

...Une nécessité de sanctuarisation du TAVI



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Conglits d'intérêt

-Consultant for

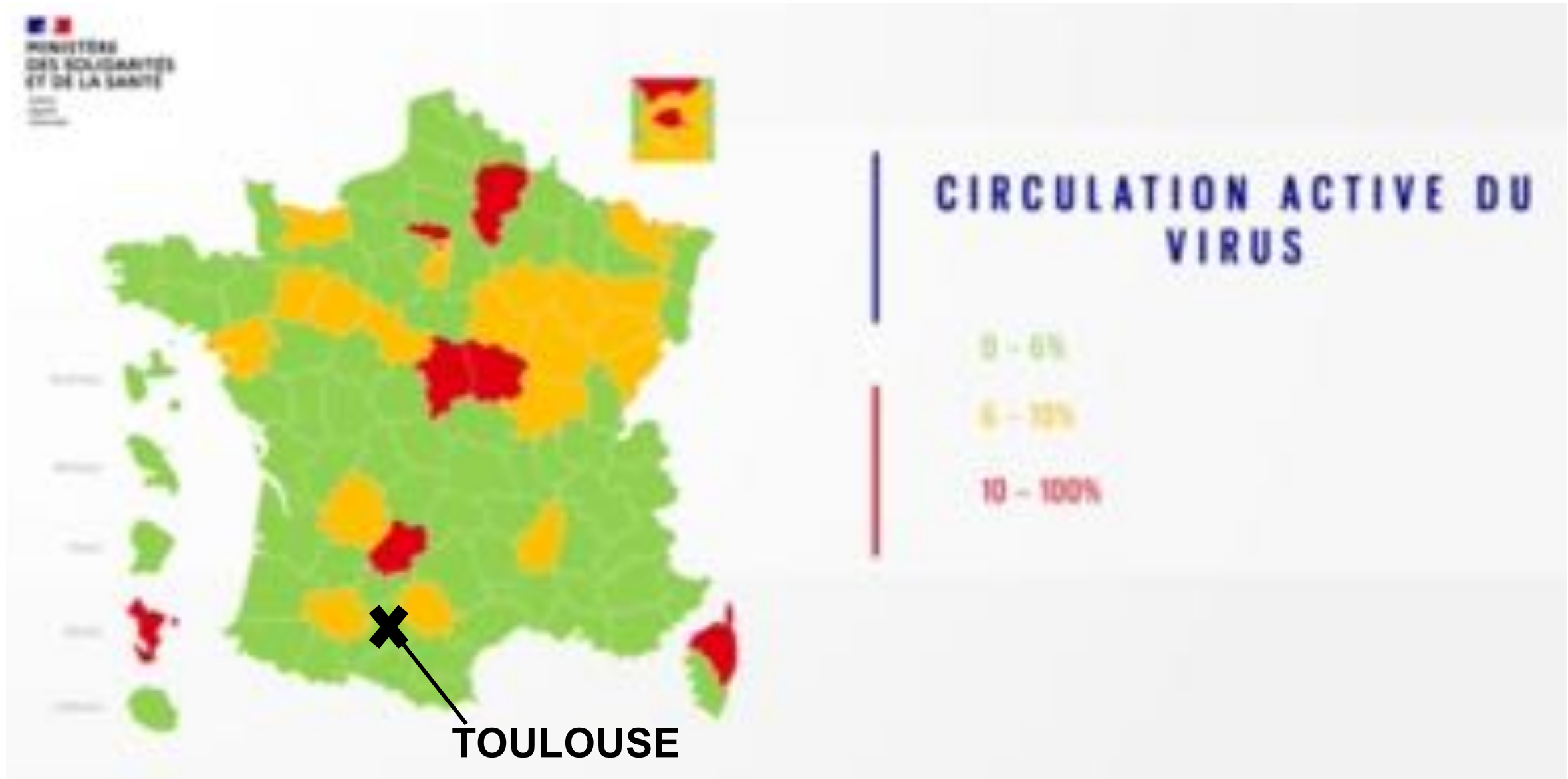
Abbott/Boston Sci/Edwards/Medtronic/T Heart

Sanctuarisation

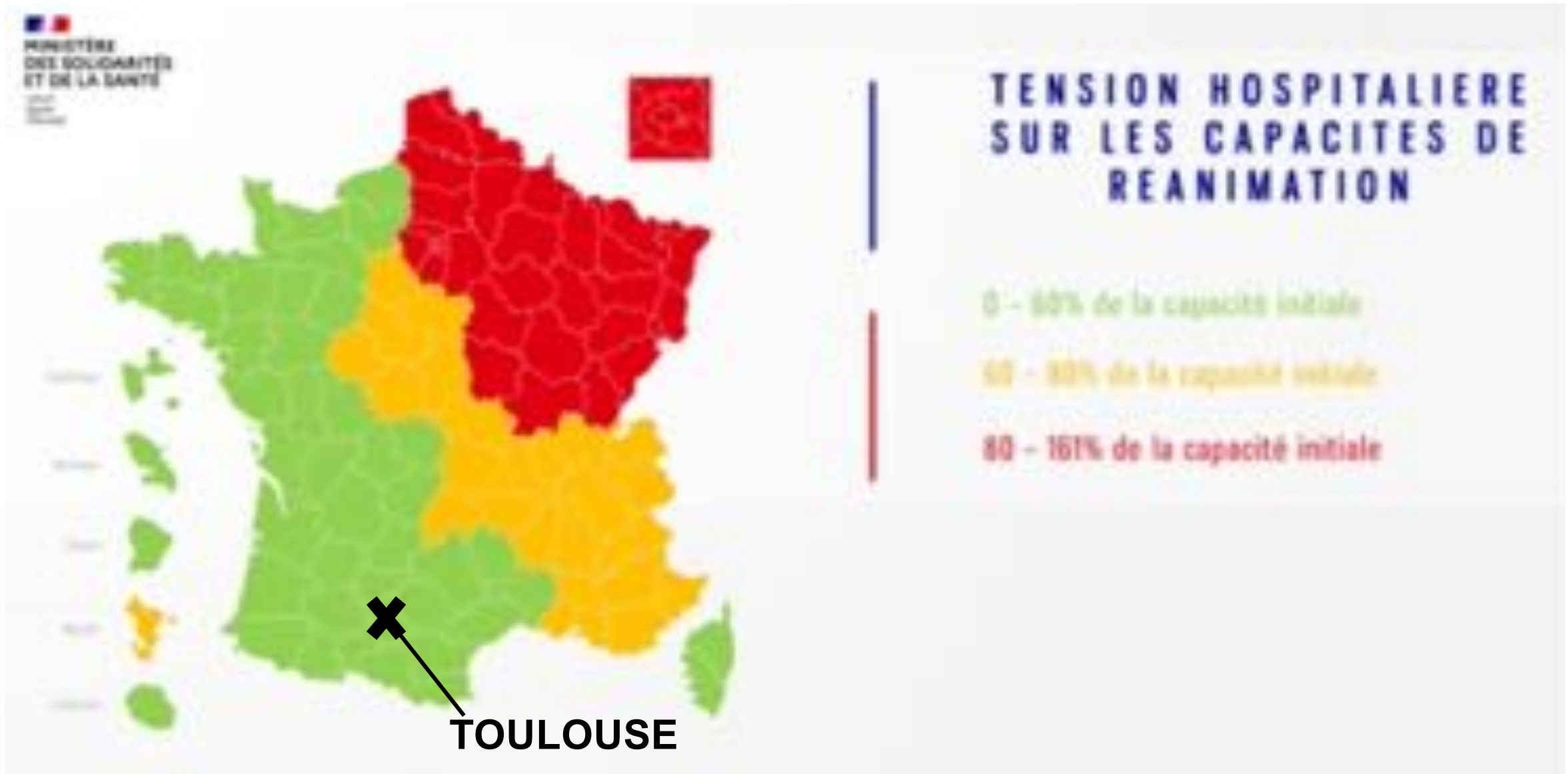
- Action de sanctuariser, de **rendre permanent ou intangible.**

