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APPAC Ensemble, imaginons la cardiologie de demain

Clip mitral: quelles indications en 2019 ?

Guillaume Leurent

CHU de Rennes

CHU Rennes

FACULTÉ DE MÉDECINE UNIVERSITÉ DE RENNES 1

guillaume.leurent@chu-rennes.fr

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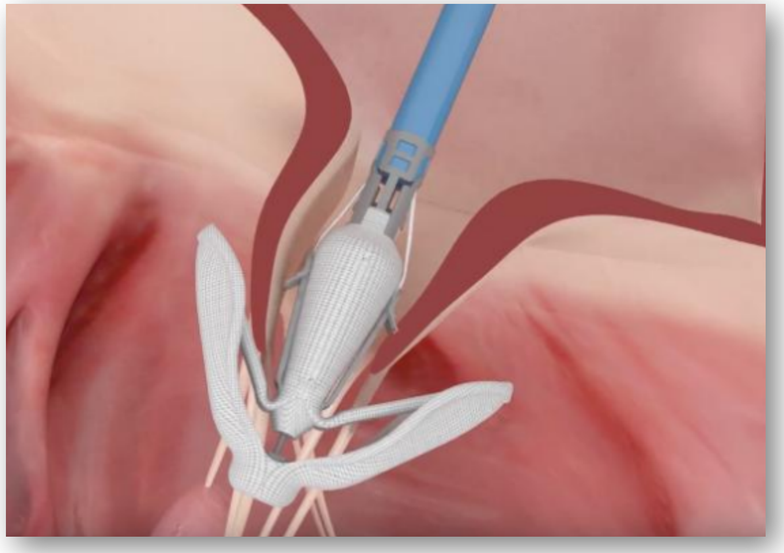
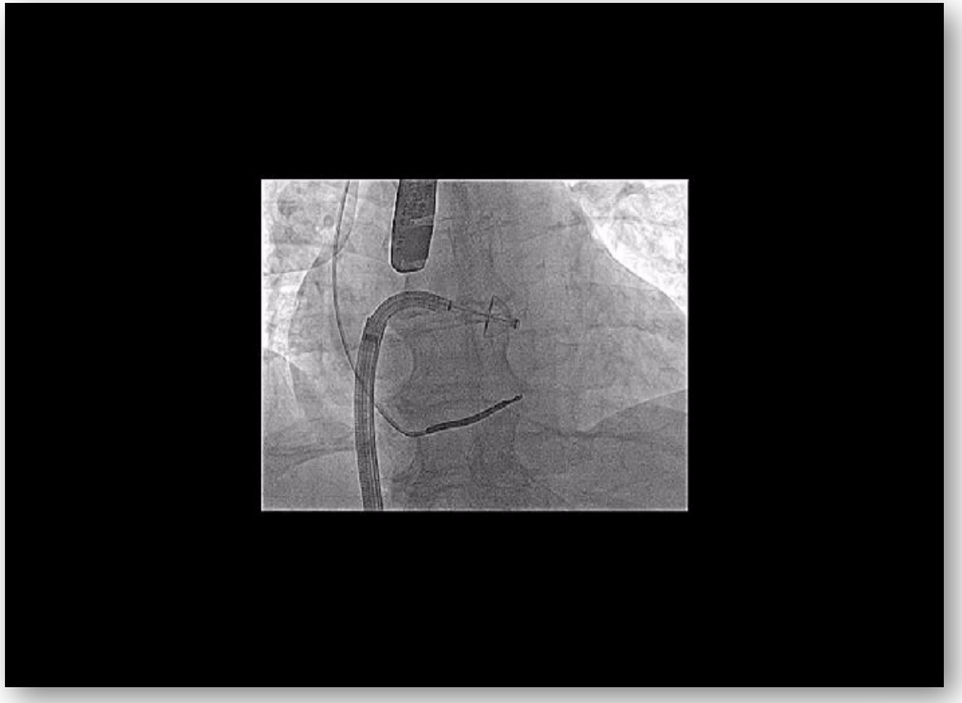
DÉCLARATION DE LIENS D'INTÉRÊT AVEC LA PRÉSENTATION

Intervenant : Leurent Guillaume, Rennes

☑ Je déclare avoir reçu des honoraires en tant que proctor médical, orateur et/ou consultant par les sociétés : Abbott, Abiomed, Astra Zeneca et Novartis

Clip mitral en France ≠ MitraClip





THELANCET-D-17-01919
S0140-6736(17)31600-8
Embargo: [add date when known]
Doctopic: Primary Research

5 videos + appendix

Articles
AJ
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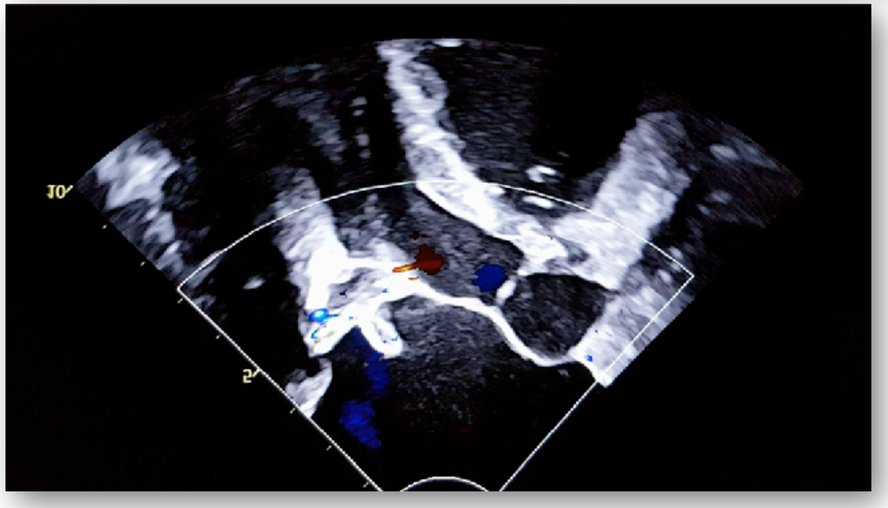
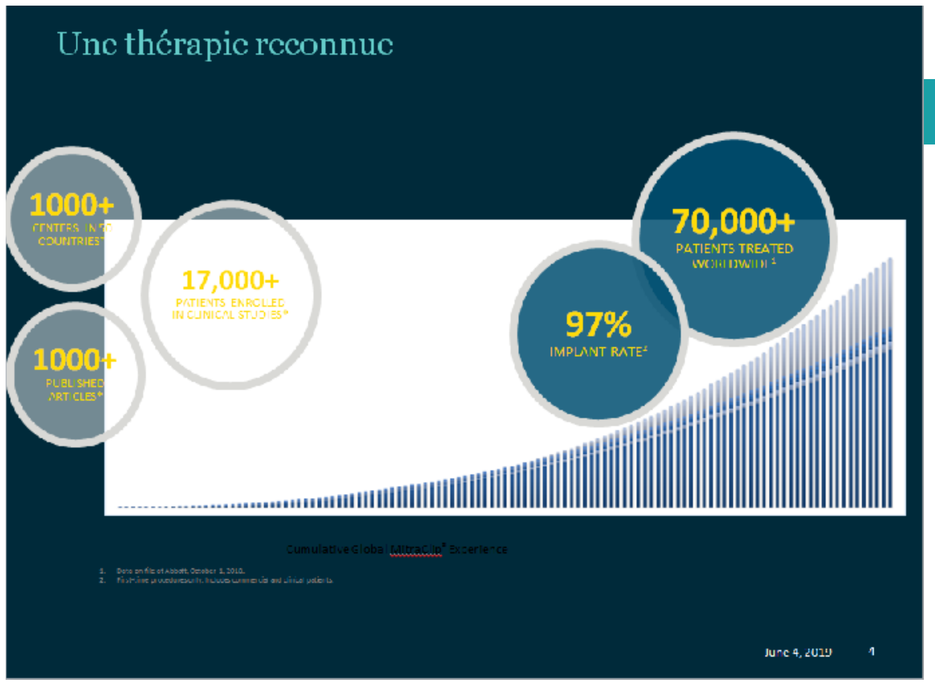
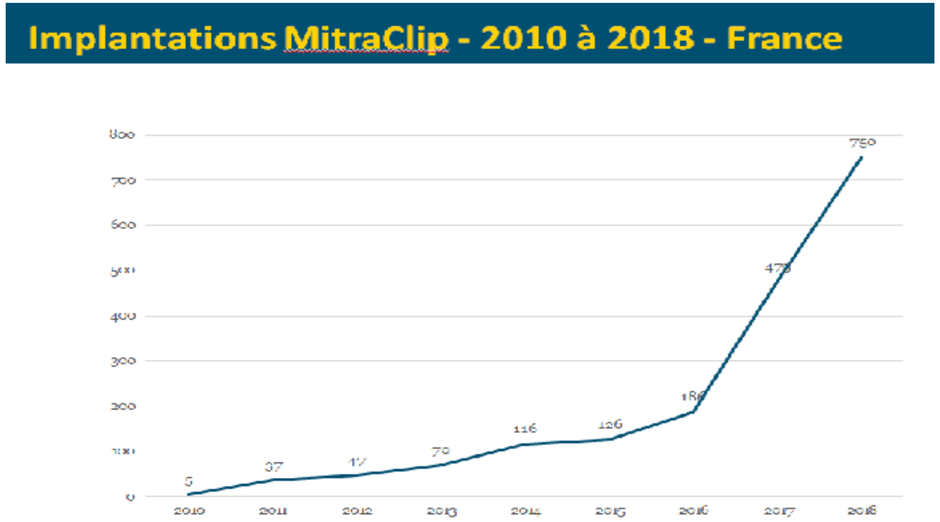
Compassionate use of the PASCAL transcatheter mitral valve repair system for patients with severe mitral regurgitation: a multicentre, prospective, observational, first-in-man study

Fabien Praz*, Konstantinos Spargias*, Michael Chrissoheris, Lutz Büllesfeld, Georg Nickenig, Florian Deuschl, Robert Schueler, Neil P Fam, Robert Moss, Moody Makar, Robert Boone, Jeremy Edwards, Aris Moschovitis, Saibal Kar, John Webb, Ulrich Schäfer, Ted Feldman, Stephan Windecker



MitraClip: données Abbott





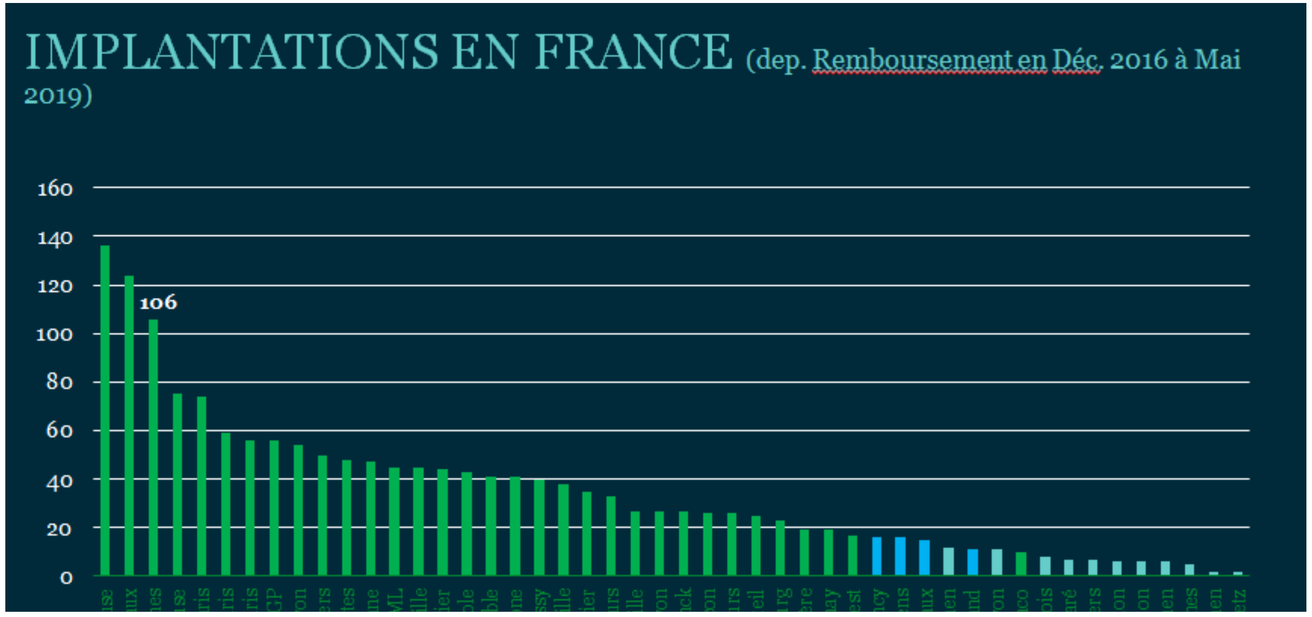


TABLE 3 Procedural and In-Hospital Outcomes (N = 2,952)

Number of clips implanted	
1	66.5
≥1	34.5
Site of clip implant	
A2-P2 segments	82.8
Other	17.2
Post-implant MR	
None/trace/trivial	15.0
Mild (grade 1)	46.8
Moderate (grade 2)	31.2
Moderate-severe (grade 3)	2.9
Severe (grade 4)	4.1
Post-implant median mitral gradient	4.0 (2.0-5.0)
Cardiac perforation	1.0
Transseptal complication	0.9
Bleeding	
Access site	1.1
Hematoma	1.6
Major or life-threatening (VARC)	3.9
Myocardial infarction	0.1
Stroke	0.4
Transient ischemic attack	0.1
Ischemic	0.4
Hemorrhagic	0.03
Device-related adverse events	
Single leaflet device attachment	1.5
Device embolization	0.1
Delivery system component embolization	0.0
Device thrombosis	0.0
Other	0.7
Open heart surgery	0.7
In-hospital mortality	2.7
Post-implant MR grade ≤2, no mortality, and no cardiac surgery	91.8
Post-implant MR grade ≤1, no mortality, and no cardiac surgery	60.9
Length of stay, days	2.0 (1.0-5.0)
Discharge location	
Home	85.9
Extended care	8.1
Other	6.0

JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY VOL. 70, NO. 19, 2017
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PUBLISHED BY ELSEVIER https://doi.org/10.1016/j.jacc.2017.09.015

ORIGINAL INVESTIGATIONS

Outcomes With Transcatheter Mitral Valve Repair in the United States

An STS/ACC TVT Registry Report

90% d'IM dégénératives
82 ans
FEVG altérée: 35%
Antdt d'AVC: 10%
Dialysés: 4%
O2: 14%
AOMI: 18%

