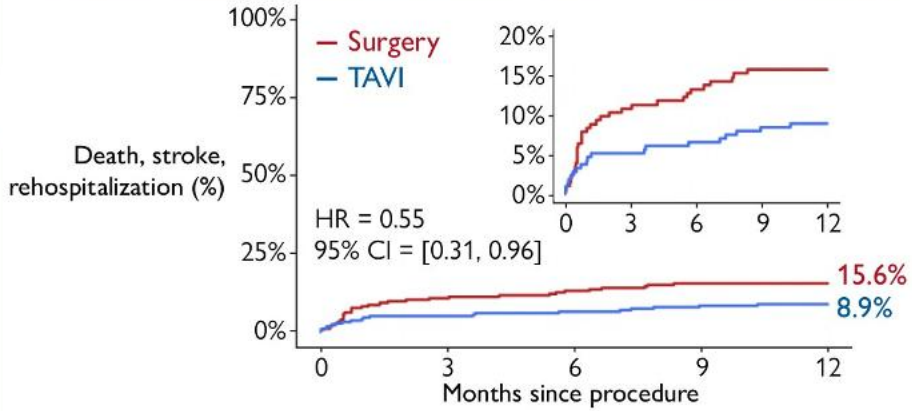
Surgical aortic valve replacement

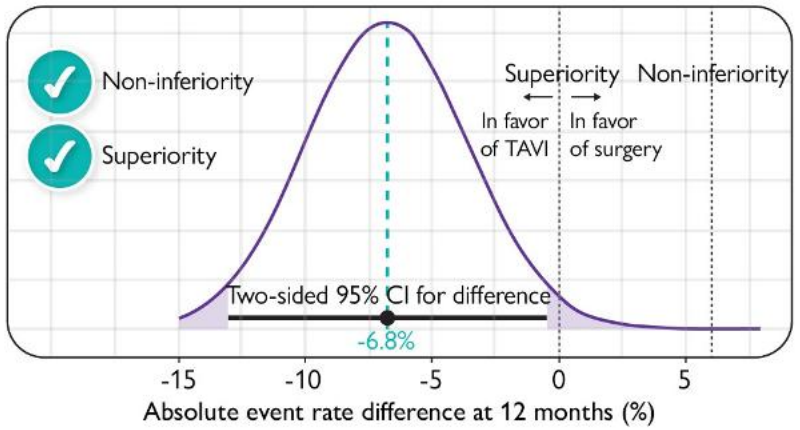
Study sites

48 centres

12 countries in Europe

Primary composite endpoint: death, stroke, rehospitalization





Tchetche D et al. Eur Heart J 2025;46:2079-2088

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Merci pour votre attention

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Redo TAVI: les aspects techniques

Didier TCHETCHE