Impact de la pandémie COVID-19

COVID-19 OUTBREAK EVOLUTION On APRIL 30TH



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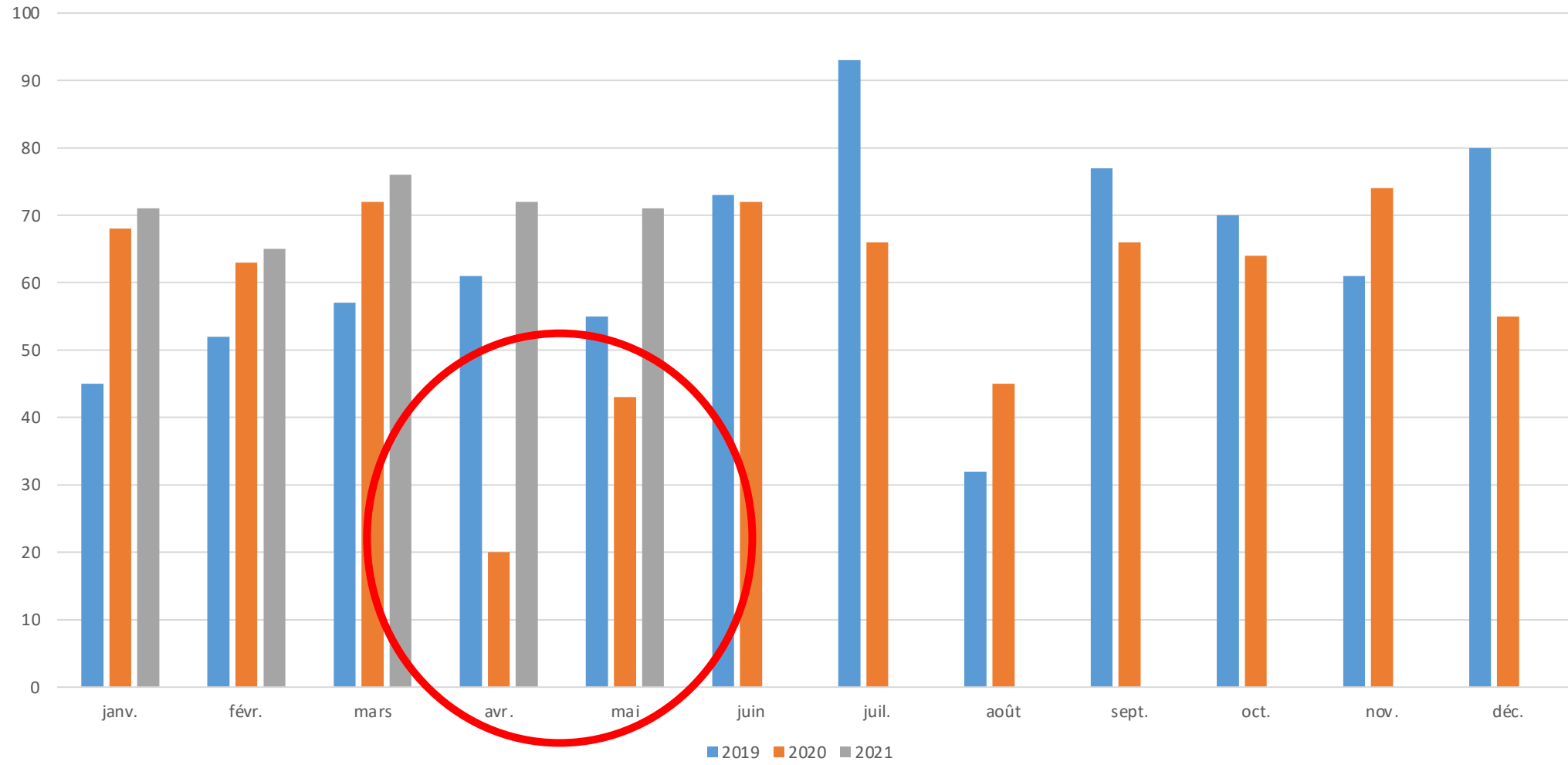


Réorganisation imposée par l'ARS

Unité COVID, Réa COVID et Unité non-COVID

Redistribution des ressources centrée sur les COVID

Nb de TAVI Clinique Pasteur Toulouse



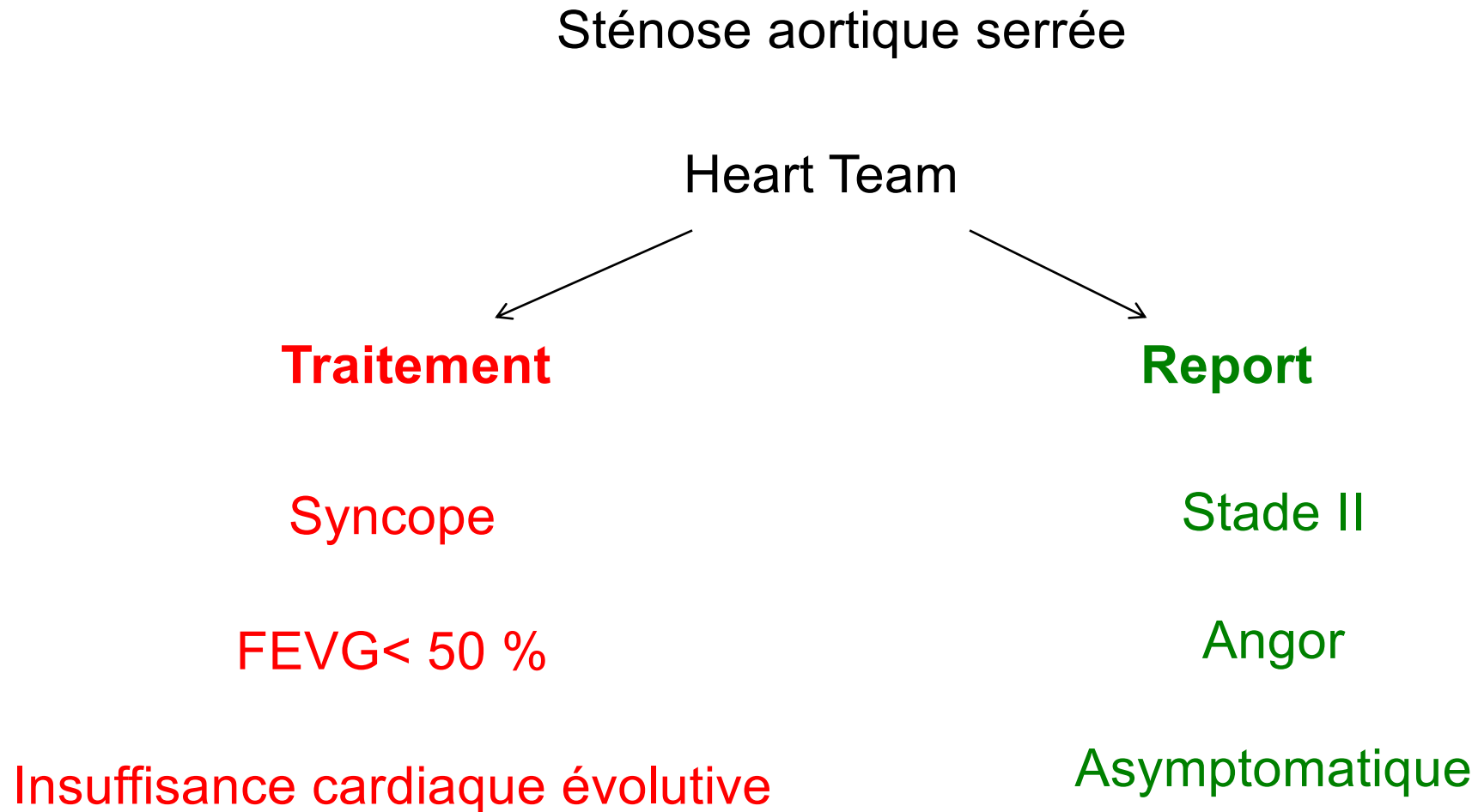
Adaptation nécessaires des indications

Patients RAO symptomatiques: à risqué élevé de complications

COVID-19

Décision de maintien du TAVI uniquement si perte de chance
en cas de report

Adaptation nécessaires des indications



ESC Guidance for the Diagnosis and Management of CV Disease during the COVID-19 Pandemic