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Mitraclip

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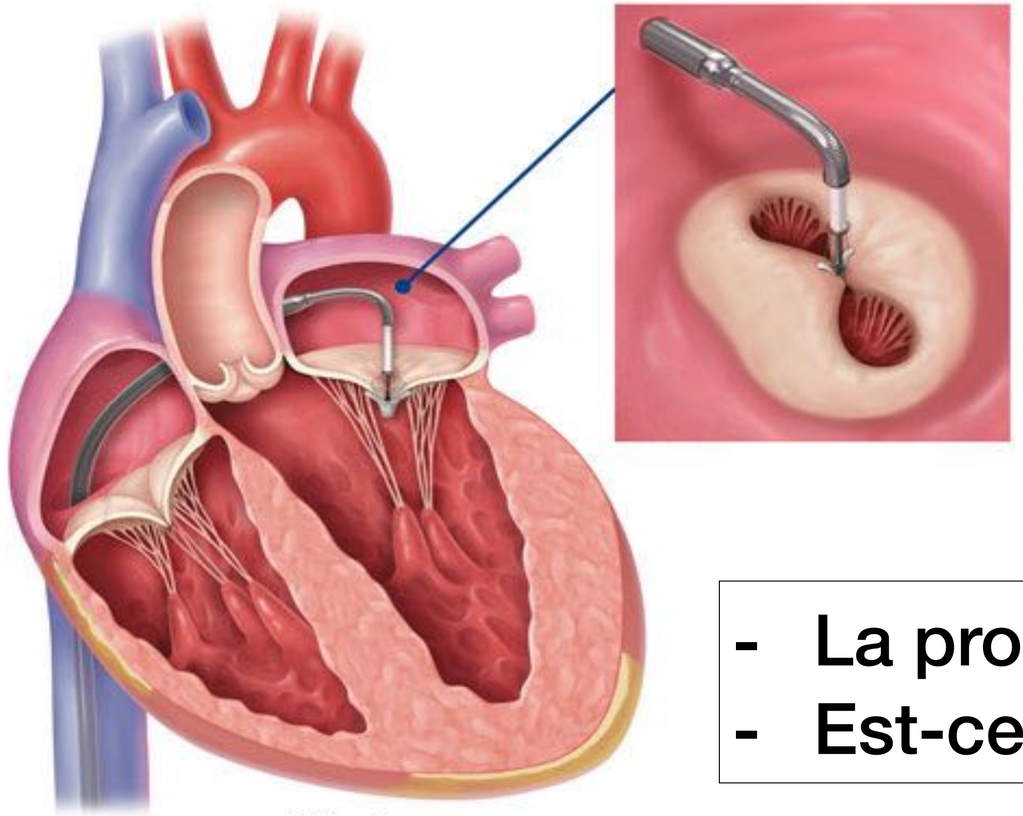
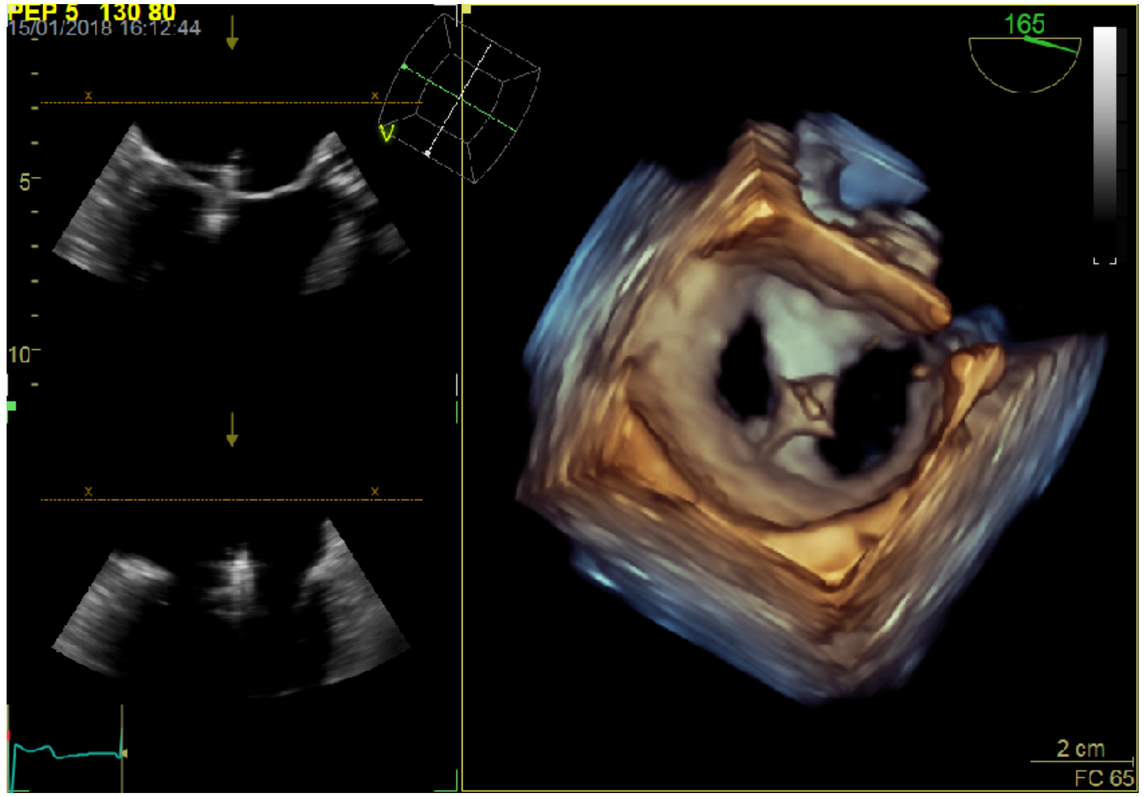
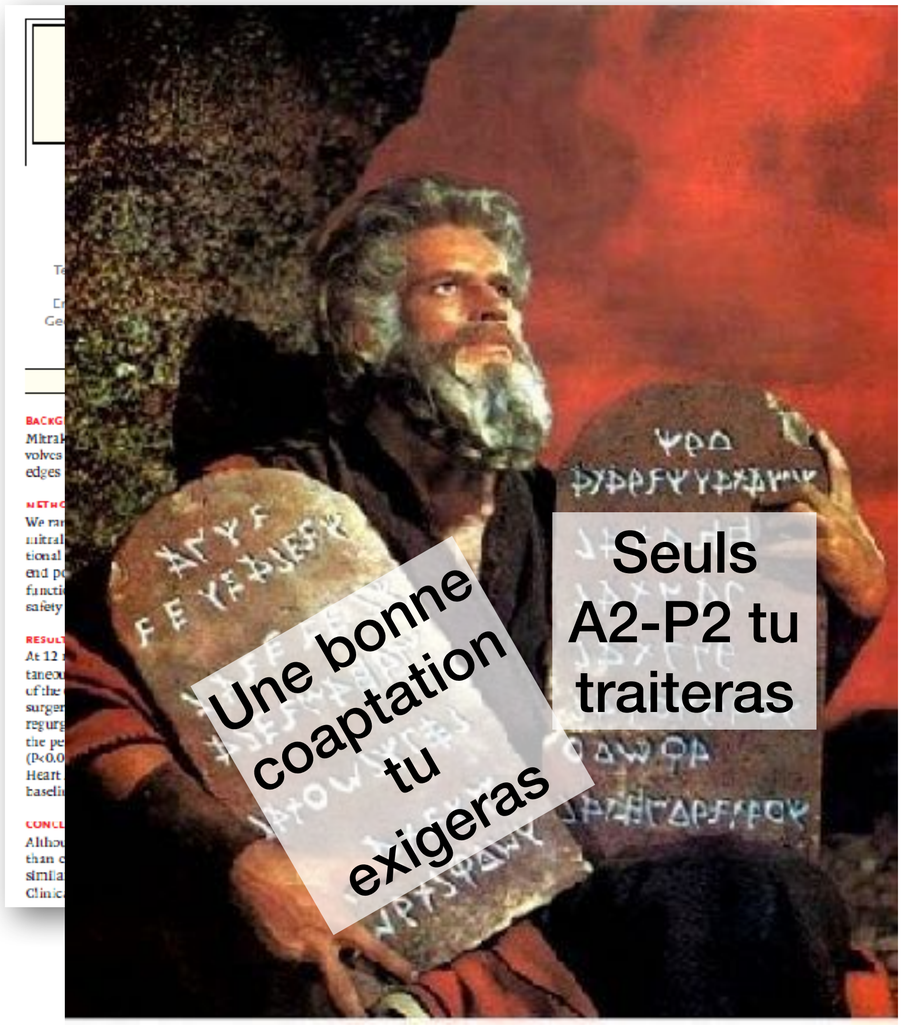
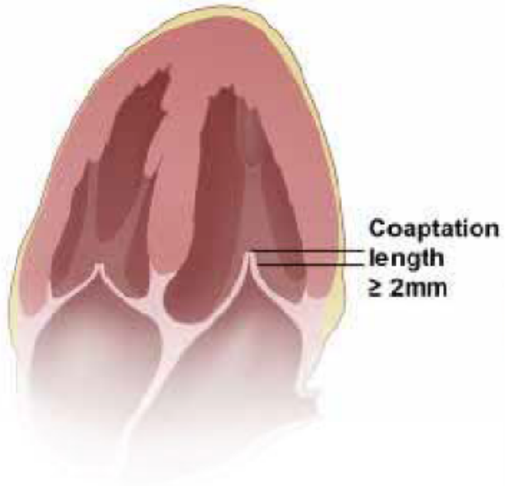


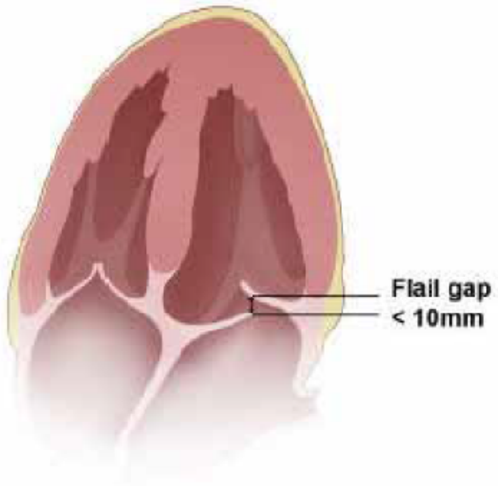


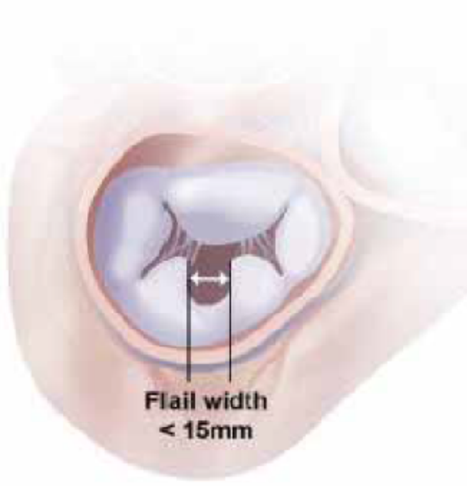
- La procédure est-elle techniquement faisable?
- Est-ce la meilleure option pour le patient ?

La faisabilité: l'héritage d'Everest 2 …

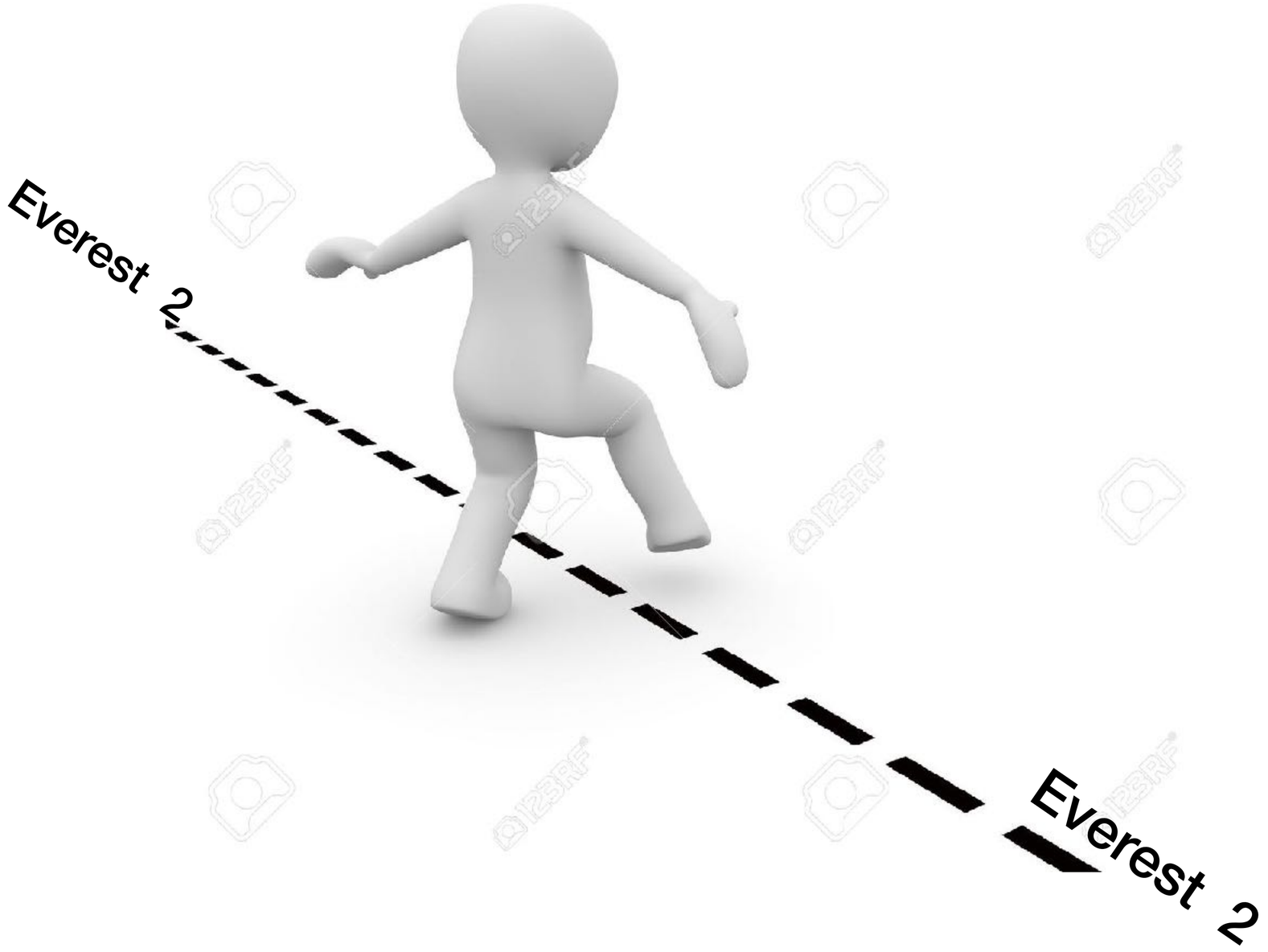








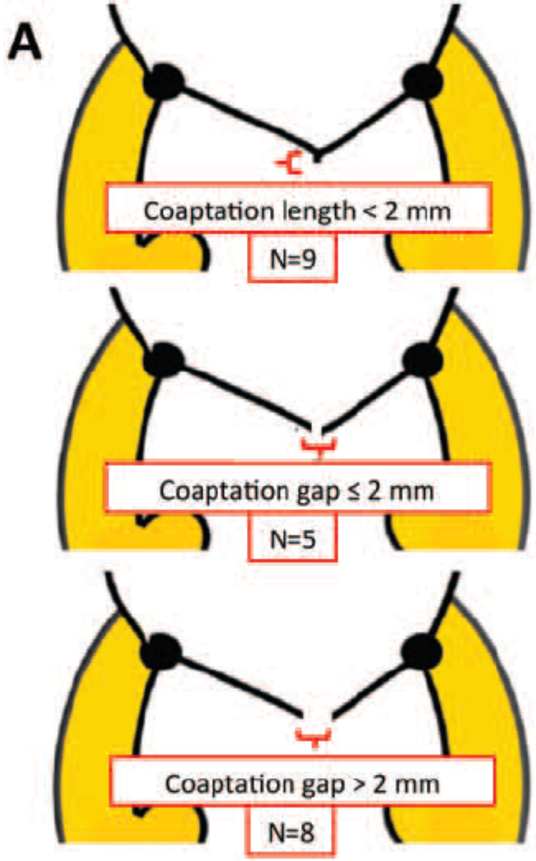
Maury L. Am J Heart 2010


Everest 2
Everest 2

European Journal of Heart Failure (2016)
doi:10.1002/ejhf.520

Mitraclip therapy in patients with functional mitral regurgitation and missing leaflet coaptation: is it still an exclusion criterion?

