

When TAVI Is Not a Good Indication



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CONFLICTS OF INTEREST RELATED TO THE CONTENT OF THE PRESENTATION

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Disclosure:

Proctoring/Consulting fees: Boston Scientific,
Edwards Lifesciences, Medtronic, Abbott Vascular

Who is a good TAVI candidate?



HAUTE AUTORITÉ DE SANTÉ

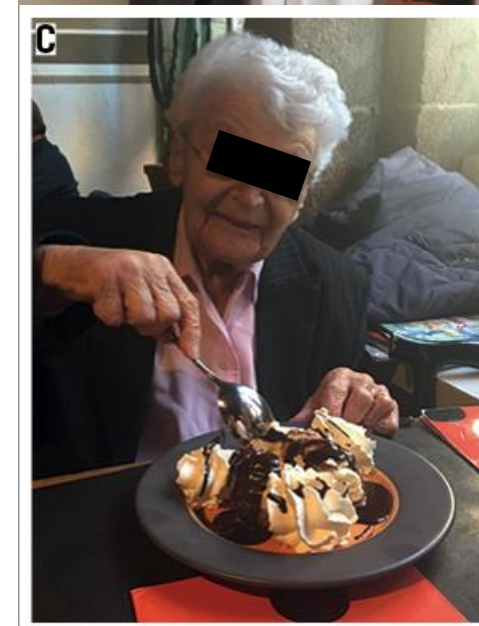
Severe symptomatic aortic stenosis

Inoperable patient

High surgical risk

Heart team assessment

Life-expectancy > 1 year



EuroIntervention 2018;14:e380-e382 published online e-edition July 2018
TAVI durability beyond five years: no alarms, but stay alert

Age: should we treat (very) old patients?