9.6.1. Management of Aortic Stenosis

Key points

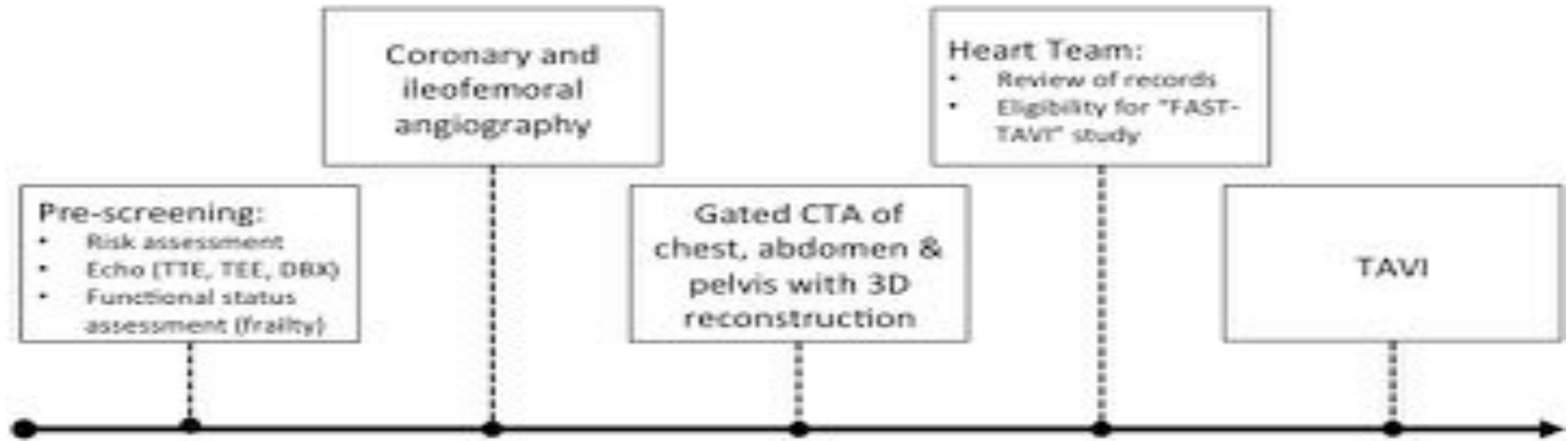
- Priority should be given to patients with syncope and HF, and those with high (or very high) gradients and/or impaired LV function;
- Non-urgent procedures should be deferred based on objective criteria assessed by the Heart Team;
- Greater use of transfemoral TAVI (as judged appropriate by the Heart Team) may allow optimal utilization of healthcare resources.

Pourquoi une sanctuarisation?

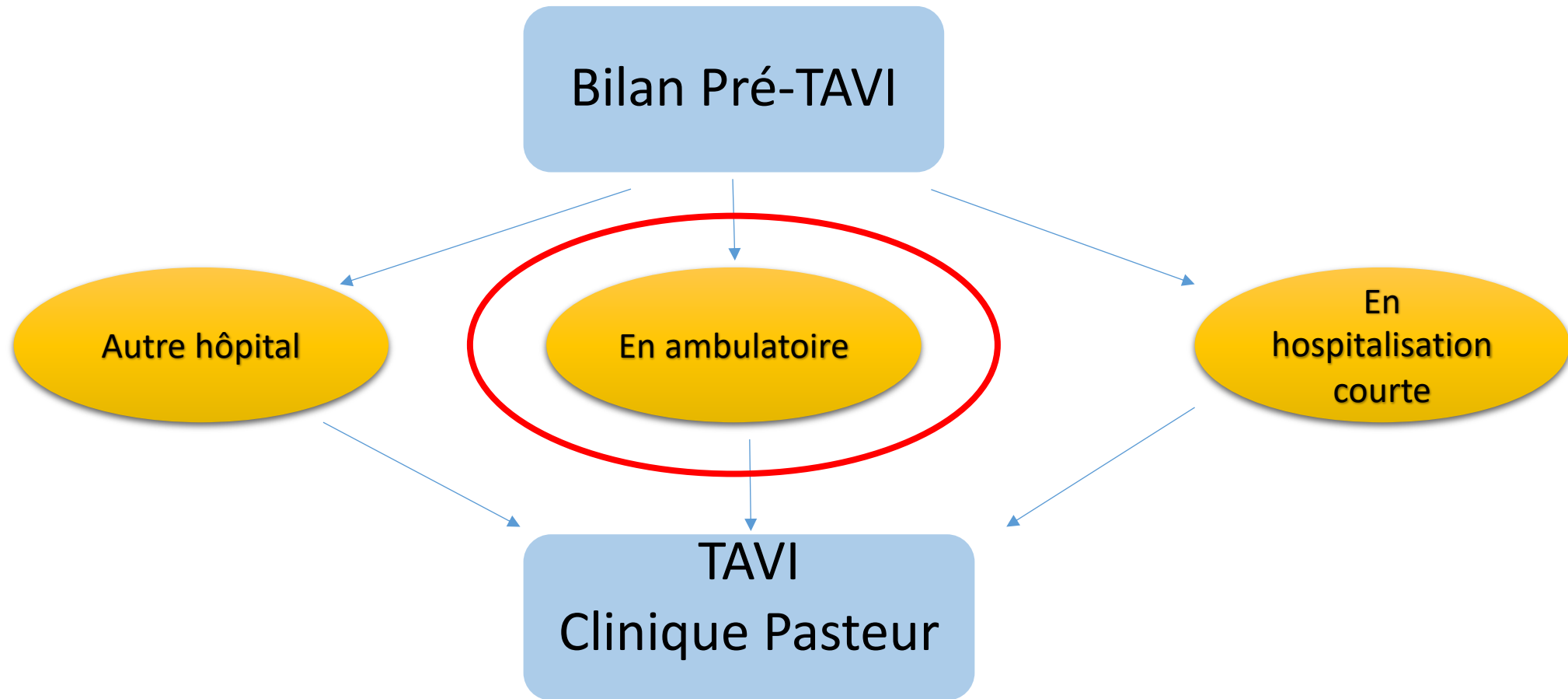
- Role central de la Heart Team
- Sélection plus précises des patients