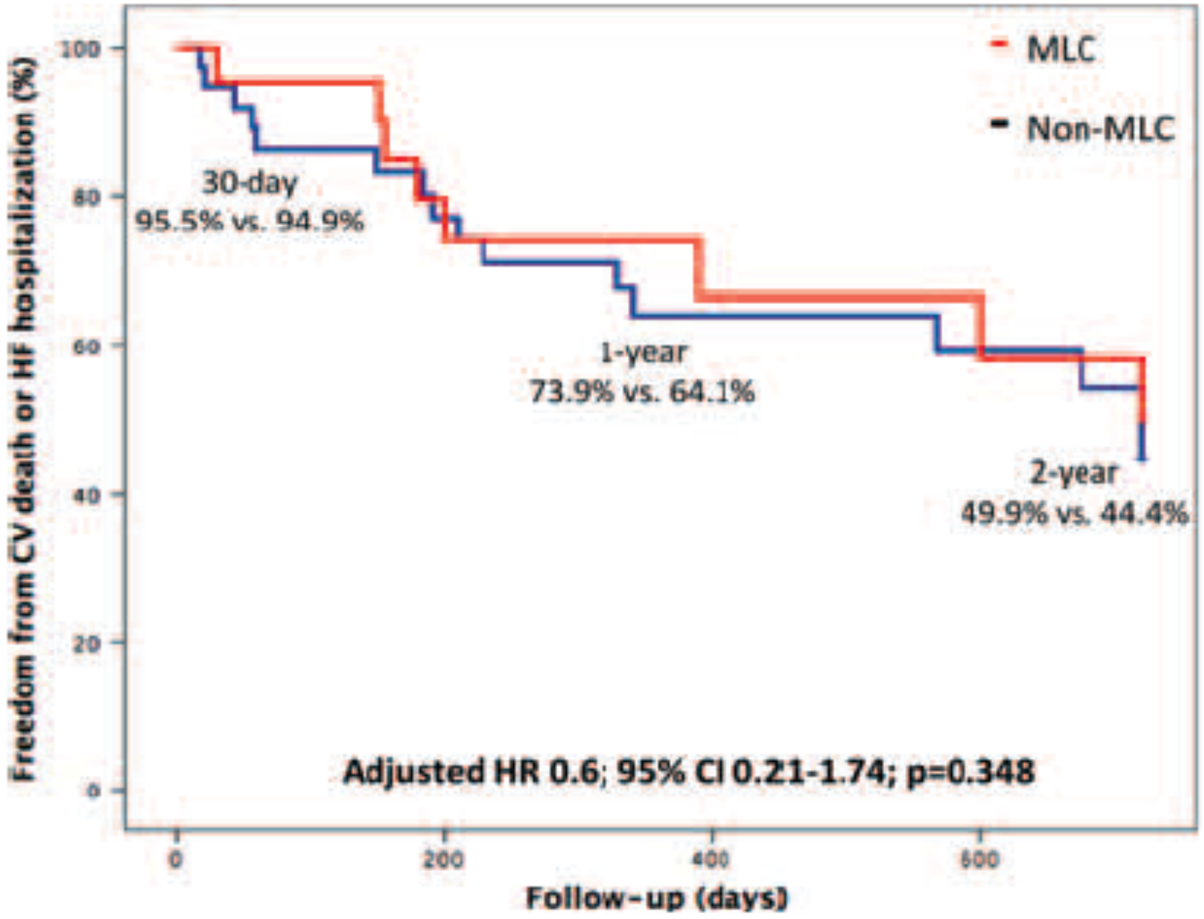
Marianna Adamo[1], Ermanna Chiari[2], Salvatore Curello[1], Cristian Maiandi[2], Giuliano Chizzola[1], Claudia Fiorina[1], Mario Frontini[3], Giovanni Cuminetti[1], Elena Pezzotti[1], Riccardo Rovetta[1], Carlo Mario Lombardi[4], Aldo Manzato[3], Marco Metra[4], and Federica Ettori[1]*



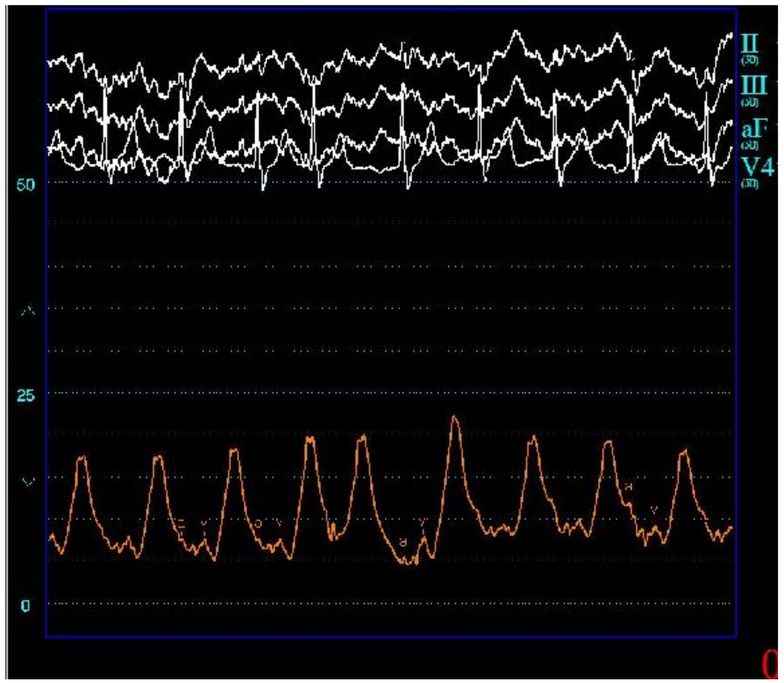
B

Supplementary Table 1. Treatment of patients with missing leaflets coaptation before Mitraclip implantation

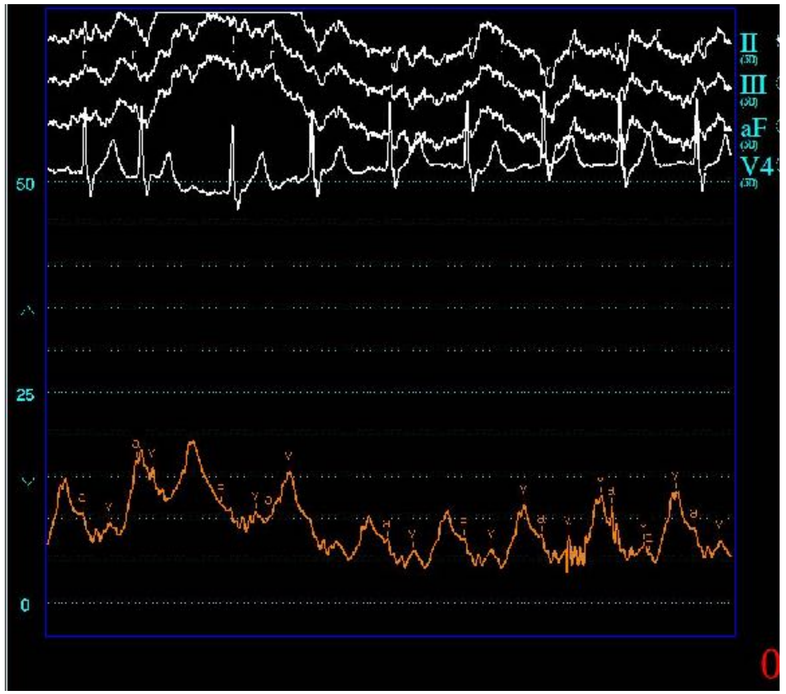
	Furosemide	Enoximone
1 support		
Patient #3		X
Patient #4		X
Patient #7	X	
Patient #9		X
Patient #10	X	
Patient #11		X
Patient #12		X
Patient #13		X
Patient #15		X
Patient #16	X	
Patient #17	X	
Patient #18	X	
Patient #19		
Patient #20	X	
Patient #21		X
Patient #22		X
2 supports		
Patient #2	X	X
Patient #8		X
3 supports		
Patient #1	X	X
Patient #6	X	
Patient #14	X	
4 supports		
Patient #5	X	X



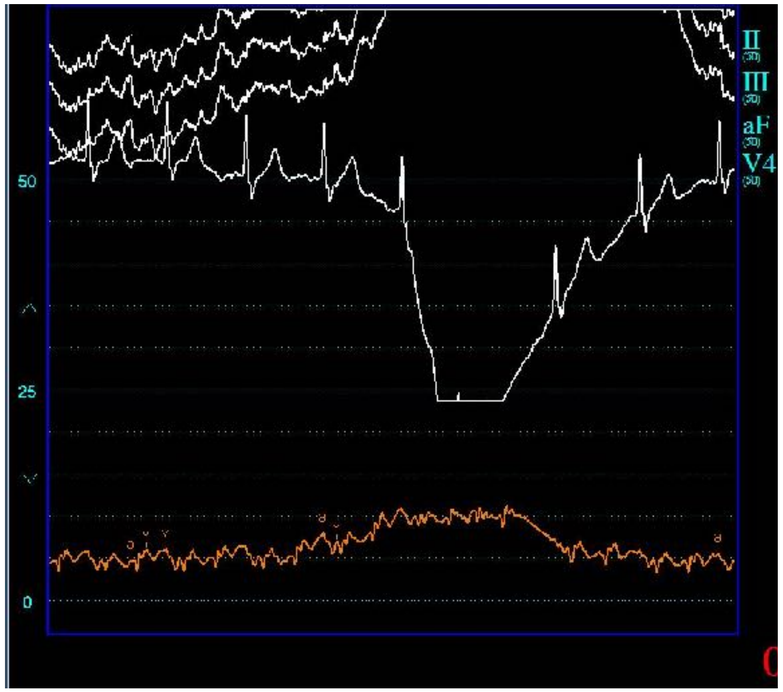
Influence de la PEEP sur la Pression capillaire



PEEP = 0



PEEP = 10 mmHg

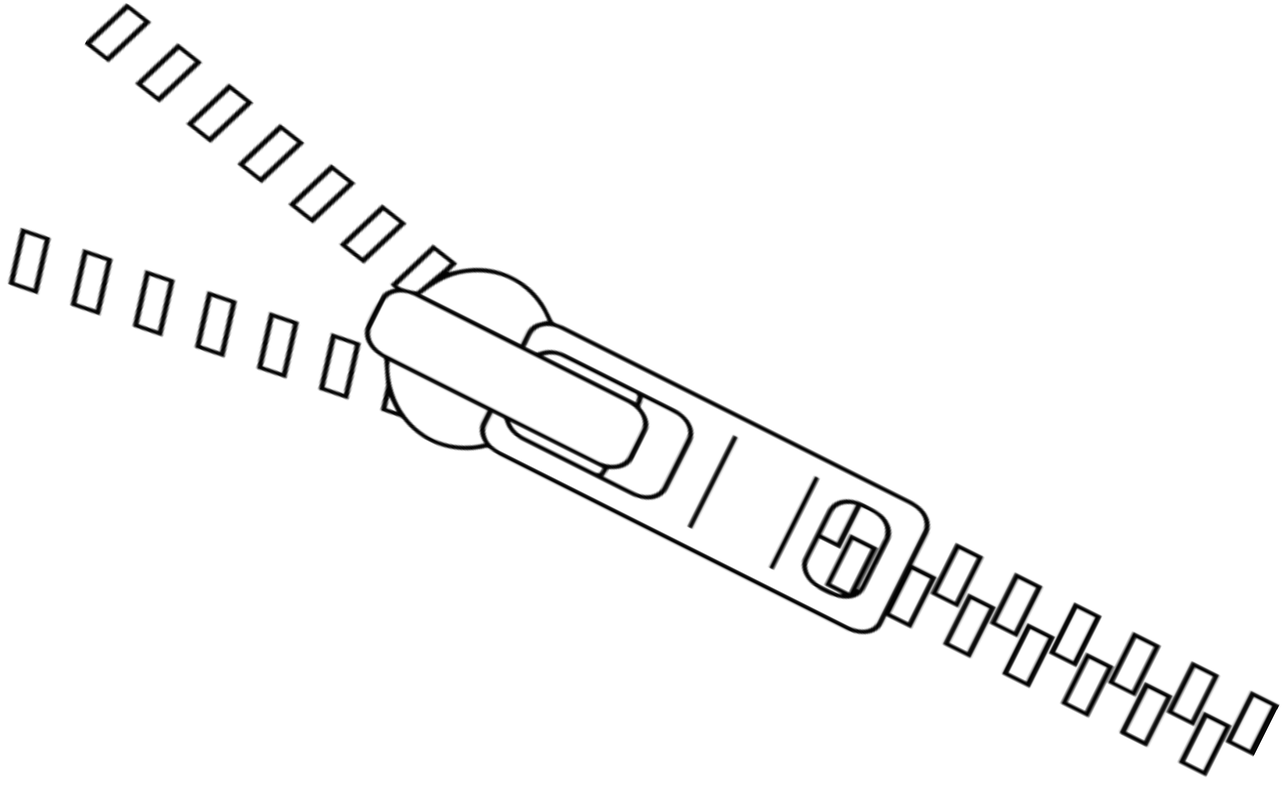


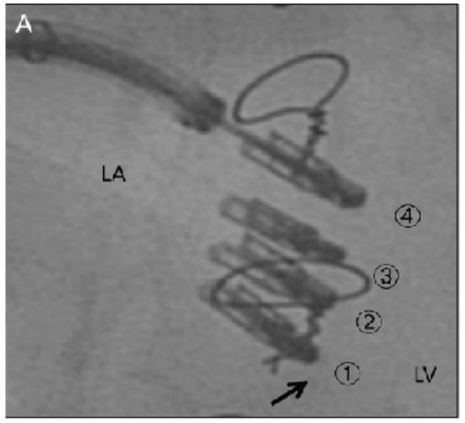
PEEP = 15 mmHg

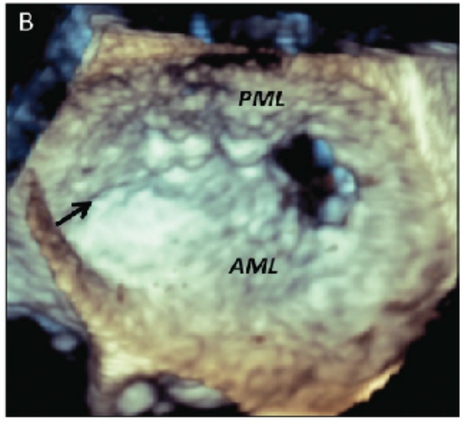
Catheterization and Cardiovascular Interventions 80:1007–1013 (2012)