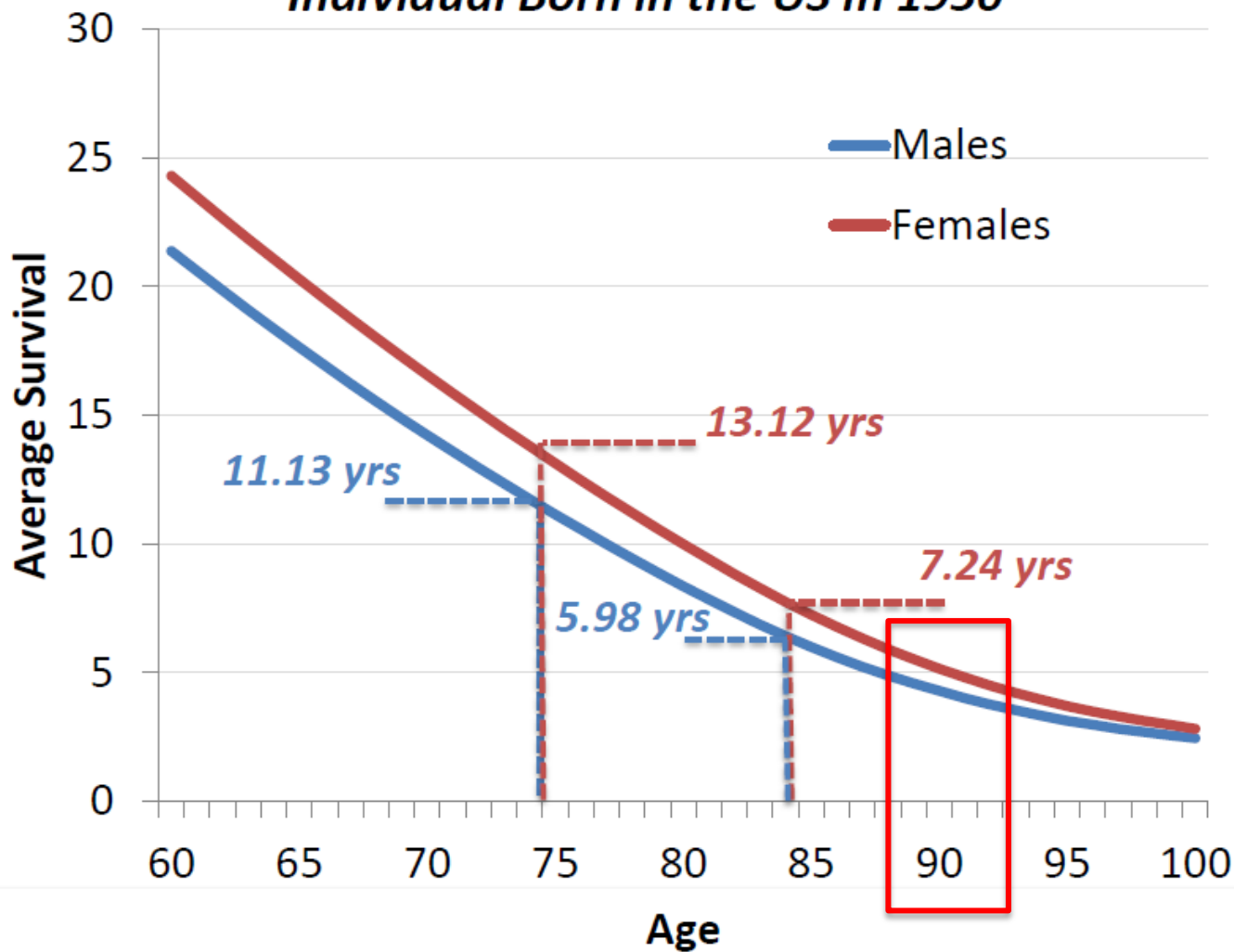
Add life to years and not years to life



4 hours post TF TAVI



Average Survival for an Individual Born in the US in 1950



* Adapted from United States Social Security Life Tables (F. Bell and M. Miller)

Implementation of a geriatrician into the heart team decision

- **Denied patient**

- 91 years old
- female
- Comorbidities
 - Previous CABG
 - LVEF 45%
 - Acute pulmonary oedema
 - Euroscore 23%
 - STS 10 %
 - Limited autonomy
 - Institution



- **Selected patient**

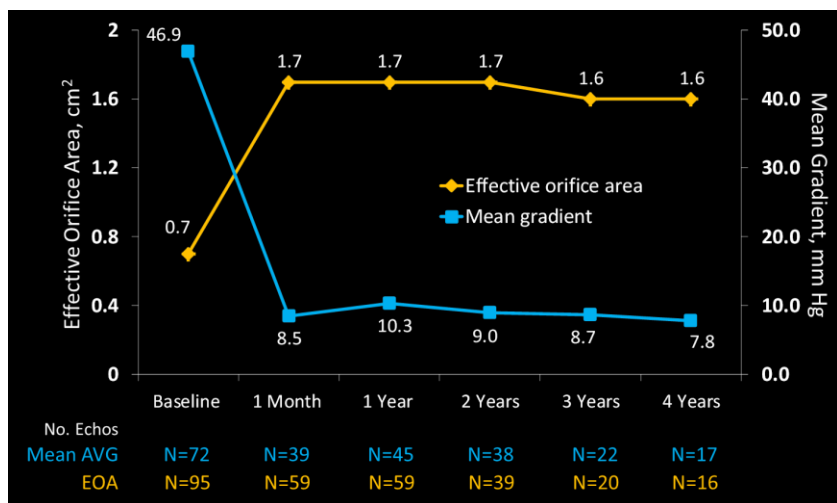
- 92 years old
- male
- Comorbidities
 - Previous CABG
 - LVEF 40 %
 - Acute pulmonary oedema
 - Euroscore 29%
 - STS 11 %
 - Generally active
 - Living with his wife