Réorganisation du parcours TAVI

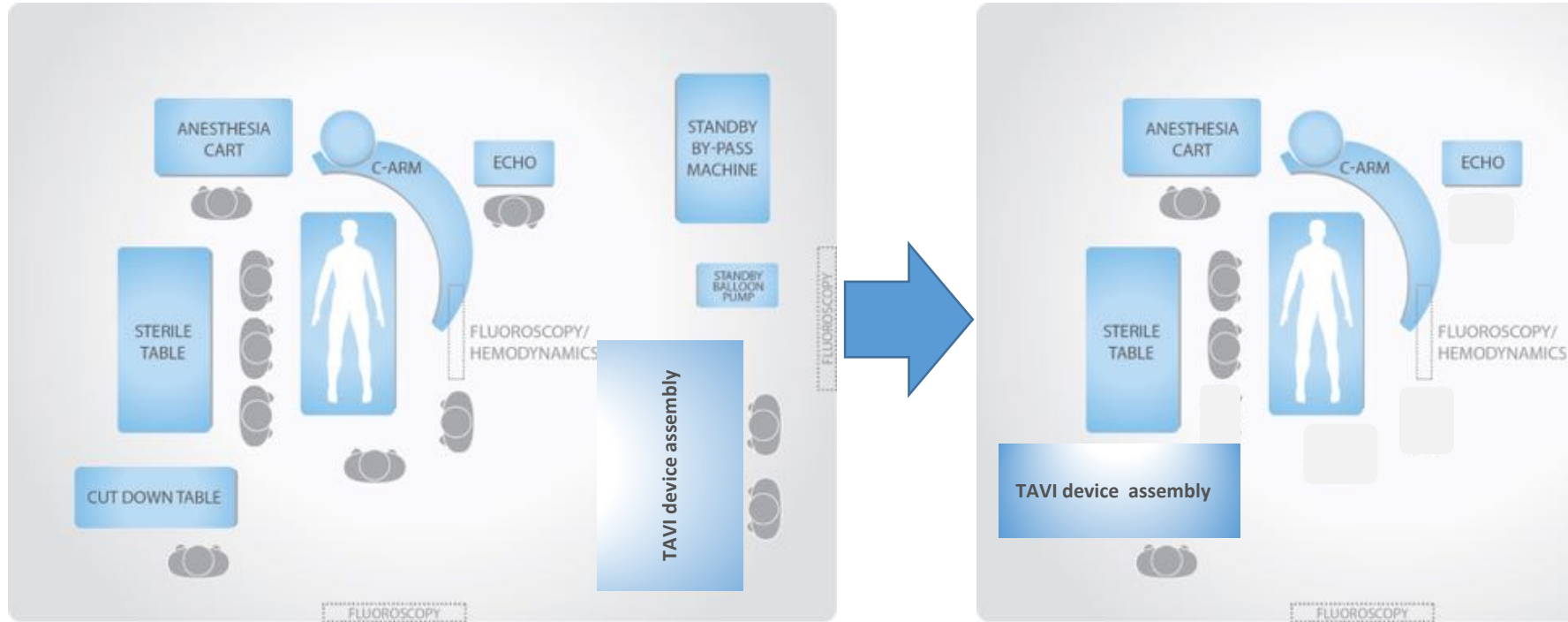
OPTIMIZE PRE PROCEDURAL PLANNING



- Pre-screening can be performed in a context of out-patients visits
- Coronary and peripheral angiography can be performed in hospital as "day-surgery" admission
- CTA can be performed as out-patients examination
- Patient can be admitted 1 day before TAVI



Optimisation du bloc interventionnel



General anesthesia

TEE guidance

4 operators

Surgical cutdown



Conscious sedation

Fluoro guidance

2 operators

Fully percutaneous

MINIMALIST TAVI ...

... SIMPLIFIED TAVI ...

... STREAMLINED TAVI ...

Éliminer certaines étapes non nécessaires

Pour un TAVI plus simple, plus rapide et plus sûr.

Sortie rapide après TAVI

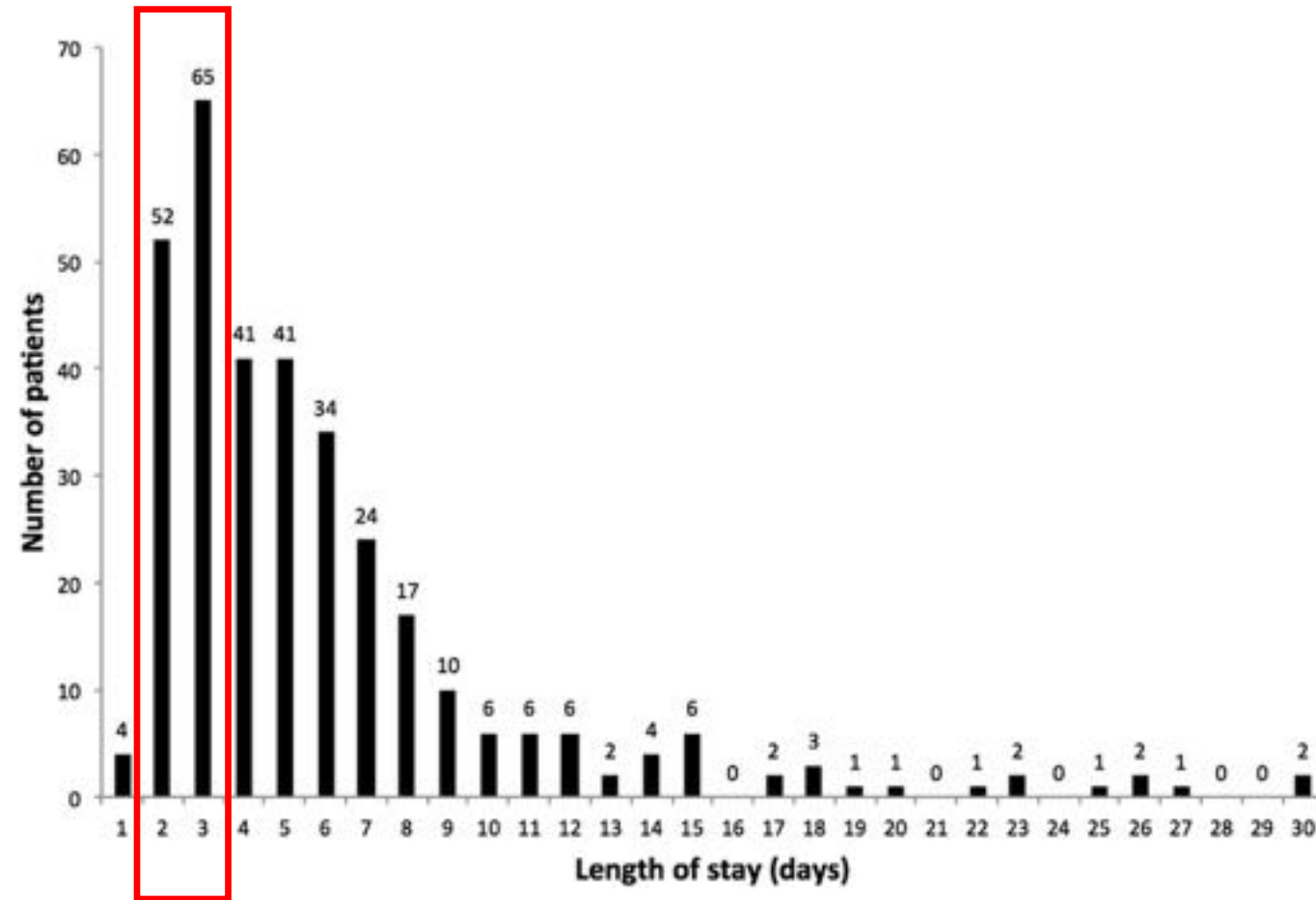
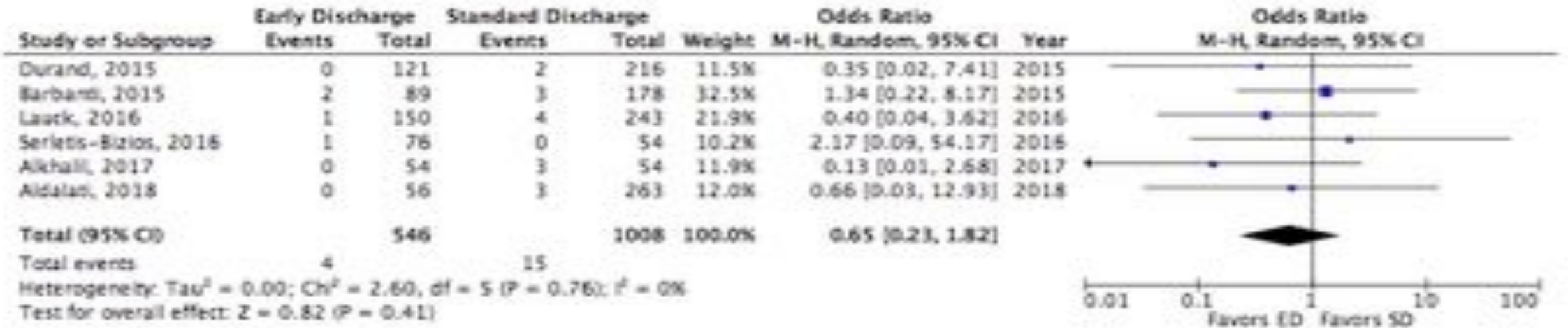