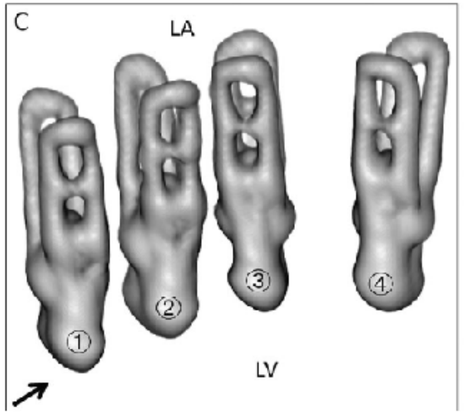
Use of Four MitraClip Devices in a Patient With Ischemic Cardiomyopathy and Mitral Regurgitation: "Zipping by Clipping"

Stephan Kische, MD, Christoph Nienaber, MD, PhD, and Hüseyin Ince,* MD, PhD









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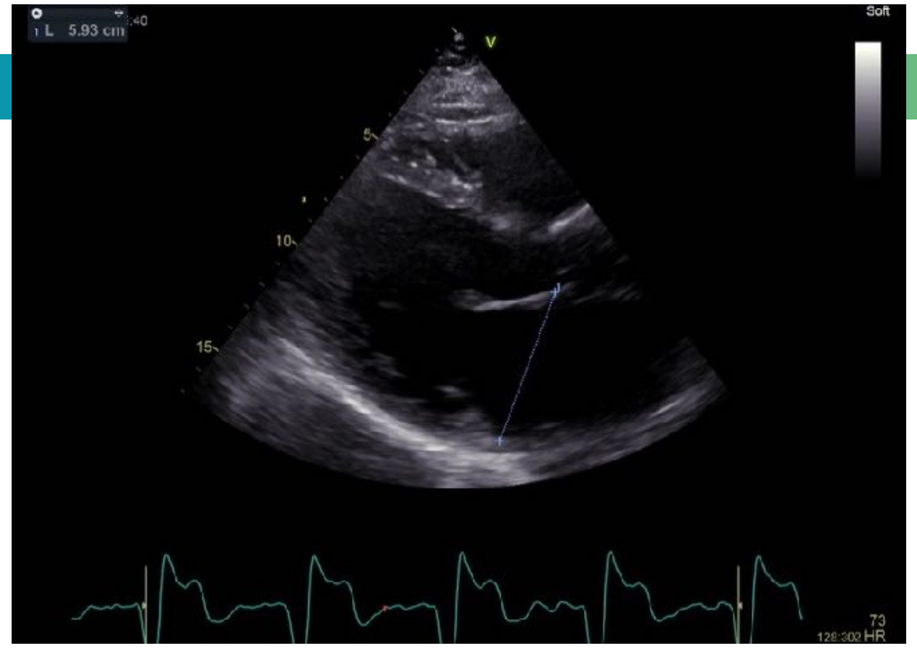
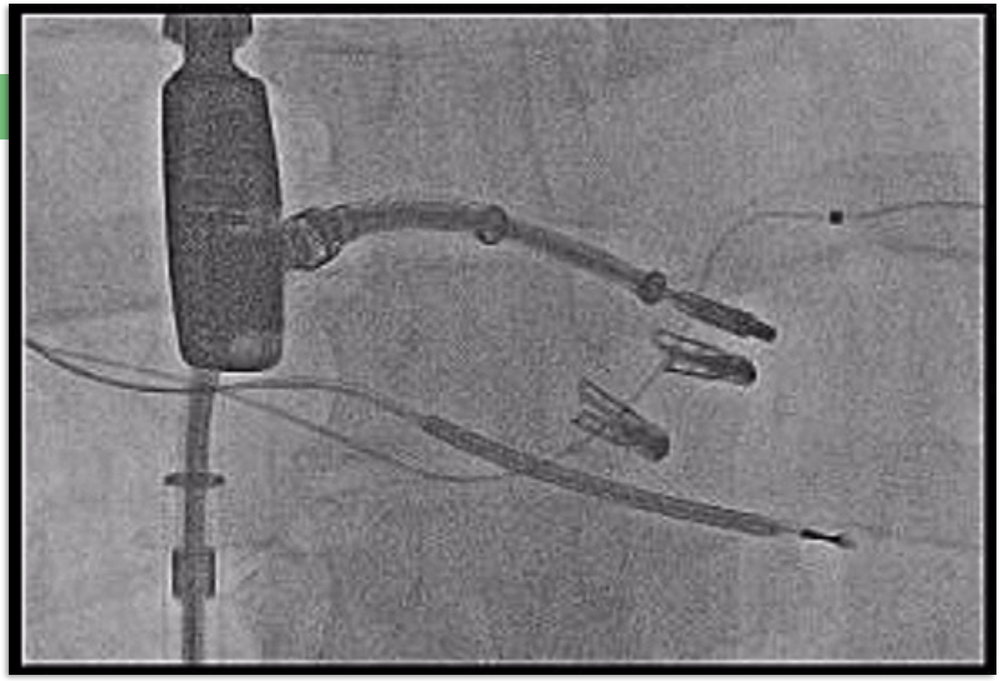
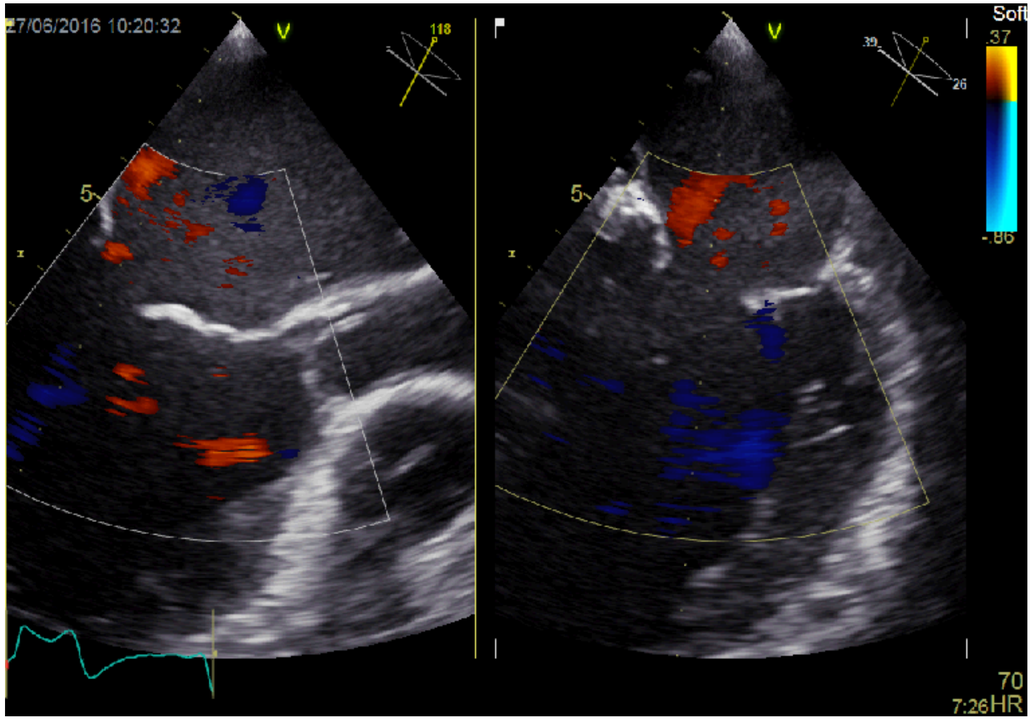
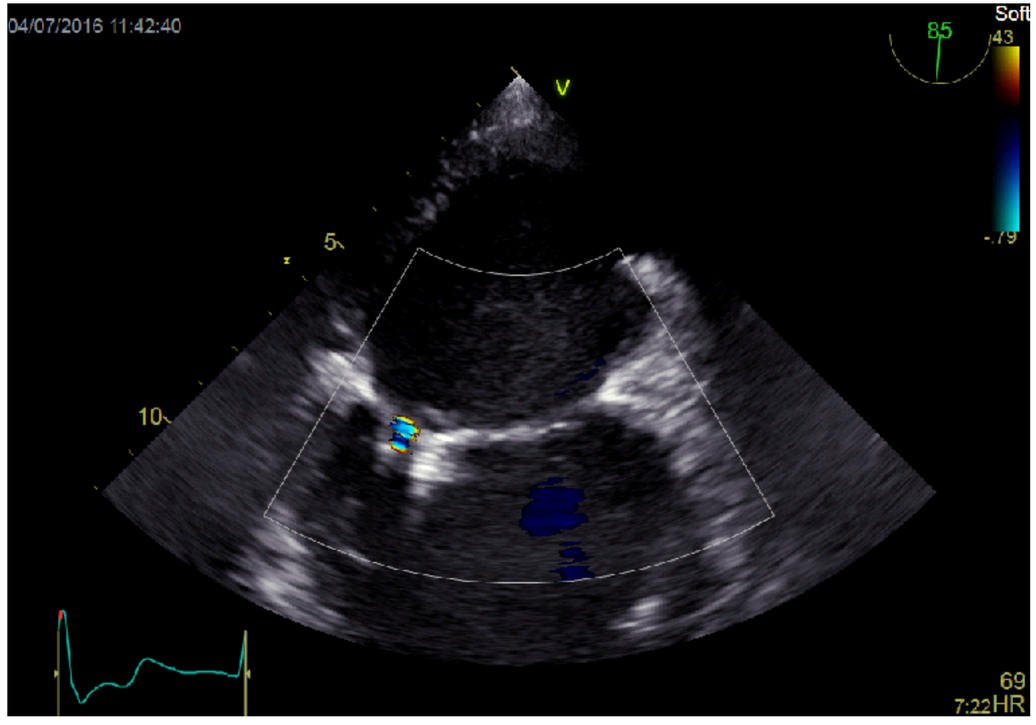
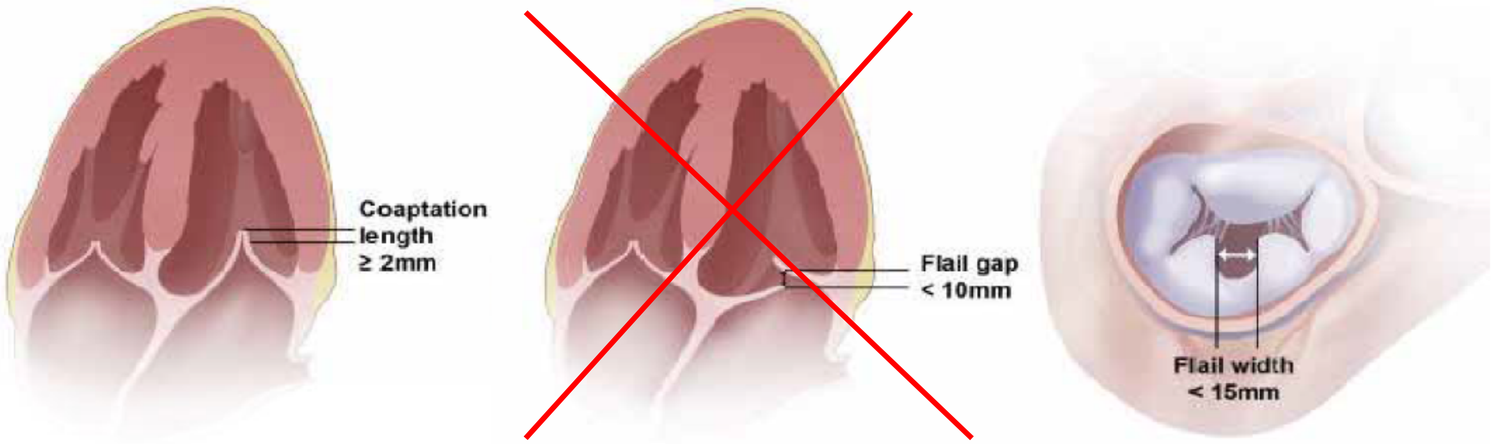










Maury L. Am J Heart 2010

Table 1. Patient selection suitability by echo criteria.