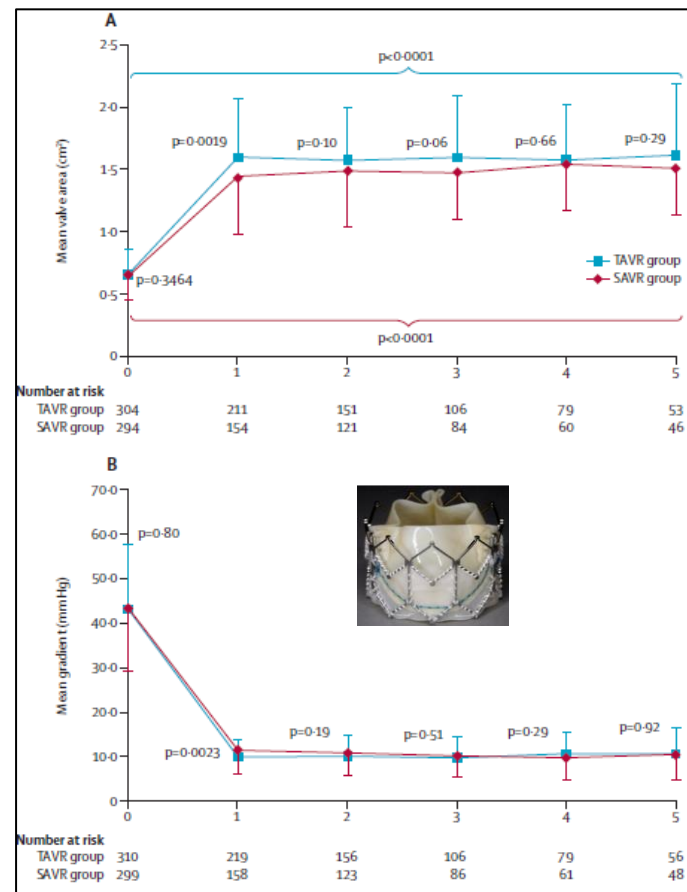
Age: should we treat young patients?