Figure 1. Bar graph representation of the distribution of length of stay in the overall population.

Influence d'une sortie rapide post TAVI

A

Discharge to 30-day mortality



Influence d'une sortie rapide post TAVI

B

30-day re-admissions

Study or Subgroup	Early Discharge		Standard Discharge		Weight	Odds Ratio M-H, Random, 95% CI	Year
	Events	Total	Events	Total			
Parry-Williams, 2014	7	74	3	47	9.7%	1.53 [0.38, 6.24]	2014
Barbanti, 2015	1	89	2	178	3.3%	1.00 [0.09, 11.18]	2015
Durand, 2015	4	121	9	216	13.3%	0.79 [0.24, 2.61]	2015
Serletis-Bizios, 2016	3	76	7	54	9.7%	0.28 [0.07, 1.12]	2016
Lauck, 2016	12	150	30	243	38.6%	0.62 [0.31, 1.25]	2016
Rathore, 2017	3	22	8	78	9.4%	1.38 [0.33, 5.72]	2017
Alkhalil, 2017	2	54	7	54	7.3%	0.26 [0.05, 1.31]	2017
Aldalati, 2018	2	56	25	263	8.8%	0.35 [0.08, 1.53]	2018
Total (95% CI)		642		1133	100.0%	0.63 [0.41, 0.98]	

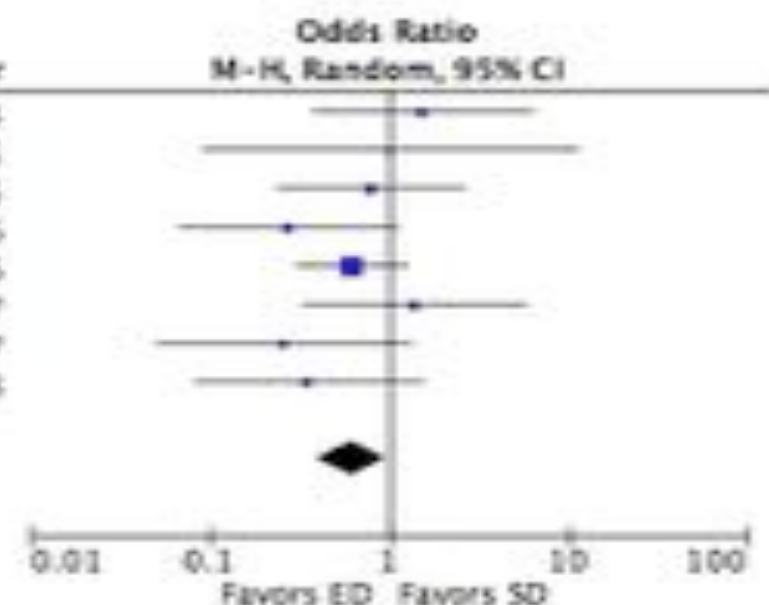
Total events

34

91

Heterogeneity: $\tau^2 = 0.00$; $\chi^2 = 6.10$, $df = 7$ ($P = 0.53$); $I^2 = 0\%$

Test for overall effect: $Z = 2.07$ ($P = 0.04$)



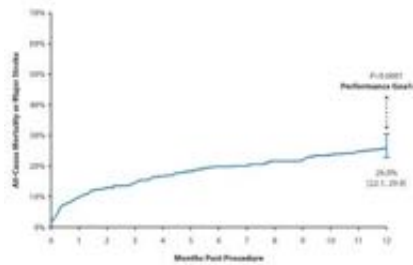
Pourquoi une sanctuarisation:

- Optimisation continue des procédures
- Sortie rapide=sécurité
- Possibilité de traiter tous les patients ayant besoin d'un TAVI (et d'accueillir leurs médecins 😊)