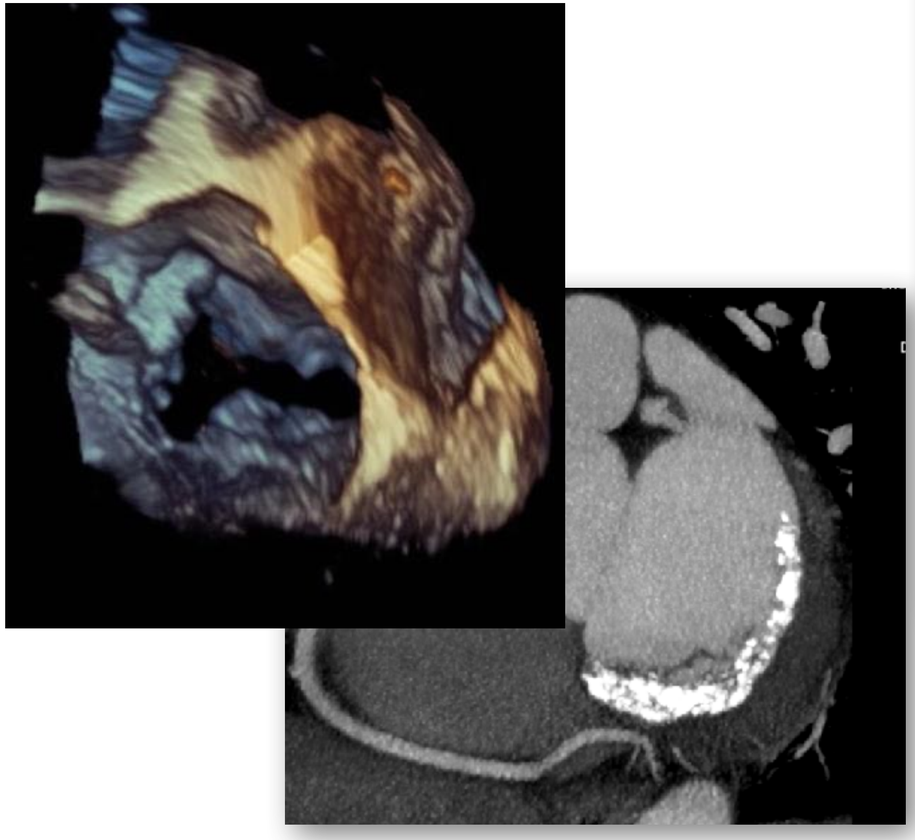
Optimal	Limited suitable	Inappropriate
Pathology in segment 2	Pathology in segment 1 or 3	Leaflet perforation or cleft
No calcification	– Slight calcification outside the grasping area – Ring calcification – Annuloplasty with ring	Severe calcification
Valve area >4 cm²	Valve area >3 cm² & good leaflet mobility	Mitral stenosis (<3 cm², gradient >5 mmHg)
Length of the posterior leaflet >10 mm	Length of the posterior leaflet 7-10 mm	Length of the posterior leaflet <7 mm
Coaptation depth <11 mm	Coaptation depth >11 mm	
Normal thickness and mobility of the leaflets	Restriction (Carpentier IIIB)	Rheumatic thickening and restriction (Carpentier IIIA)
MR with prolapse – Flail size <15 mm – Flail gap <10 mm	Flail size >15 mm only with large mitral annulus and option for more than 1 clip	Barlow's disease
Start-up centres	**Intermediate centres**	**High-volume centres**

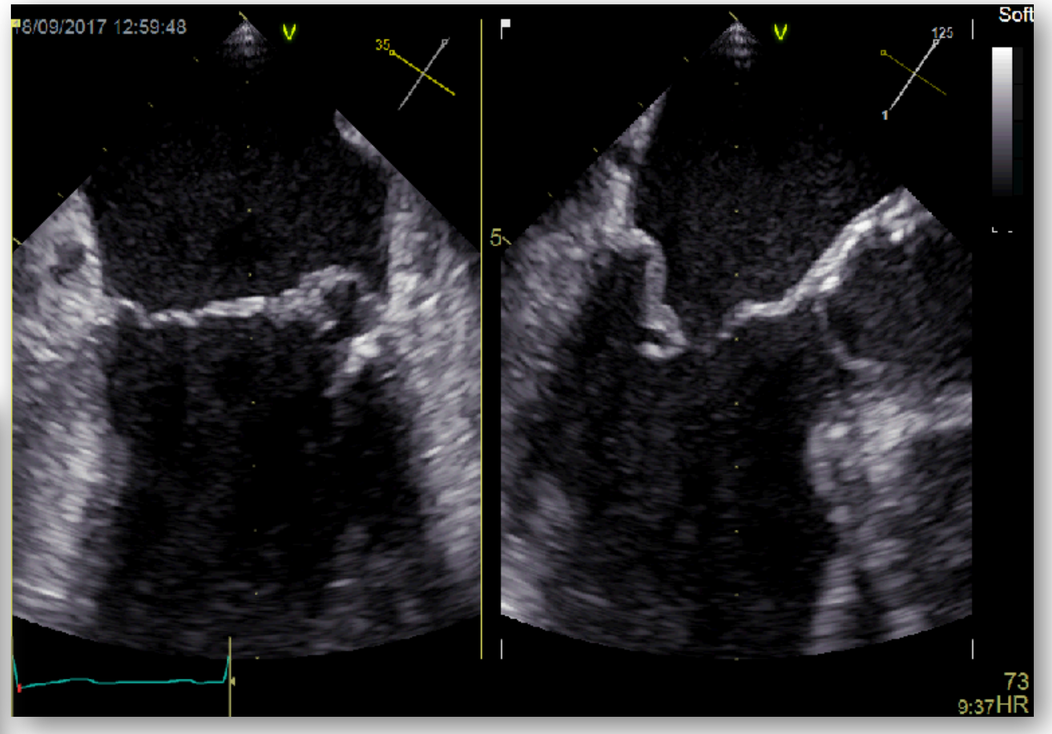
(Adapted from Boekstegers et al)

Grasso C. Eurointervention 2016

Les CI anatomiques

- Barlow
- Calcifications
- Indentation
- RM
- IM < endocardite
- Classe IIIa Carpentier

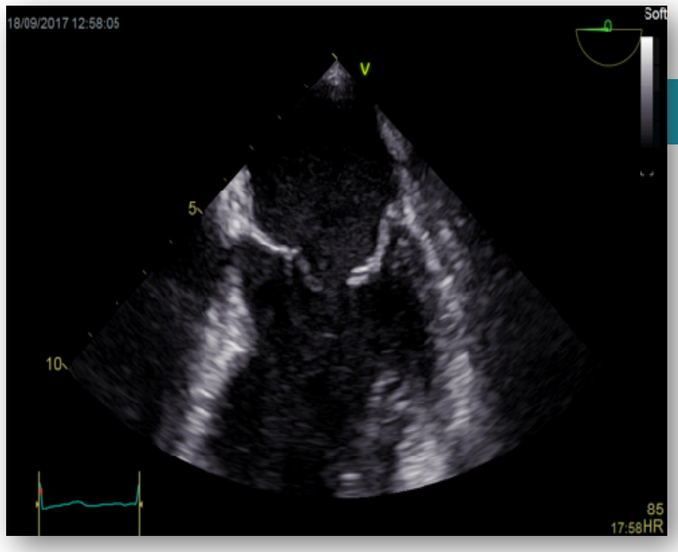




⟶ L’ ETO réalisée spécifiquement dans cette intention par un échographiste « référent Mitraclip » est incontournable

La meilleure option ?

- Quel type d'IM ?
- Quel est le risque opératoire de mon patient ?
- Difficultés techniques prévisibles ?
- L'indication sera-t-elle prise en charge ?



IM primitive

une indication remboursée …

« … *non éligible à la chirurgie…* »

Legifrance.gouv.fr
LE SERVICE PUBLIC DE LA DIFFUSION DU DROIT

JORF n°0286 du 9 décembre 2016
texte n° 19

Arrêté du 7 décembre 2016 portant inscription du système de clip percutané pour valve mitrale MITRACLIP de la société ABBOTT France SAS au titre III de la liste des produits et prestations remboursables prévue à l'article L. 165-1 du code de la sécurité sociale

HAS
HAUTE AUTORITÉ DE SANTÉ

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

AVIS DE LA CNEDiMTS
24 mars 2015

CONCLUSIONS

MITRACLIP, clip de réparation mitrale bord à bord

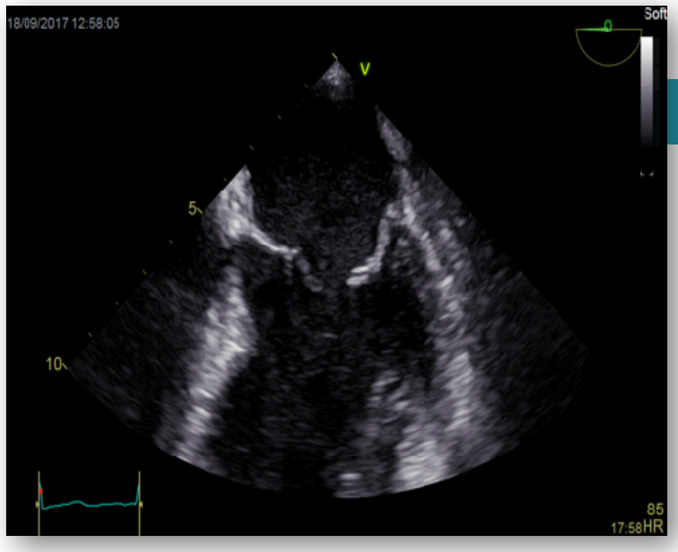
Demandeur : ABBOTT France SAS (France)

Fabricant : Evalve Inc (Etats-Unis)

Les modèles et références retenus sont ceux proposés par le demandeur (cf. page 4)

Indications retenues :	Patients avec insuffisance mitrale sévère, d'origine dégénérative, symptomatique malgré une prise en charge médicale optimale, non éligibles à la chirurgie de réparation ou de remplacement valvulaire et répondant aux critères échocardiographiques d'éligibilité. Tous ces critères et en particulier la contre-indication chirurgicale doivent être validés par une équipe multidisciplinaire *ad hoc* Les patients ayant une espérance de vie inférieure à un an compte tenu de comorbidités extracardiaques ne sont pas éligibles à la technique (non indication)

Comparateur retenu :	Absence d'alternative
Amélioration du SA :	**ASA de niveau II**
Type d'inscription :	Nom de marque
Durée d'inscription :	5 ans



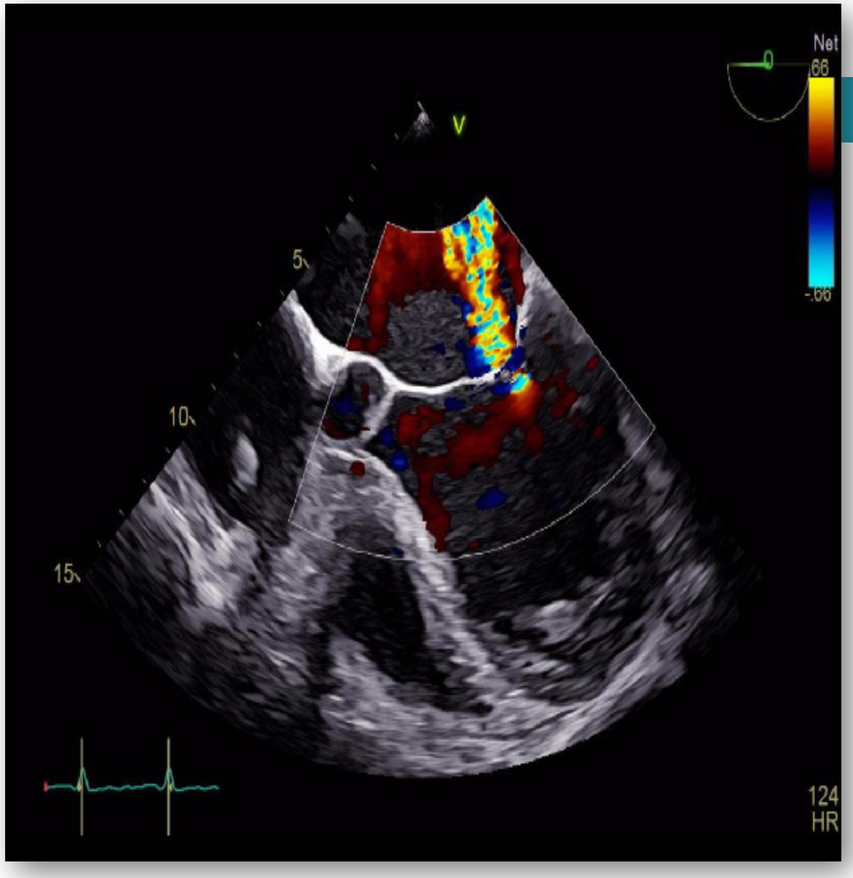
Un PHRC en cours…

« …*risque chirurgical élevé*… »

Mitra HR: Multicentre and randomized study of MITRACLIP® transcatheter mitral valve repair in patients with severe primary mitral regurgitation eligible for high-risk surgery

Aim : to perform the first randomized trial showing the non-inferiority of MitraClip® versus Surgery at 12 months after the procedure for patient with a severe primary mitral regurgitation with high surgical risk

PI: Pr P. Guérin- CHU de Nantes



IM secondaire

European Heart Journal (2016) 37, 2129–2200
doi:10.1093/eurheartj/ehw128

ESC GUIDELINES

2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure

The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC)

Indication non remboursée

In patients with HF with moderate-severe, secondary mitral regurgitation who are judged inoperable or at high surgical risk, percutaneous mitral valve intervention (percutaneous edge-to-edge repair) may be considered in order to improve symptoms and quality of life, although no RCT evidence of improvement has been published, only registry studies.[504–506]

ESC European Society of Cardiology
European Heart Journal (2017) 00, 1–53
doi:10.1093/eurheartj/ehx391

ESC/EACTS GUIDELINES

2017 ESC/EACTS Guidelines for the management of valvular heart disease

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)

When revascularization is not indicated and surgical risk is not low, a percutaneous edge-to-edge procedure may be considered in patients with severe secondary mitral regurgitation and LVEF >30% who remain symptomatic despite optimal medical management (including CRT if indicated) and who have a suitable valve morphology by echocardiography, avoiding futility.	IIb	C

5 6 7 JUIN 2019

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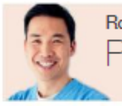
Cardiovascular News
Feb 19 | Issue 52

David Kandzari: Orsiro vs. Xience
Page 8



Robert Yeh: Profile
Page 18

Massimiliano Gnecchi: Cell therapy
Page 28

Audience applauds as MitraClip shown to reduce heart failure hospitalisations

Delegatee at the 2018 Transcatheter Cardiovascular Therapeutica (TCT) meeting (21-25 September, San Diego, USA) broke into spontaneous applause after Gregg Stone (Columbia University Medical Center, Cardiovascular Reseearch Foundation, New York, USA) reported that, according to the results of the COAPT trial, percutaneous edge-to-edge repair (MitraClip, Abbott) for the management of secondary mitral regurgitation significantly reducee the rate of heart failure hospitalieations at twoo yeare. Stone garnered further applause when he revealed MitraClip reduces all-cause mortality.

The COAPT (Cardiovascular outcomes assessment of the MitraClip percutaneous therapy for heart failure patients with functional mitral regurgitation) trial was easily the most hotly anticipated trial of TCT. Just under a month before TCT, MITRA-FR was presented at the 2018 European Society of Cardiology (ESC) Congress (25–29 August, Munich, Germany) and indicated that MitraClip for secondary mitral regurgitation did not provide a prognostic benefit. Prior to MITRA-FR, no data were available for the beneficial effect of MitraClip (for secondary mitral regurgitation) on hard outcomes. Therefore, many at TCT were eager to see if COAPT would confirm or refute the findings of MITRA-FR.

In COAPT, 614 patients with moderate-to-severe (3+) or severe (4+) secondary mitral regurgitation were randomised to receive MitraClip plus guideline-directed medical therapy (302) or guideline-directed medical therapy alone (312). According to Stone, a "key aspect" of the study was that enrolled patients met the eligibility criteria, "especially the use of maximally-tolerated guideline-directed medical therapy for heart failure". He stated that enrolment of patients who were not receiving the maximal tolerated doses of therapy was deferred and these patients could be represented if suitable therapy had been instituted and the patient was still symptomatic. However, Stone revealed that none of the deferred patients came back. While admitting some of these patients died, he reported that others "did do better" after their medical therapy was revised and, thus, did not need to come back. This policy meant that there were few major changes in heart failure medication during follow-up. By contrast, in line with real-world practice, the protocol of MITRA-FR allowed variable adjustment in heart failure medication after baseline.