TAVI durability up to 5 years

CoreValve CE Pivotal Trial

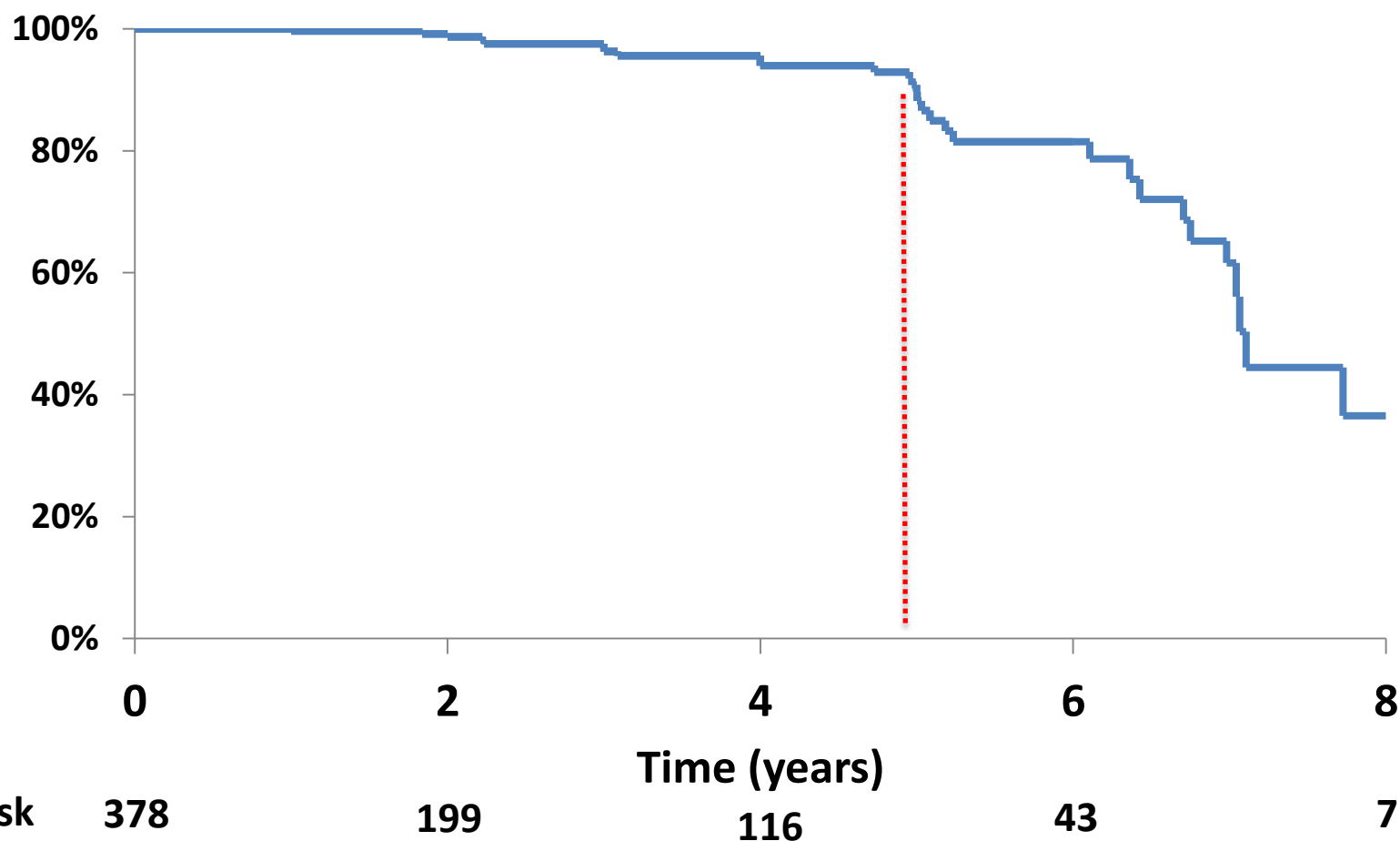


Kovac, Presented at ACC 2014



Mack et al., Lancet 2015

Freedom from THV degeneration



THV degeneration was defined as at least moderate regurgitation AND/OR mean gradient ≥ 20 mmHg, which did not appear within 30 days of the procedure and is not related to endocarditis. KM estimate of THV degeneration included censoring of patients at their date of last known THV functioning well without evidence for degeneration per study definition.

SAPIEN Platform Durability: *testing up to 9 Years*

1st generation



Horse pericardium
Untreated

2nd generation SAPIEN

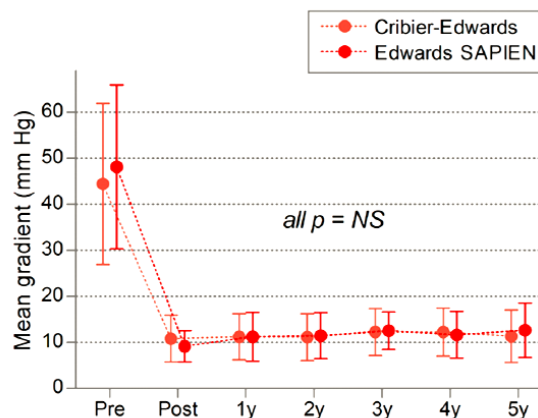


Bovine pericardium
Anticalcification treatment

Valves explanted after 7 years



Vancouver 9 year durability experience



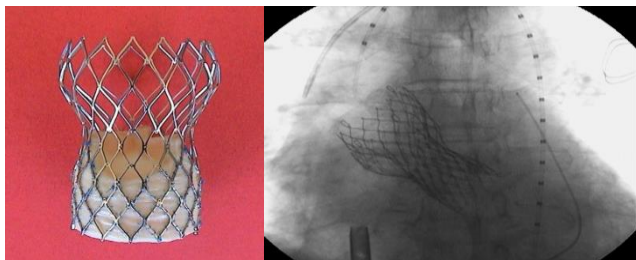
Vancouver

- 9 year experience
- >1,000 implants
- 5 failed valves

TAVI Durability Example

2005: CoreValve case in Caracas.
Jose Condado, MD.

CoreValve 25 Fr



2015: 10 y Follow up



SOFI

News

Latest news

Archives

- 2012
- 2011
- 2010
- 2009
- 2008
- 2007
- 2006
- 2005
- 2004
- 2003

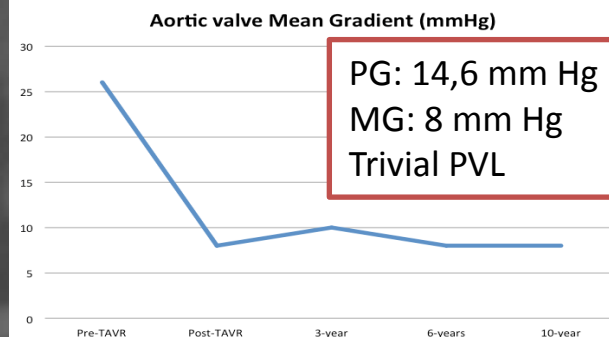
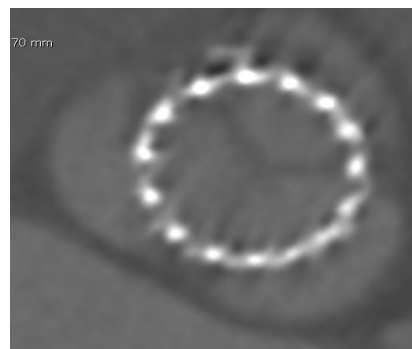
The News