Amélioration continue des événements cliniques

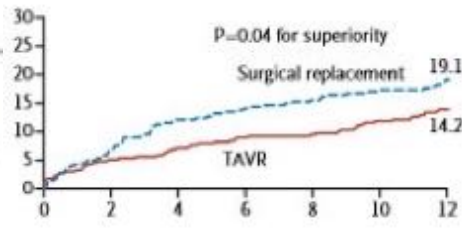
ETUDES RANDOMISÉES TAVI ET INDICATIONS

2011



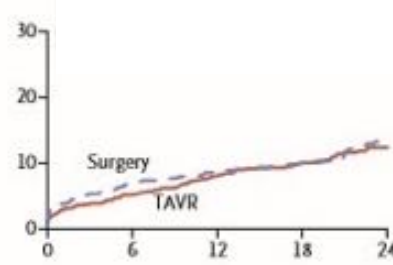
Extreme Risk

Popma J et al JACC 2014; 63:19:1972



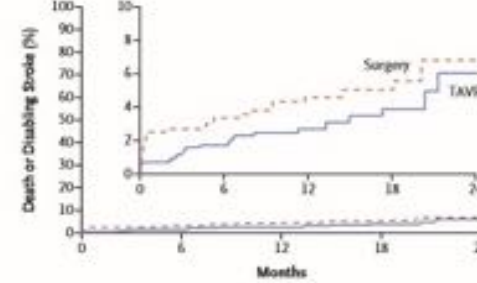
High Risk

Adams D et al NEJM 2019; 370:1790



Intermediate Risk

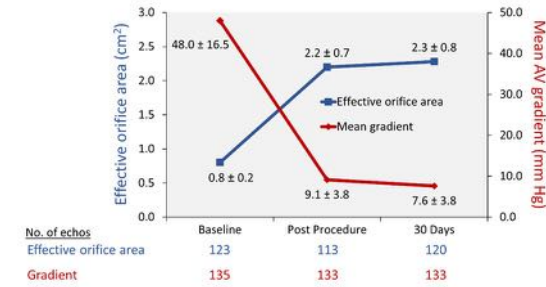
Reardon et al NEJM 2017; 376:1391



Low Risk

Popma J et al NEJM 2019; 380:1706-15

2020



Bicuspid

Forest J et al JAMA Cardiol 2020, epub

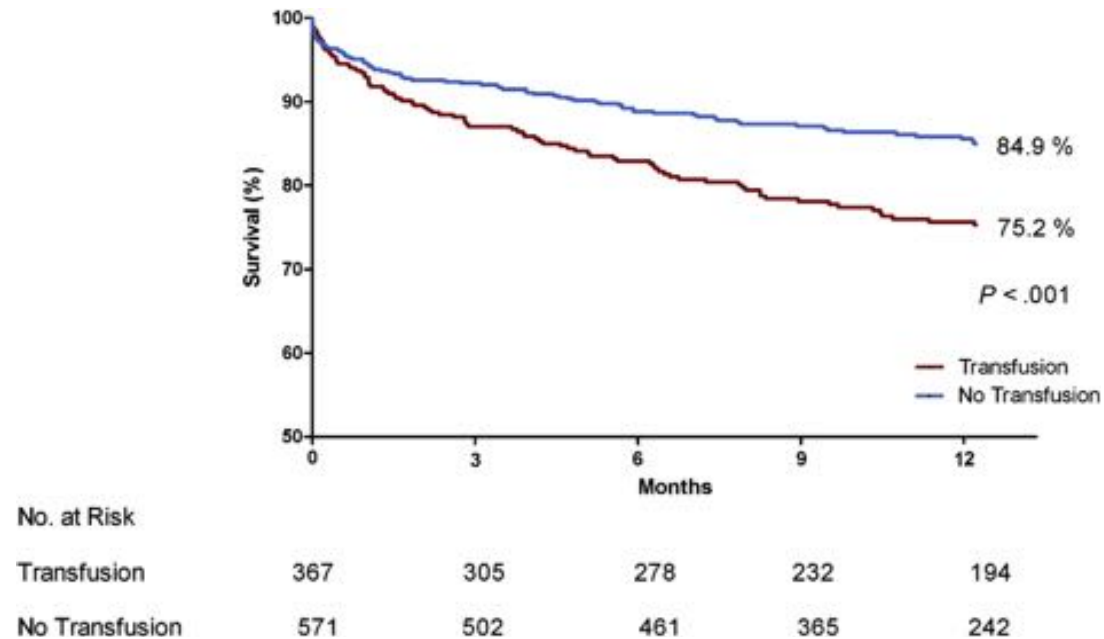
Augmentation des coûts du TAVI en cas de complications

The impact of post-procedural complications on reimbursement, length of stay and mechanical ventilation among patients undergoing transcatheter aortic valve implantation in Germany

Klaus Kaier^{1,2} · Holger Reinecke³ · Huseyin Naci⁴ · Lutz Frankenstein⁵ ·
Martin Bode^{2,6} · Werner Vach¹ · Philip Hehn¹ · Andreas Zirlik² · Manfred Zehender² ·
Jochen Reinöhl²

Conclusions: Post procedural complications such as bleeding events, acute kidney injuries and strokes are associated with increased resource use and substantial amounts of additional reimbursement in Germany, which has important implications for decision making outside of the usual clinical sphere.

Impact des complications vasculaires et saignements: initiative PRAGMATIC



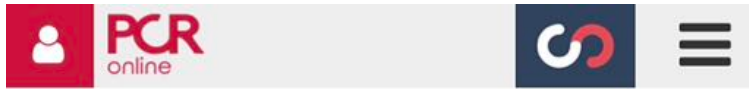
Abord radial



Ponction echo-guidée



Stimulation sur guide intraVG



PCRonline / Cases & Resources / Zoom on / My Toolkit

14 MAY 2020



TAVI

**How to use the guidewire
for simple and efficient
pacing during TAVI**

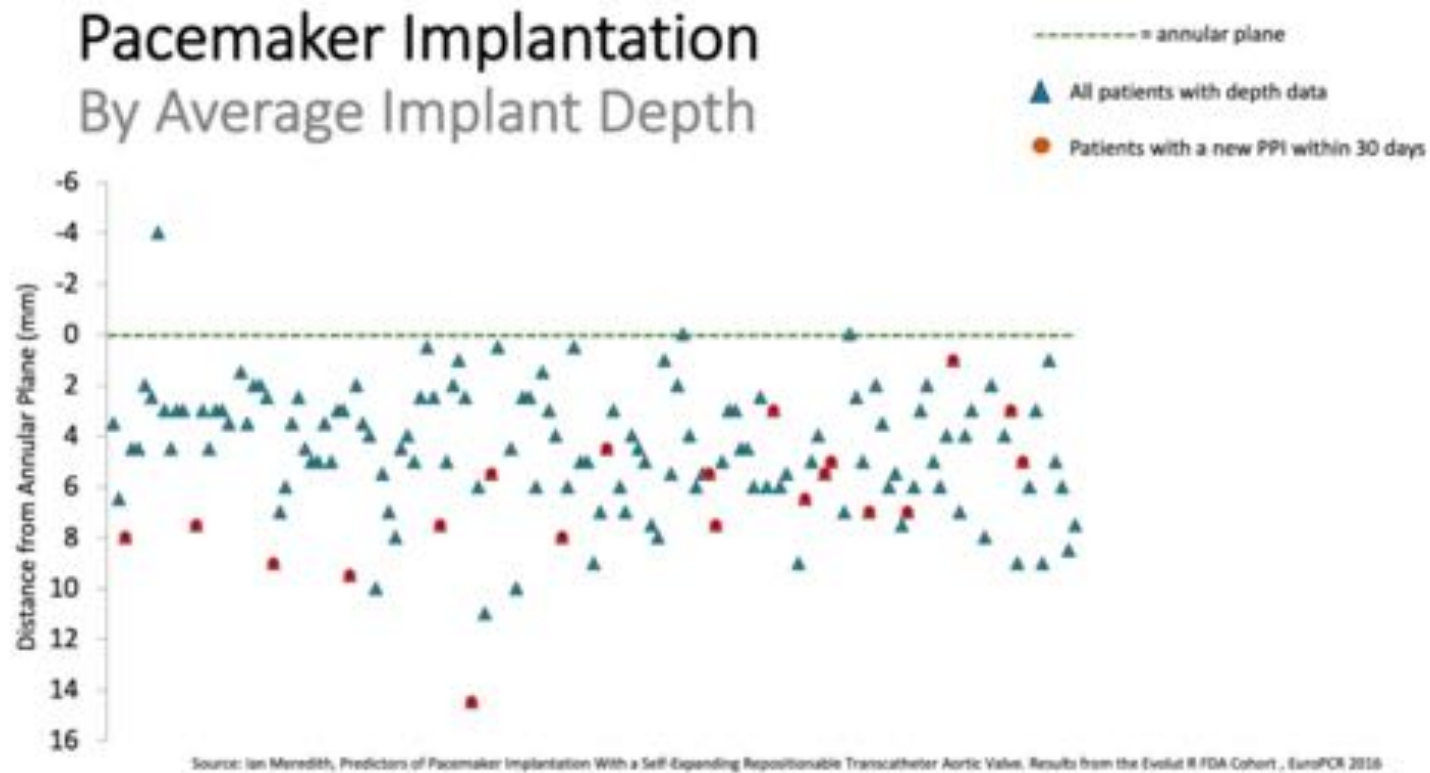


Electroducer device (in study)

Prévention maximale des complications

- **Heparine a minima pour ACT proche de 200**
- **Procédures courtes <30 min skin-to-skin**
- **Contraste dilué (2/3-1/3) avec minimum d'injections**
- **Protection cérébrale pour des patients sélectionnés**
- **Prévention des troubles de la conduction**