Gregg Stone

The primary effectiveness endpoint of COAPT was the annualised rate of all heart failure hospitalisations through 24 months and the primary safety endpoint was freedom from device-related complications at 12 months (in MITRA-FR, the primary outcome was the rate of all-cause mortality and unplanned heart failure hospitalisations at 12 months). Stone reported that the primary effectiveness endpoint was significantly reduced in the MitraClip group at two years: 160 events vs. 283 for guideline-directed medical therapy alone group ($p<0.01$). Upon hearing this result, the audience burst into applause and Stone had to wait for them to stop clapping before revealing the number needed to treat with MitraClip to prevent one heart failure hospitalisation was three. He added that the primary safety endpoint was also met: 96.6% freedom from device-related complications vs. a performance goal of 88% ($p<0.001$).

Further applause from the audience came when Stone announced that all 10 of the powered secondary endpoints were met. In particular, MitraClip was

Continued on page 2

IVUS-guided PCI reduces target vessel failure in all-comers population

Jun-jie Zhang (Department of Cardiology, Nanjing First Hospital, Nanjing Medical University, Nanjing, China) and others report in the *Journal of American College of Cardiology* that percutaneous coronary intervention (PCI) guided by intravascular ultrasound (IVUS) is associated with a significantly lower rate of clinically-driven target vessel failure in all-comers patients than is angiography-guided PCI. This is the first time that benefits of the IVUS-guided PCI have been shown in an all-comers population.

ZHANG *ET AL* report that data for the benefit of IVUS-guided PCI for simple lesions is "unclear". "Moreover, whether the beneficiary effect of IVUS-guidance is still present in the modern drug-eluting era still remains to be unknown, the authors add. They write: "Accordingly, this prospective, multicentre, randomised trial was designed to compare the efficacy and safety between IVUS-guided and angiography-guided second-generation drug-eluting stent implantation in all-comers patients with coronary artery disease."

In the study, 1,448 patients were randomised to undergo angiography-guided PCI (724) or IVUS-guided PCI (724). The authors report that optimal stent implantation with angiography guidance was defined as "thrombolysis in myocardial infarction grade 3, residual stenosis <20, and the absence of atype B dissection" while optimal stent implantation with IVUS was defined as "minimum lumen area in the stented segment >5mm² or 90% of the minimum lumen area at the distal reference segments, plaque burden at the 5mm proximal or distal to the stent edge <60%, and no edge dissection involving media with

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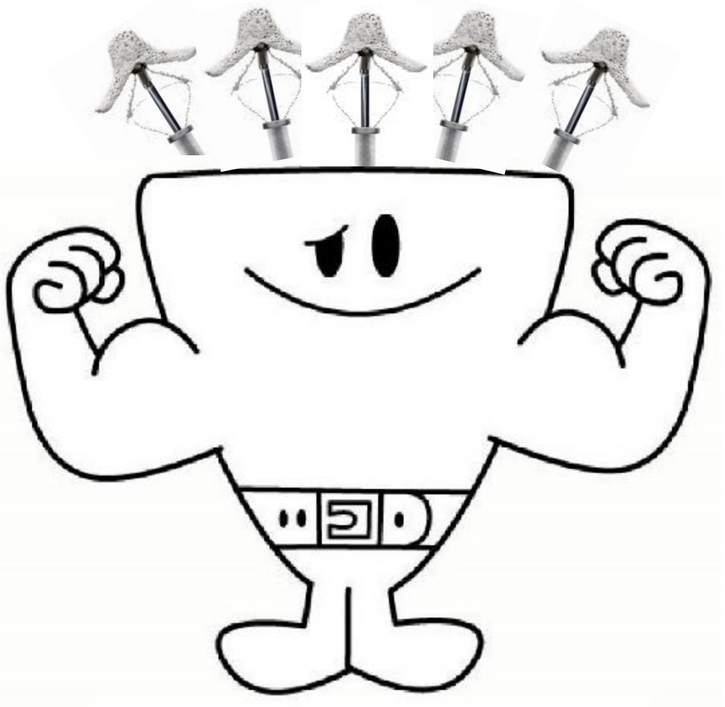
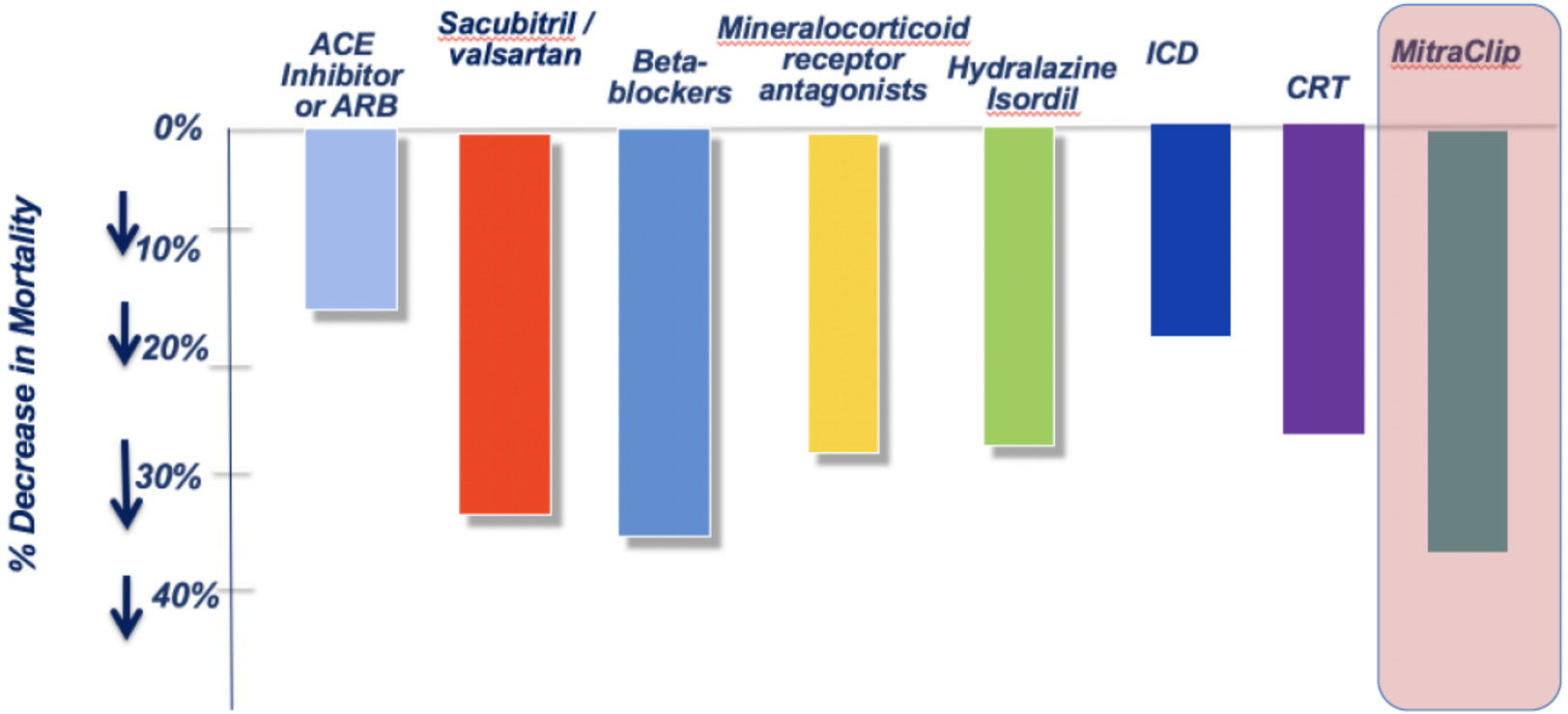
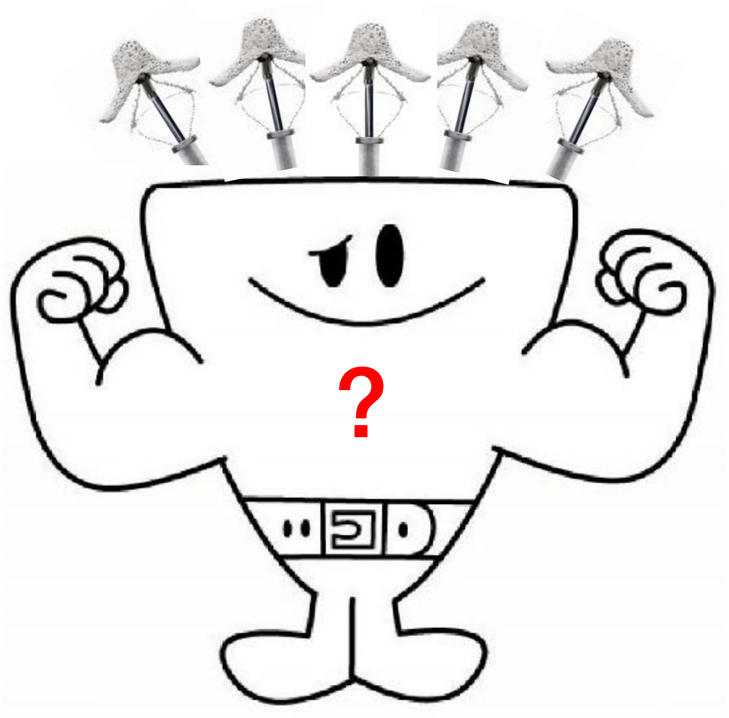






EuroPCR 2019

Mitra fr

Study Design*

Objective ➔ to evaluate the clinical efficacy of percutaneous mitral valve repair in addition to medical treatment in patients with heart failure and severe functional/secondary mitral regurgitation versus medical treatment alone.

Primary Endpoint "Composite" ➔ All-Cause Deaths or Unplanned rehospitalization for Heart failure at 12 months

ESC Congress
Munich 2018

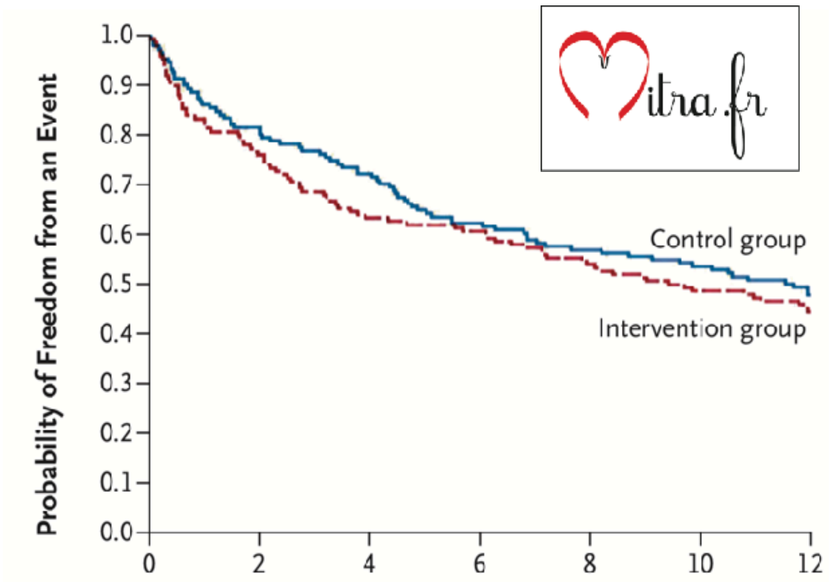
* *Obadia et al. Eurointervention 2015;10:1354-1360*

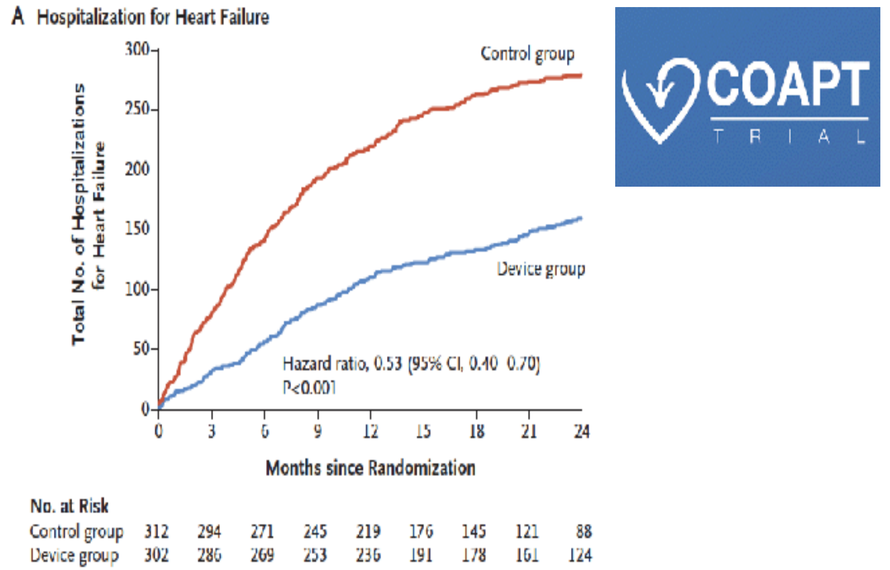
Cardiovascular Outcomes Assessment of the MitraClip in Patients with Heart Failure and Secondary Mitral Regurgitation: Design and rationale of the COAPT trial

Michael J. Mack, MD,[a] William T. Abraham, MD,[b] JoAnn Lindenfeld, MD,[c] Steven F. Bolling, MD,[d] Ted E. Feldman, MD,[e] Paul A. Grayburn, MD,[f] Samir R. Kapadia, MD,[g] Patrick M. McCarthy, MD,[h] D. Scott Lim, MD,[i] James E. Udelson, MD,[j] Michael R. Zile, MD,[k] James S. Gammie, MD,[l] A. Marc Gillinov, MD,[m] Donald D. Glower, MD,[n] David A. Heimansohn, MD,[o] Rakesh M. Suri, MD,[p] Jeffrey T. Ellis, PhD,[q] Yu Shu, PhD,[q] Saibal Kar, MD,[r] Neil J. Weissman, MD,[*] and Gregg W. Stone, MD[t]
Dallas, TX; Columbus, OH; Nashville, TN; Ann Arbor, MI; Evanston, IL; Cleveland, OH; Chicago, IL; Charlottesville, VA; Boston, MA; Charleston, SC; Baltimore, MD; Durham, NC; Indianapolis, IN; Santa Clara, CA; Los Angeles, CA; Hyattsville, MD; and New York, NY

Background Patients with heart failure (HF) and symptomatic secondary mitral regurgitation (SMR) have a poor prognosis, with morbidity and mortality directly correlated with MR severity. Correction of isolated SMR with surgery is not well established in this population, and medical management remains the preferred approach in most patients. The Cardiovascular Outcomes Assessment of the MitraClip Percutaneous Therapy for Heart Failure Patients with Functional Mitral Regurgitation (COAPT) trial was designed to determine whether transcatheter mitral valve (MV) repair with the MitraClip device is safe and effective in patients with symptomatic HF and clinically significant SMR.