Two-Month Follow-up of first South-American patient shows 58-year-old female is fully recovered and has resumed normal activity after non-surgical replacement of defective aortic heart valve using Corevalve's breakthrough ReValving™ procedure

04/04/2005

One of an ongoing series of early cases that demonstrate CoreValve's ReValving™ approach is a successful alternative to open-heart surgery

"This patient's life has been transformed—without surgery—from being significantly debilitated to normal-functioning as a direct result of ReValving. The procedure was performed in a hospital cathlab (not a cardiac OR) and avoided



Key Message

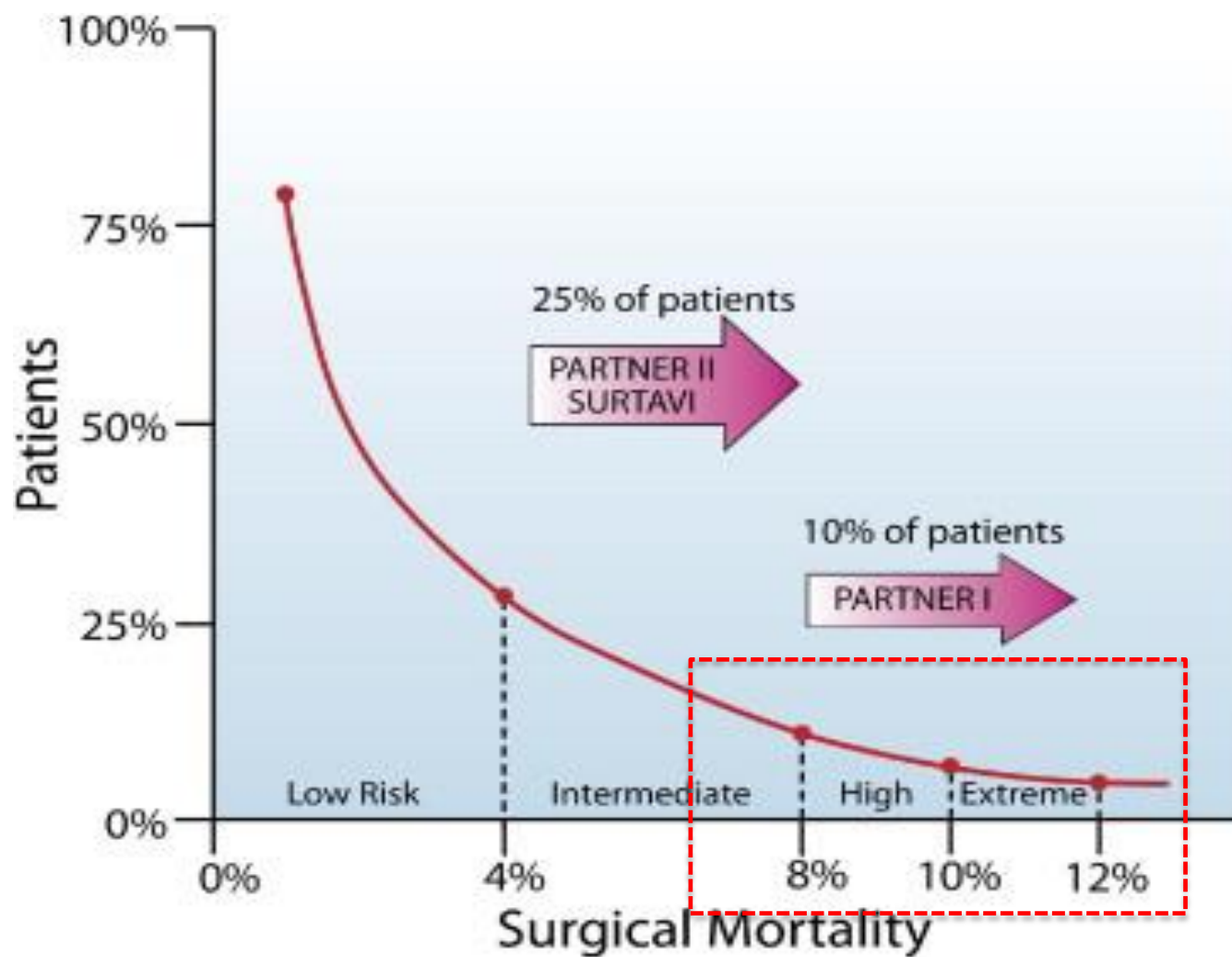
Age per se is not a limit for TAVI

Lack of autonomy /Severe cognitive dysfunction

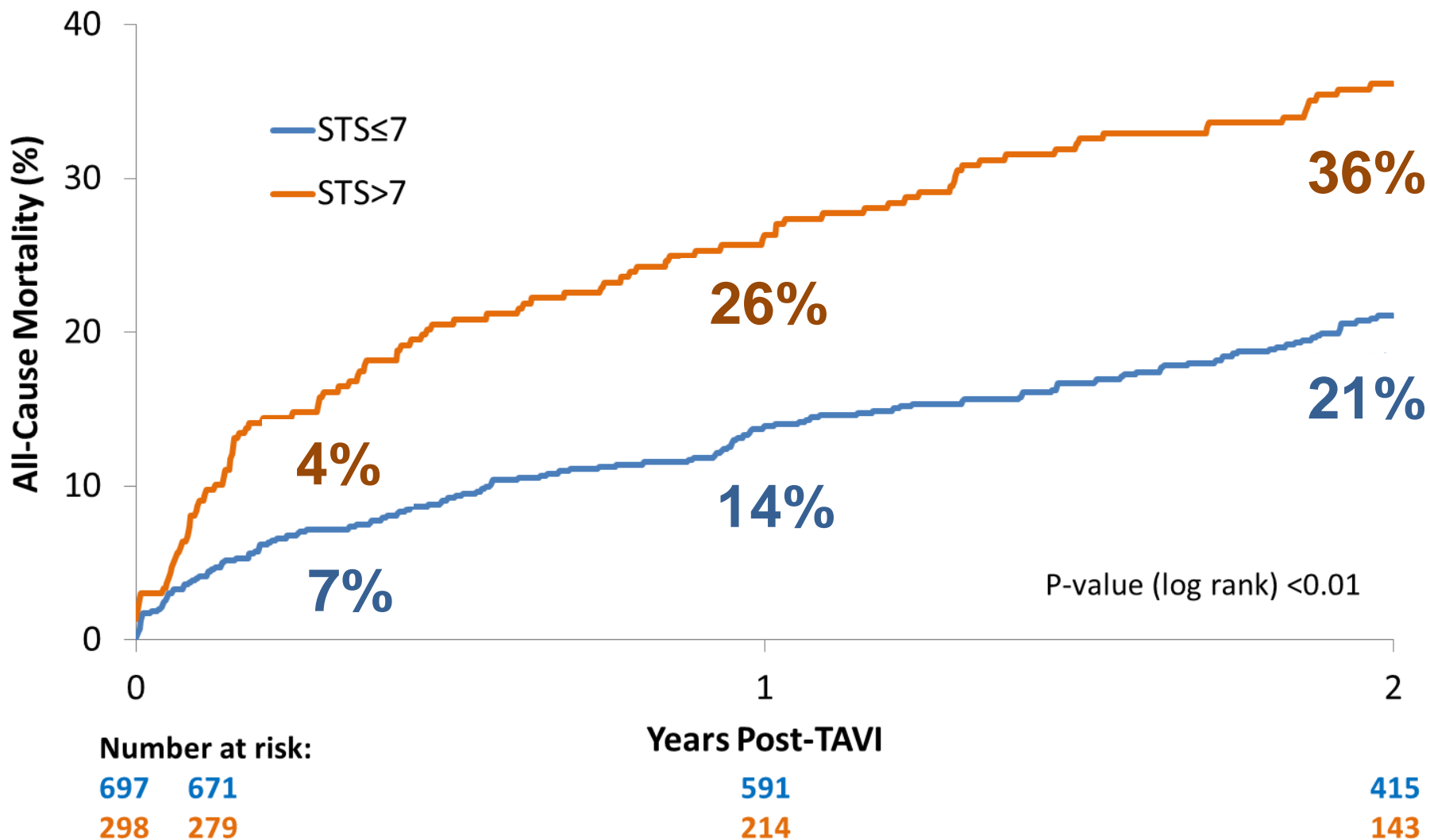
Life-expectancy < 1 year

Young patients: more durability data required

How about the risk profile?