Prévention des troubles de conduction

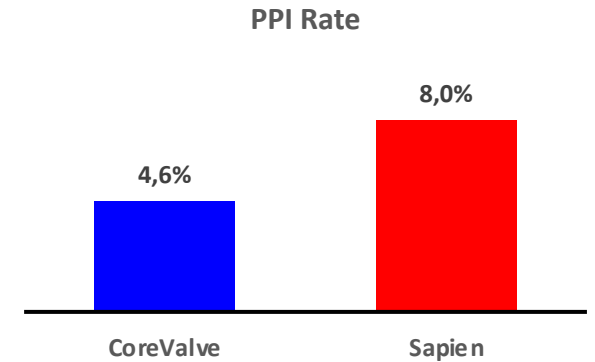
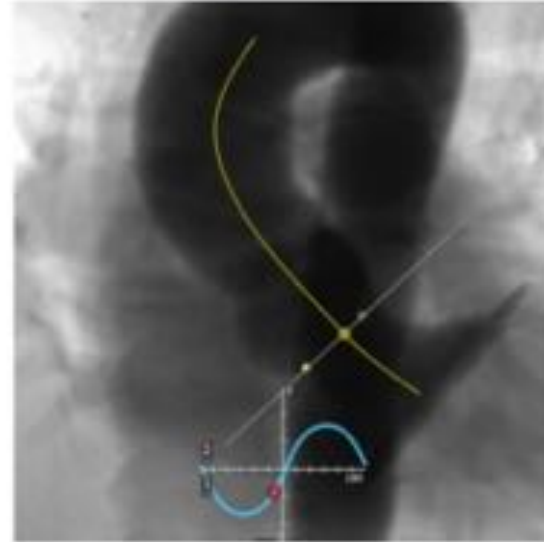


Average implant depth (>5 mm)	4.67 [1.77, 12.31]	0.002	6.9 [2.4, 19.6]	0.0003
Presence of RBBB	3.42 [1.36, 8.57]	0.009	6.1 [2.3, 15.9]	0.0003

Cusp overlap technique

The Cusp Overlap Technique

- **PRECISION**
 - Provide a reliable anatomical view for assessing implant depth
- **CONTROL**
 - Depth of implant is a predictor of new pacemaker implantation
- **CONSISTENCY**
 - Systematic approach
 - Reproducible procedure

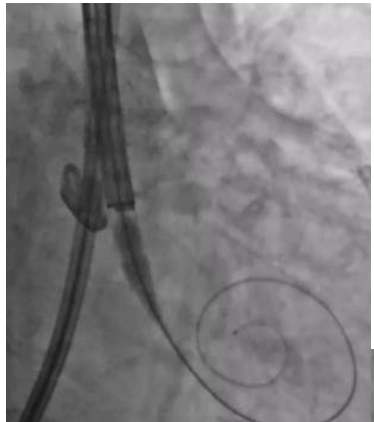


Pisaniello A. et al, Presented at ACC 2020.