Study design The COAPT trial is a prospective, randomized, parallel-controlled, open-label multicenter study of the MitraClip device for the treatment of moderate-to-severe (3+) or severe (4+) SMR (as verified by an independent echocardiographic core laboratory) in patients with New York Heart Association class II-IVa HF despite treatment with maximally tolerated guideline-directed medical therapy (GDMT) who have been determined by the site's local heart team as not appropriate for MV surgery. A total of 614 eligible subjects were randomized in a 1:1 ratio to MV repair with the MitraClip plus GDMT versus GDMT alone. The primary effectiveness end point is recurrent HF hospitalizations through 24 months, analyzed when the last subject completes 12-month follow-up, powered to demonstrate superiority of MitraClip therapy. The primary safety end point is a composite of device-related complications at 12 months compared to a performance goal. Follow-up is ongoing, and the principal results are expected in late 2018.



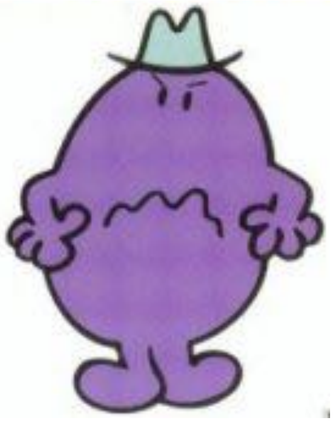


The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Percutaneous Repair or Medical Treatment for Secondary Mitral Regurgitation

J.-F. Obadia, D. Messika-Zeitoun, G. Leurent, B. Iung, G. Bonnet, N. Piriou, T. Lefèvre, C. Piot, F. Rouleau, D. Carrié, M. Nejjari, P. Ohlmann, F. Leclercq, C. Saint Etienne, E. Teiger, L. Leroux, N. Karam, N. Michel, M. Gilard, E. Donal, J.-N. Trochu, B. Cormier, X. Armoiry, F. Boutitie, D. Maucort-Boulch, C. Barnel, G. Samson, P. Guerin, A. Vahanian, and N. Mewton, for the MITRA-FR Investigators*



The NEW ENGLAND JOURNAL of MEDICINE

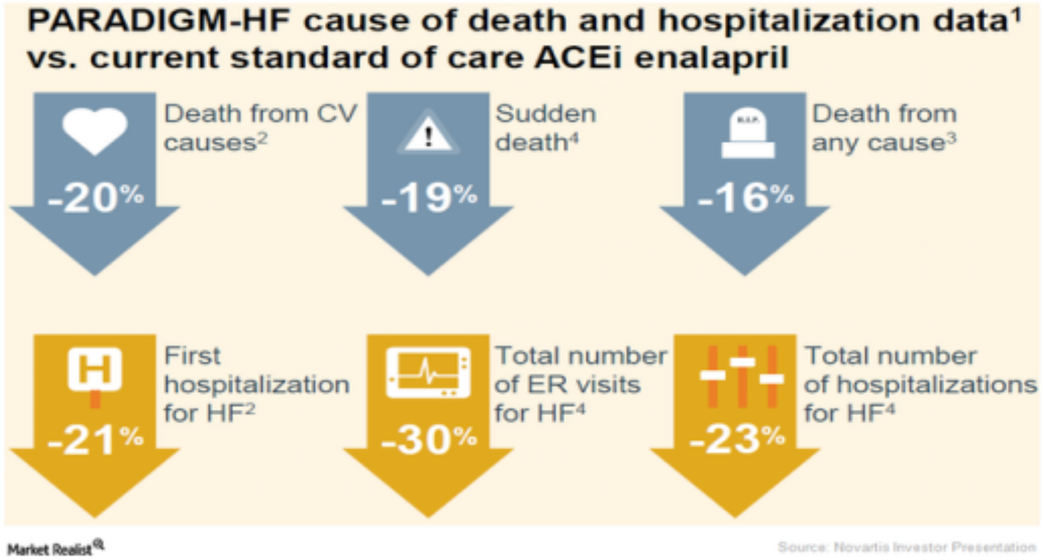
ORIGINAL ARTICLE

Transcatheter Mitral-Valve Repair in Patients with Heart Failure

G.W. Stone, J.A. Lindenfeld, W.T. Abraham, S. Kar, D.S. Lim, J.M. Mishell, B. Whisenant, P.A. Grayburn, M. Rinaldi, S.R. Kapadia, V. Rajagopal, I.J. Sarembock, A. Brieke, S.O. Marx, D.J. Cohen, N.J. Weissman, and M.J. Mack, for the COAPT Investigators*

Un groupe contrôle traité différemment

GDMT at baseline and FU	Receiving HF meds at baseline – allowed variable adjustment in each group during follow-up per "real-world" practice	CEC confirmed pts were failing maximally-tolerated GDMT at baseline – few major changes during follow-up



5 6 7 JUIN 2019

The PRIME study

Kang et al. Circulation 2019

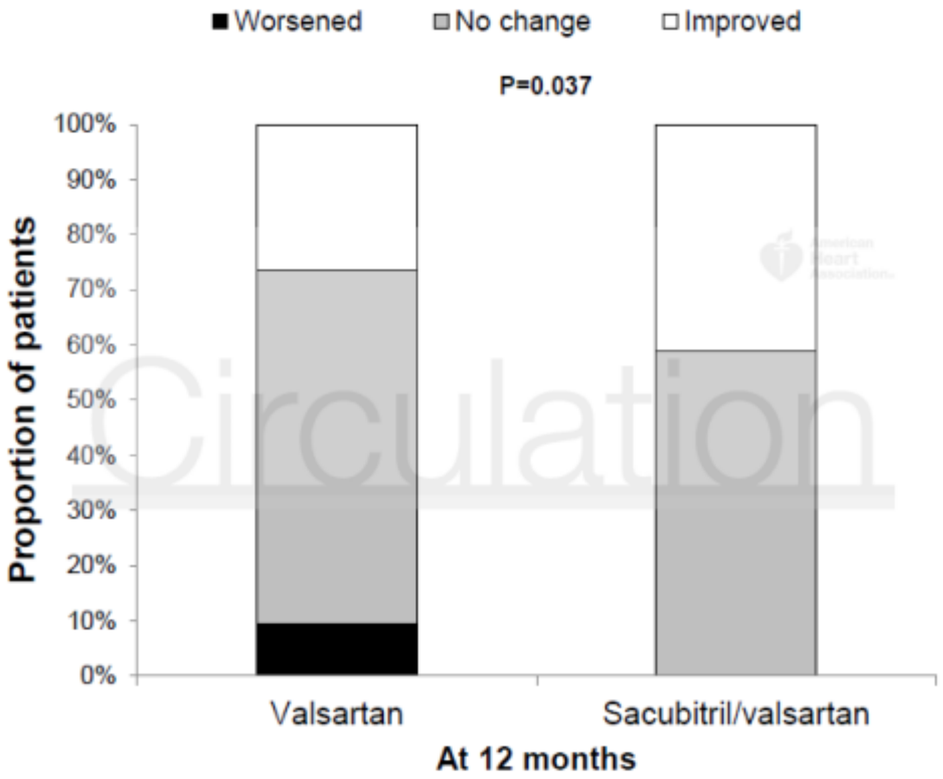
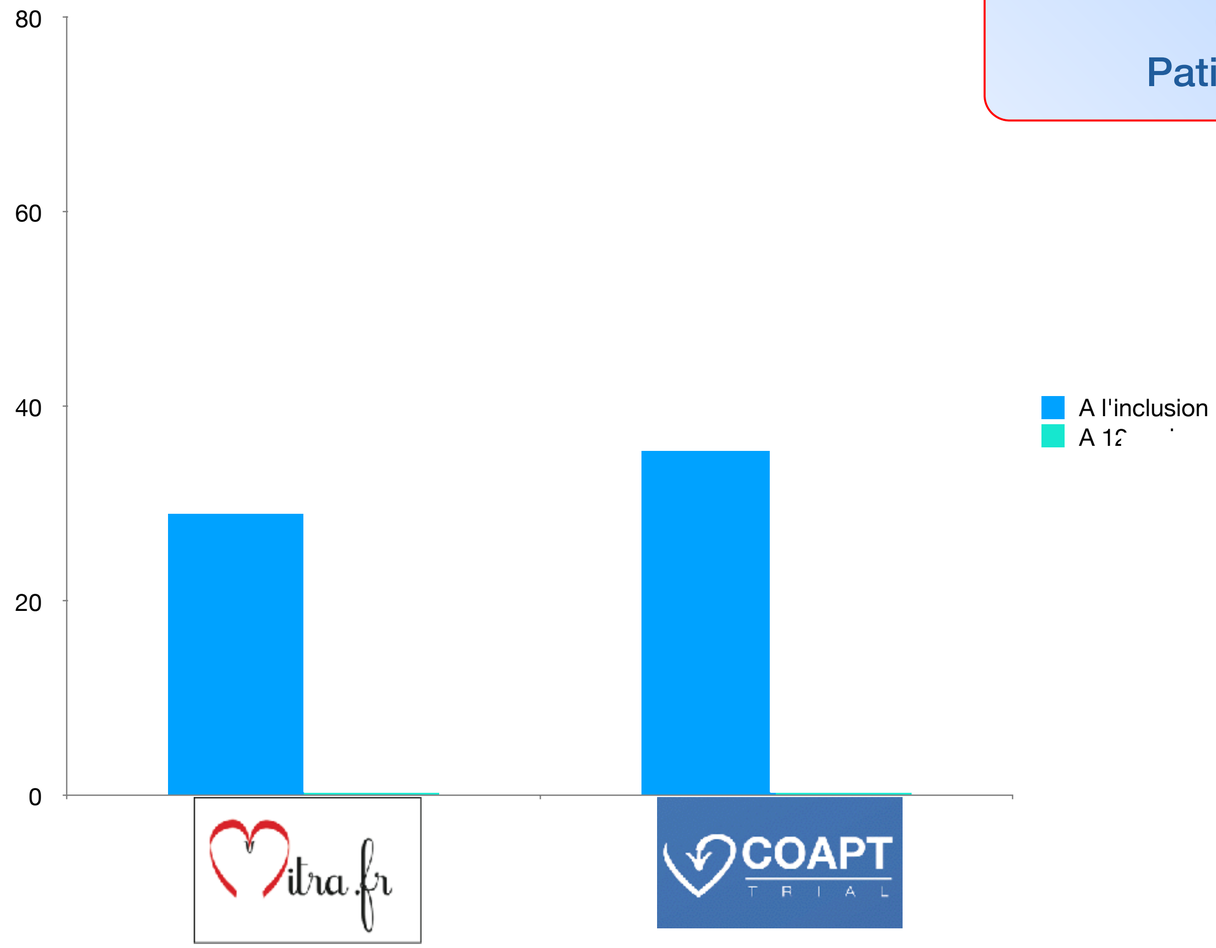


Table 3. Intention-to-treat Outcomes According to Treatment group

Outcome	Baseline			Follow-up			Change			
	Valsartan	Sacubitril/ valsartan	P value	Valsartan	Sacubitril/ valsartan	P value	Valsartan	Sacubitril/ valsartan	Difference (95%CI)	P value*
	n=58	n=59		n=58	n=59		n=58	n=59		
Primary endpoint										
EROA of MR – cm^2	0.210±0.107	0.195±0.094	0.41	0.192±0.161	0.137±0.089	0.022	-0.018±0.105	-0.058±0.095	-0.040 (-0.076 to -0.094)	0.032
Secondary endpoint										
Regurgitant volume – ml	35.9±17.4	34.7±14.7	0.69	31.6±23.7	23.1±13.3	0.019	-4.3±15.1	-11.6±14.4	-7.3 (-12.6 to -1.9)	0.009
End-systolic volume – ml	144.9±66.9	126.3±50.1	0.09	135.1±70.2	110.7±57.4	0.042	-9.9±31.0	-15.6±26.0	-5.7 (-16.1 to 4.6)	0.28
ESVI – ml/m^2	81.1±32.9	74.6±29.5	0.26	75.7±36.1	65.1±31.2	0.09	-5.4±17.1	-9.5±15.1	-4.2 (-10.1 to 1.7)	0.16
End-diastolic volume – ml	212.0±83.5	189.6±62.6	0.10	202.9±84.6	170.0±66.9	0.021	-9.0±35.9	-19.6±29.8	-10.6 (-22.5 to 1.3)	0.08
EDVI – ml/m^2	119.0±40.4	111.8±36.6	0.31	114.2±42.6	100.0±36.4	0.055	-4.8±19.9	-11.8±17.3	-7.01 (-13.83 to -0.19)	0.044
ILCA – cm^2	1.73±0.48	1.62±0.48	0.21	1.57±0.57	1.42±0.46	0.11	-0.16±0.42	-0.20±0.36	-0.04 (-0.18 to -0.10)	0.58

Groupes contrôles:
Patient en stade NYHA ≤ II



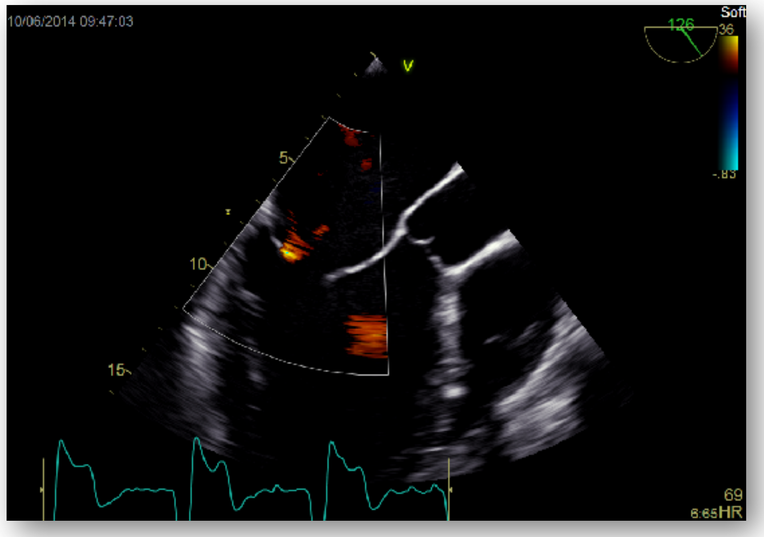
Un effet courbe d'apprentissage ?