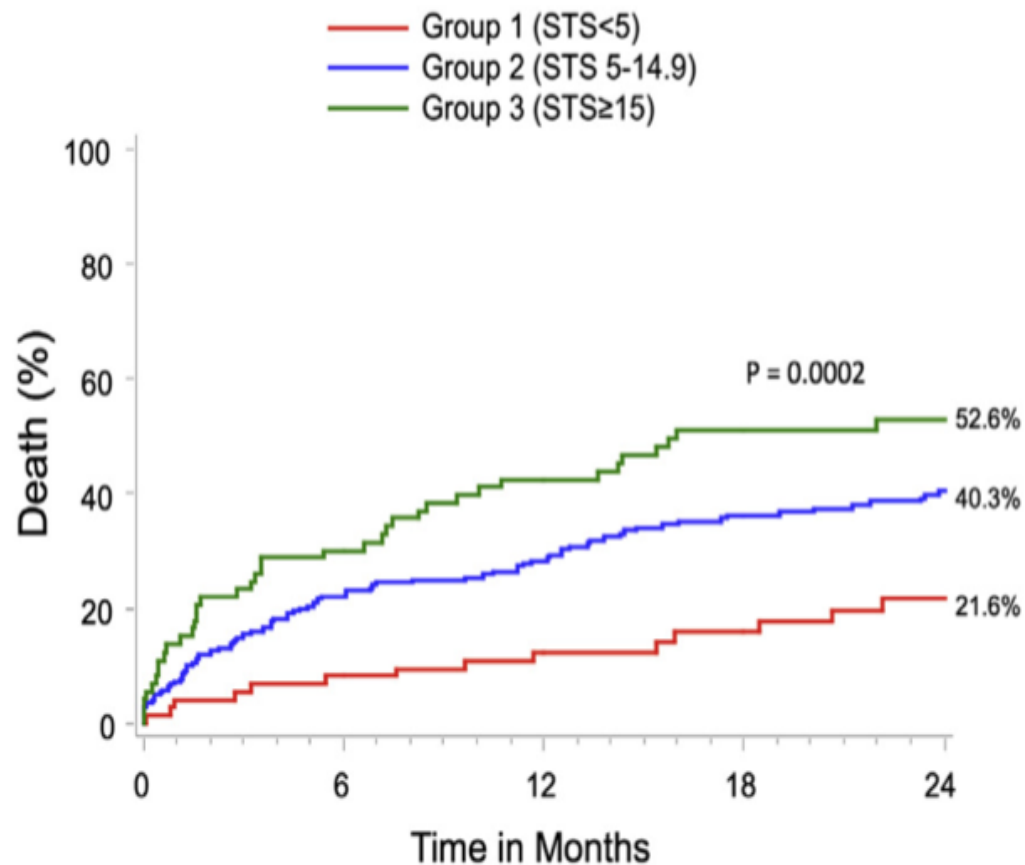


Impact on the STS score on 2-Year All-Cause Mortality CoreValve ADVANCE Registry



Adverse impact of Risk scores on survival: Sapien experience

A



Number at risk:

	0	6	12	18	24
Group1	74	68	57	46	33
Group2	222	170	143	116	95
Group3	73	51	40	34	24