Start above the annulus in cusp overlap view

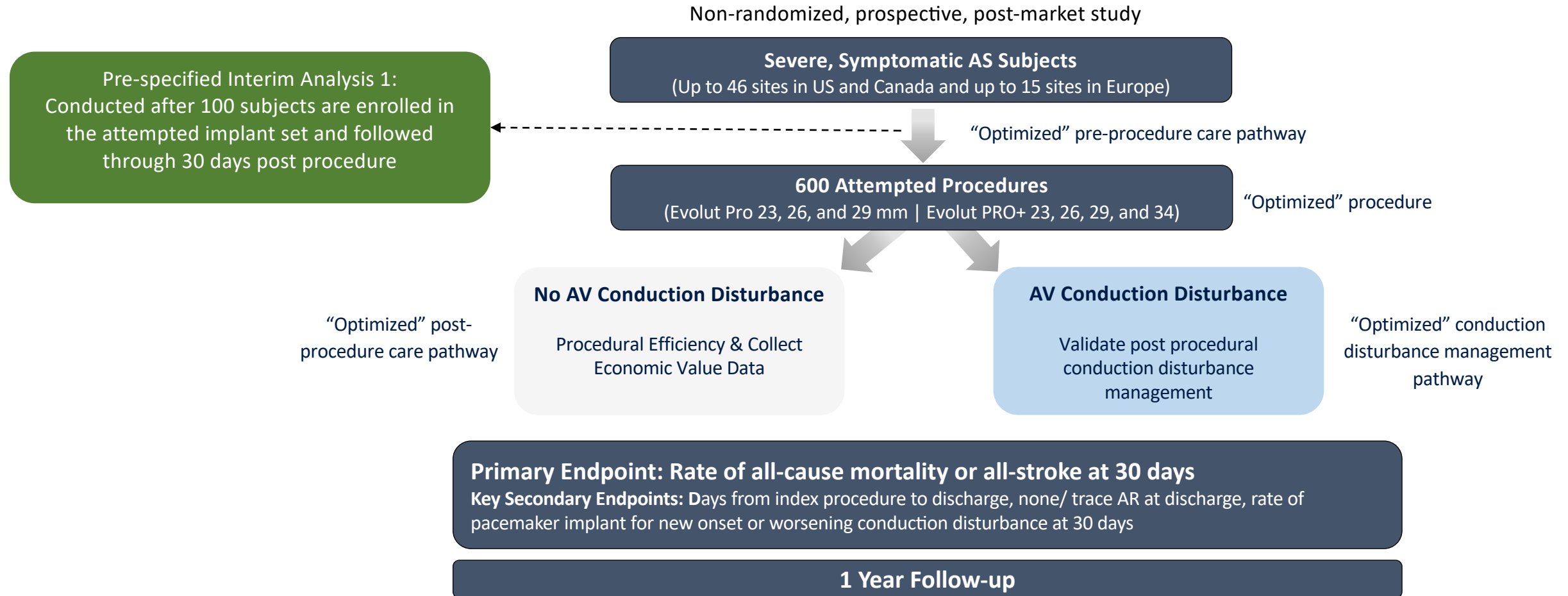
Controlled depth 1-3 mm below NCC

Final release in 3 cusp view



OPTIMIZE PRO CLINICAL TRIAL INTERIM ANALYSIS

Study Design Synopsis



Principal Investigators: Dr. Kendra Grubb and Dr. Steven Yakubov

OPTIMIZE PRO CLINICAL TRIAL INTERIM ANALYSIS

Takeaways

0
Death

0
Disabling Stroke

8.8%
Pacemaker
Implantation
Rate

Low Total PVL
80.4%
None/Trace

No
Moderate/
Severe PVL

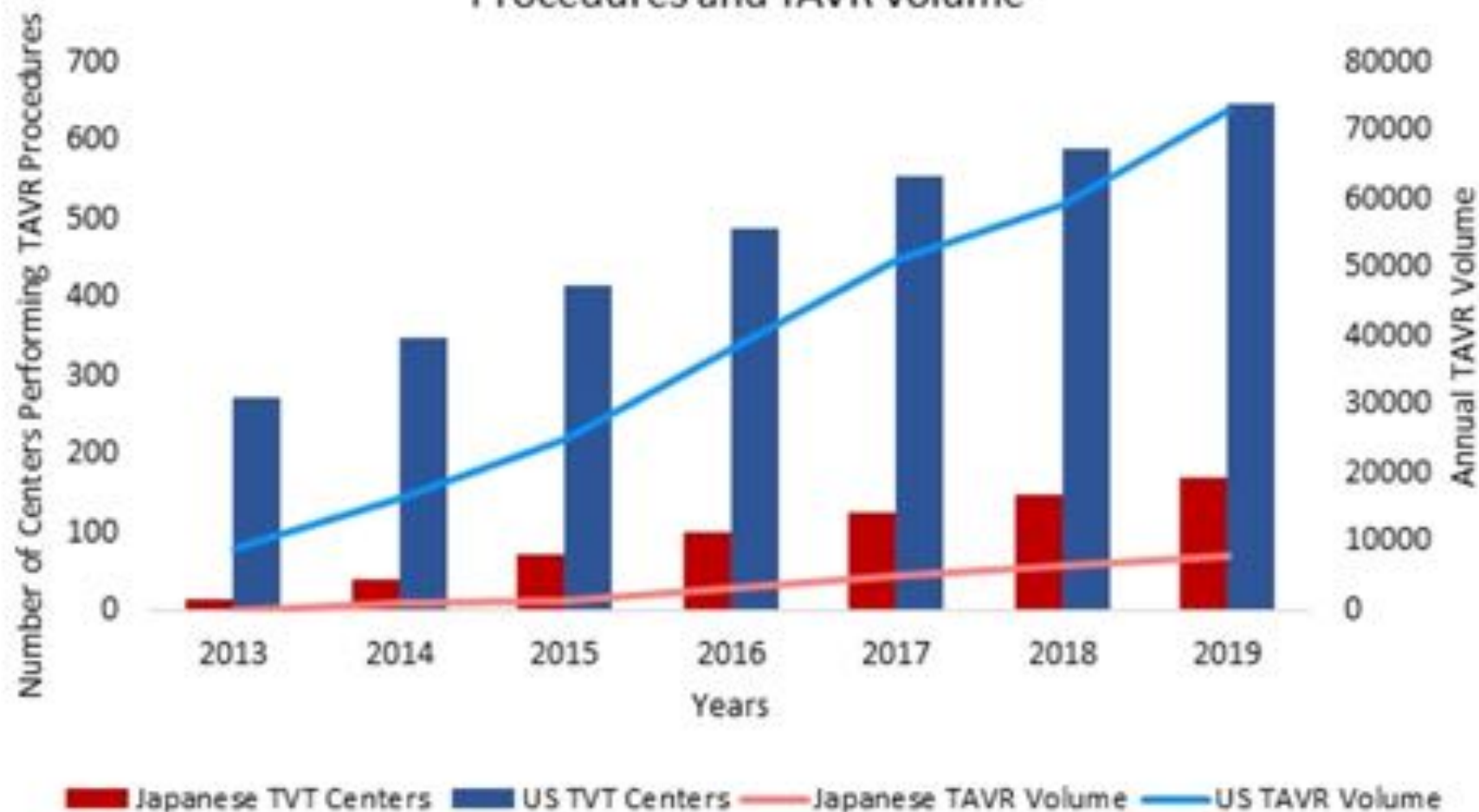
1-Day
Median Length of
Stay

Pourquoi une sanctuarisation:

- Amélioration continue des résultats cliniques

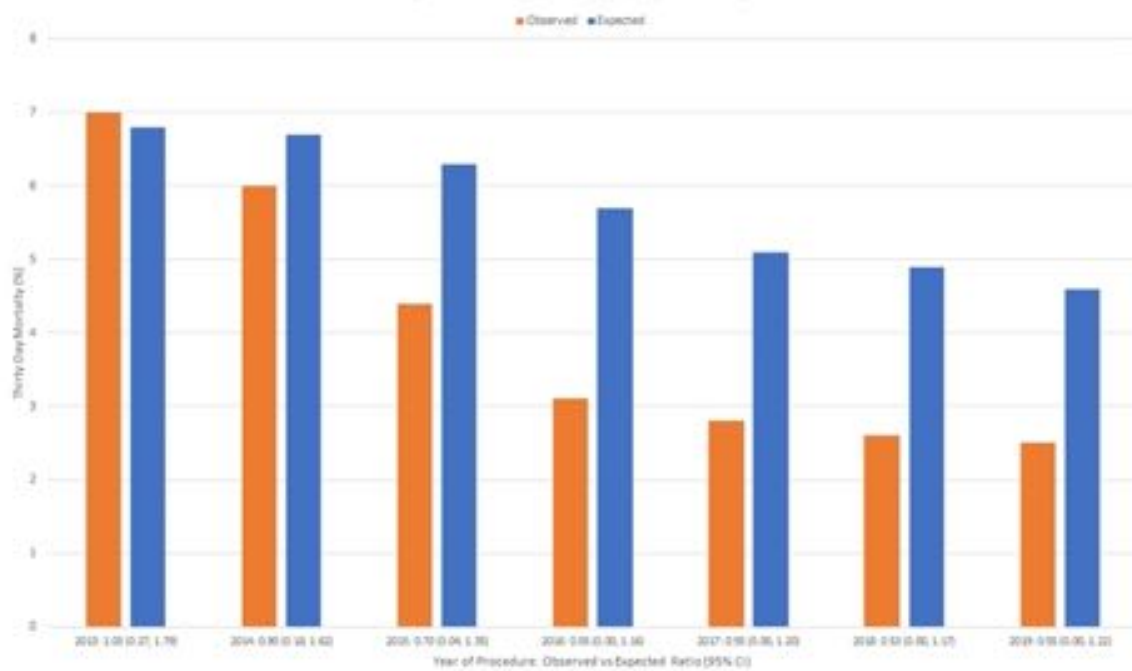
Quid du nombre de centres?

Japanese and US Number of Centers Performing TAVR Procedures and TAVR Volume



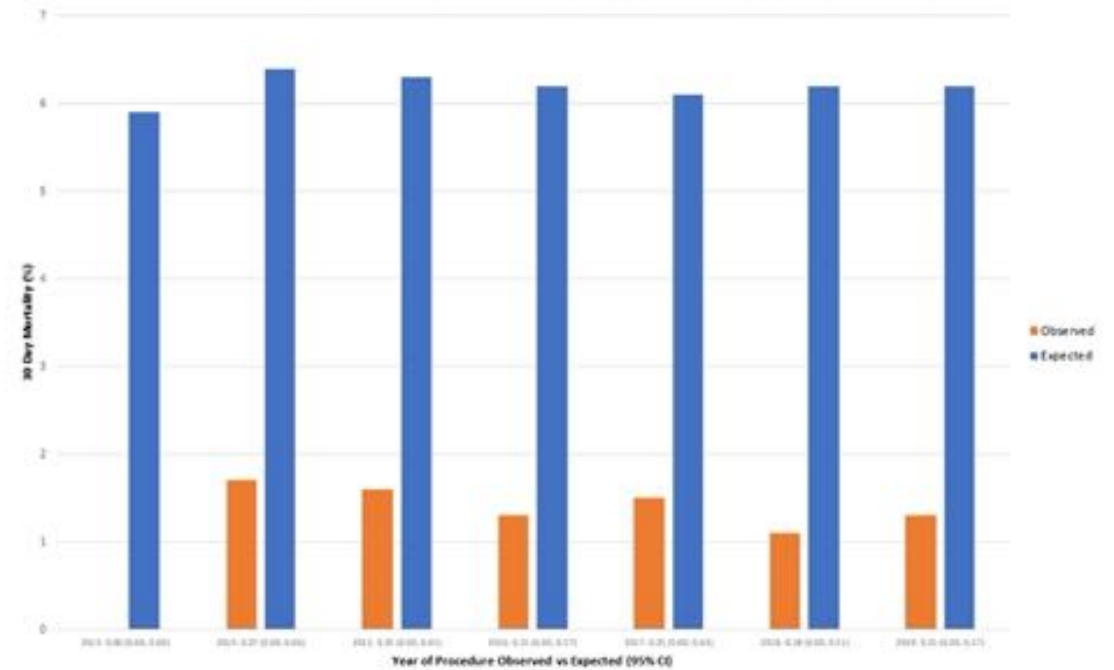
Mortalité attendue/observée

Observed vs Expected [2007 STS inhospital risk score] US TVT registry 30 Day Mortality



US TVT registry

Observed vs. Expected STS Inhospital Risk Score (2007) Japanese TVT Registry 30 Day Mortality



Japanese TVT registry

Pourquoi une sanctuarisation:

- Impact négatif de l'augmentation du nombre de centres?
- Effet bénéfiques d'un cadre réglementaire

En conclusion

...Une nécessité de sanctuarisation du TAVI?

OUI!

MERCI

THANK YOU

DANKE

どうもありがとう

GRACIAS

谢谢

OBRIGADO

GRAZIE

BEDANKT

DEKUJI

Спасибо

ΕΦΗΑΡΙΣΤΟ