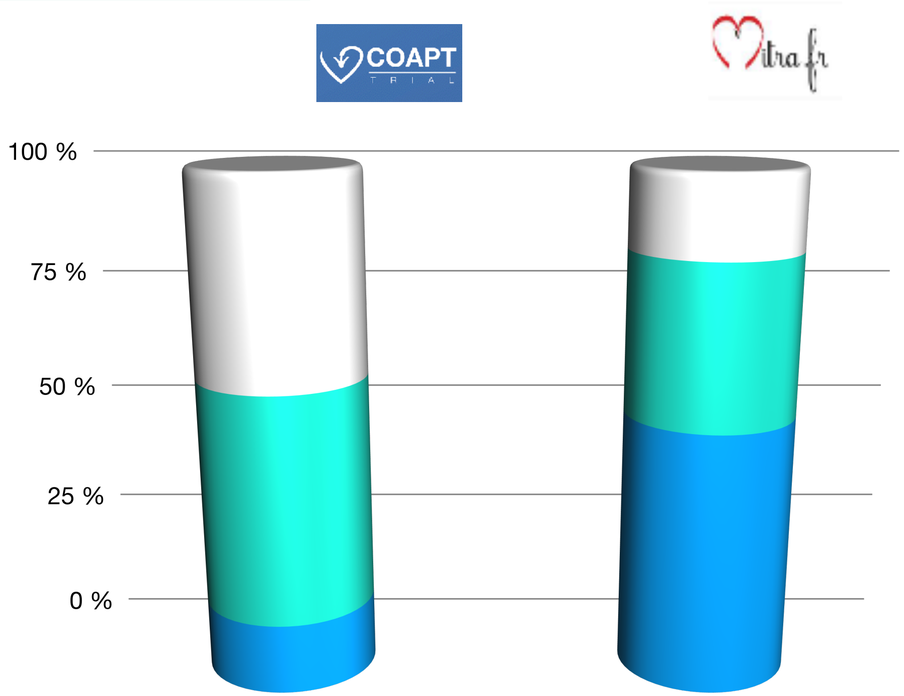
	Mitra.fr	COAPT TRIAL
Technical device success	95.8 %	98%
	↓	↓
	Procédures à 1 clip	
	45,7%	36,2%
MR ≤ 2 à M12	81 %	94.8 %

Des populations différentes …

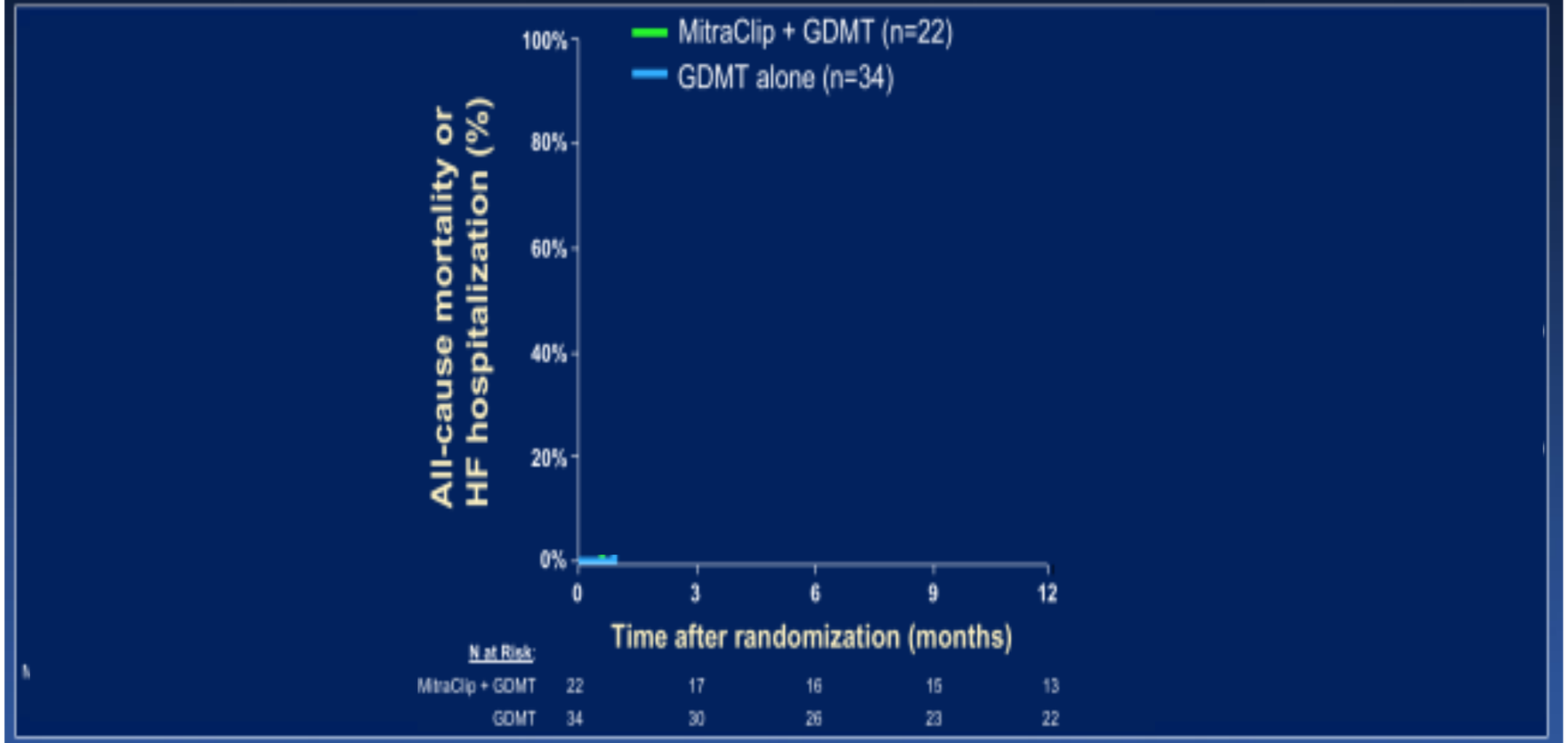
	COAPT TRIAL	Mitra.fr
	n=614	**n= 304**
Critères d'inclusion		
-FEVG (%)	20-50	15-40
-SOR (mm²)	> 30	> 20
-Diamètre télédiastolique VG (mm)	< 70	Non spécifié
Population incluse		
-FEVG	31 ±9	33 ±6
-SOR	41 ±15	31 ±10
-VTDVG indexé (ml/m²)	101 ±34	135 ±35

	COAPT TRIAL n=614	Mitra.fr n= 304
Population incluse		
-FEVG	31 ±9	33 ±6
-SOR	41 ±15	31 ±10
-VTDVG indexé (ml/m²)	101 ±34	135 ±35





LVEDVI >96 ml/m² + EROA ≤30 mm²



COAPT TRIAL

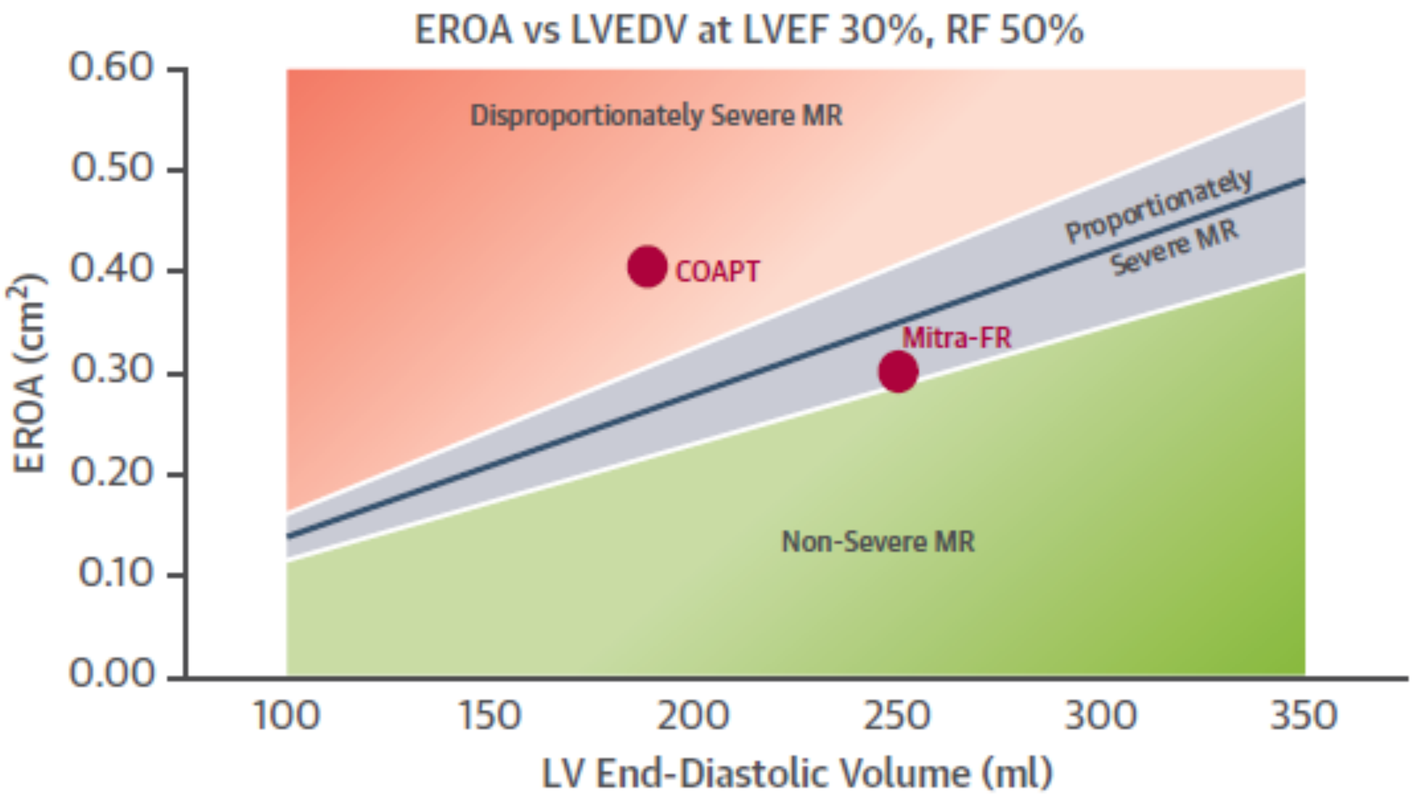
EDITORIALS AND VIEWPOINTS

Proportionate and Disproportionate Functional Mitral Regurgitation

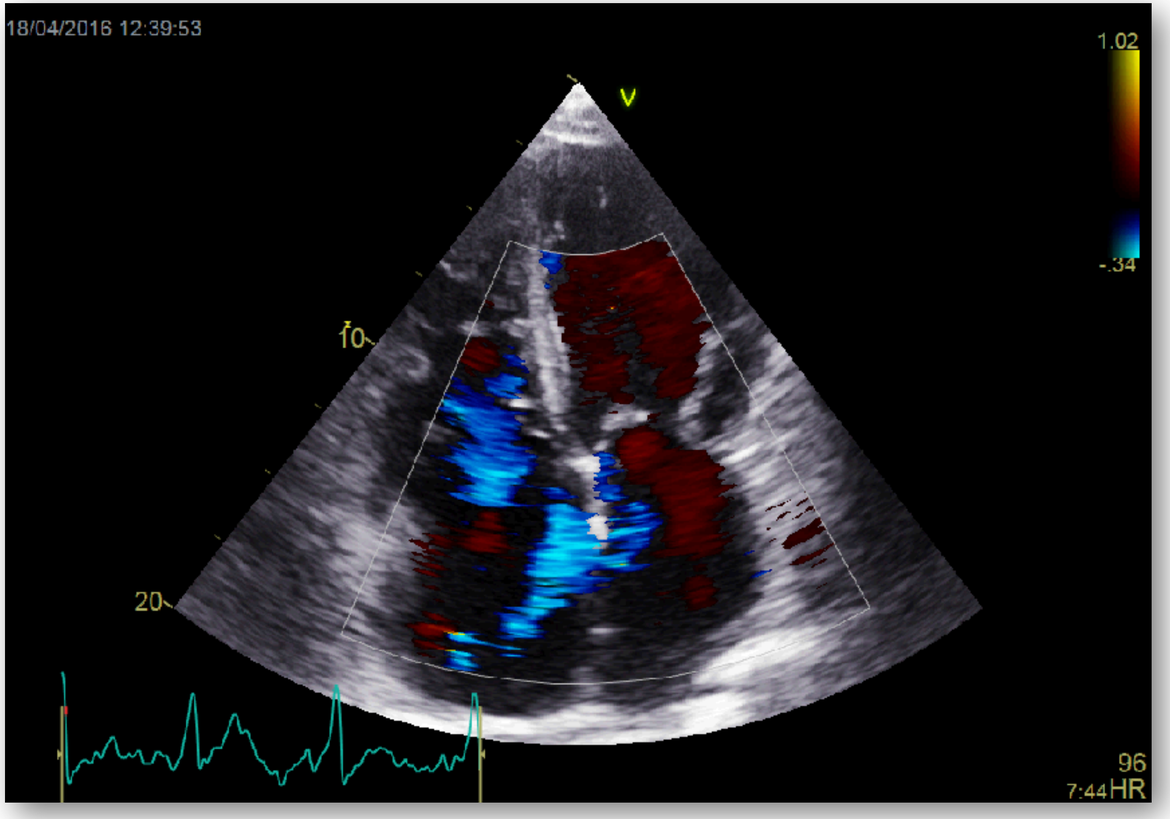
A New Conceptual Framework That Reconciles the Results of the MITRA-FR and COAPT Trials

Paul A. Grayburn, MD, Anna Sannino, MD, Milton Packer, MD

FIGURE 2 Relationship Between EROA and LVEDV Illustrating Domains That Define Disproportionately Severe, Proportionately Severe, and Nonsevere Functional Mitral Regurgitation



Les mauvaises indications



One-year outcomes and predictors of mortality after MitraClip therapy in contemporary clinical practice: results from the German transcatheter mitral valve interventions registry

Miriam Puls[1*], Edith Lubos[2], Peter Boekstegers[3], Ralph Stephan von Bardeleben[4], Taoufik Ouarrak[5], Christian Butter[6], Christine S. Zuern[7], Raffi Bekeredjian[8], Horst Sievert[9], Georg Nickenig[10], Holger Eggebrecht[11], Jochen Senges[5†], and Wolfgang Schillinger[1,12†]

Table 4 Predictors of 1-year mortality in the transcatheter mitral valve interventions registry cohort

	Multivariable analysis (Cox regression model)	
	HR (95% CI)	P
Age >75 years	1.29 (0.90–1.87)	0.16
Female gender	1.13 (0.78–1.64)	0.53
NYHA IV	1.62 (1.10–2.40)	0.02
Anaemia	2.44 (1.16–5.12)	0.02
Previous aortic valve intervention	2.12(1.32–3.41)	0.002
Creatinine ≥1.5 mg/dL	1.77 (1.24–2.54)	0.002
Peripheral artery disease	2.12 (1.41–3.20)	0.0003
LVEF <30%	1.58 (1.10–2.31)	0.01
Severe tricuspid regurgitation	1.84 (1.23–2.77)	0.003
Procedural failure[a]	4.36 (2.37–8.02)	<0.0001

Conclusion

- Un patient éligible à la chirurgie (risque faible ou intermédiaire) doit être opéré
- Elargissement possible des critères Everest 2 dans les centres expérimentés
- Screening écho ++: faisabilité anatomique ?
- IM secondaire: traiter les IM dysproportionnées, patient avec bon pronostic

⟶ *discussion collégiale: spécialiste insuff. cardiaque, échographiste, cardio interv., chir, anesth …*

guillaume.leurent@chu-rennes.fr