R. Makkar et al. JACC 2014;63:901-911

Key Message

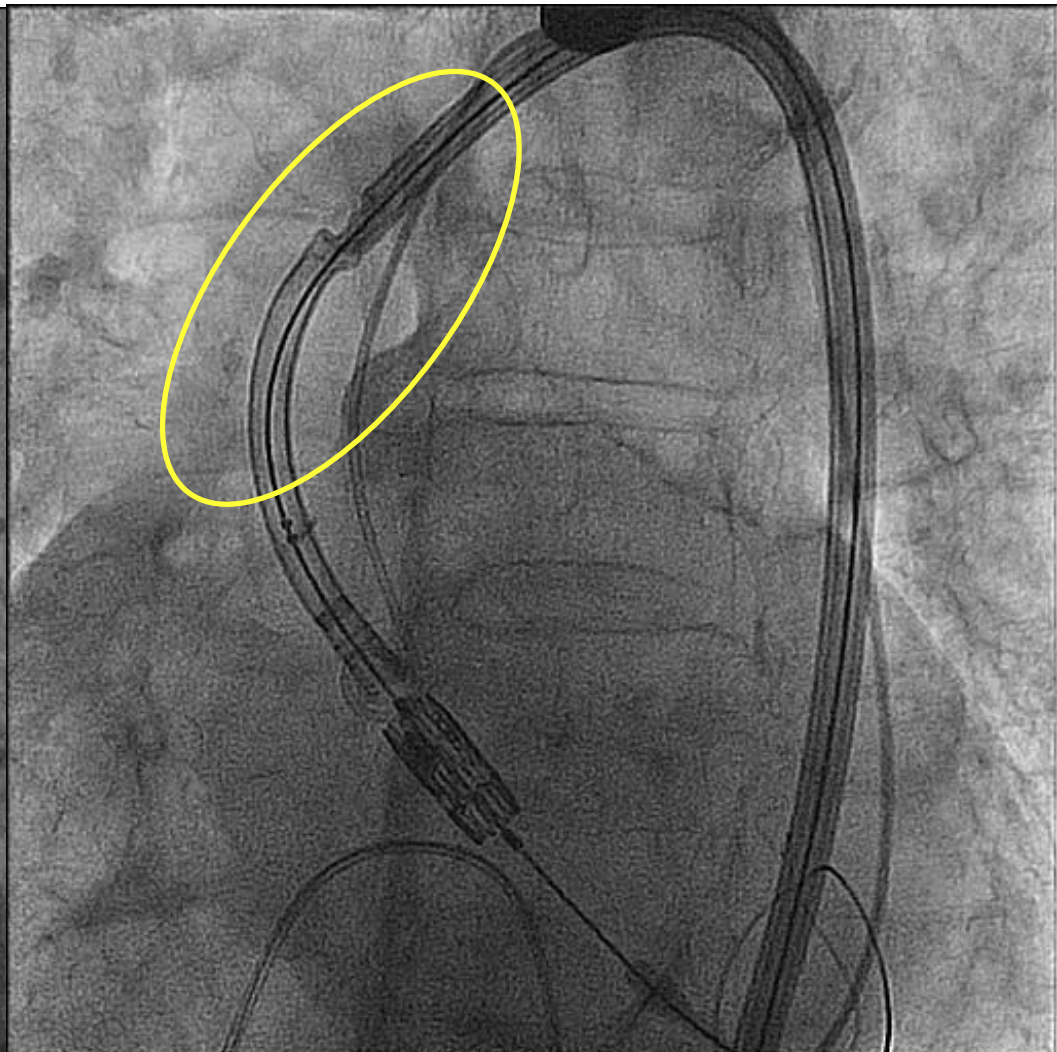
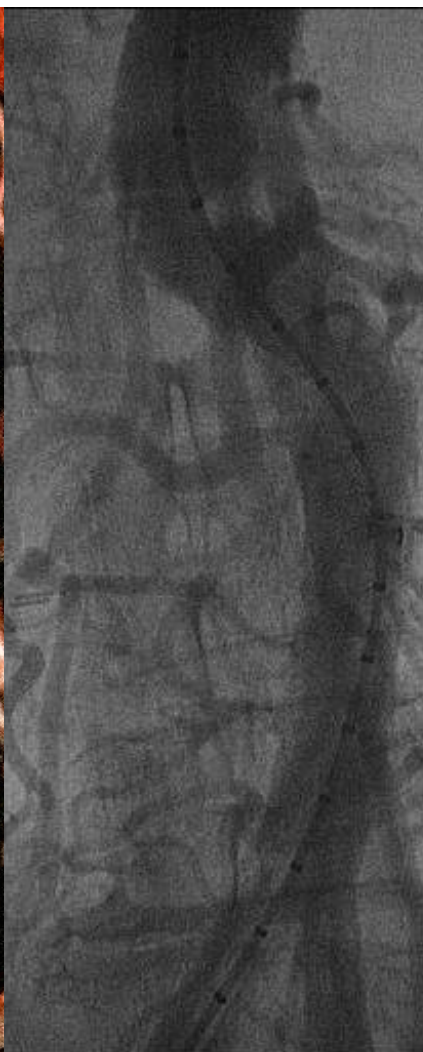
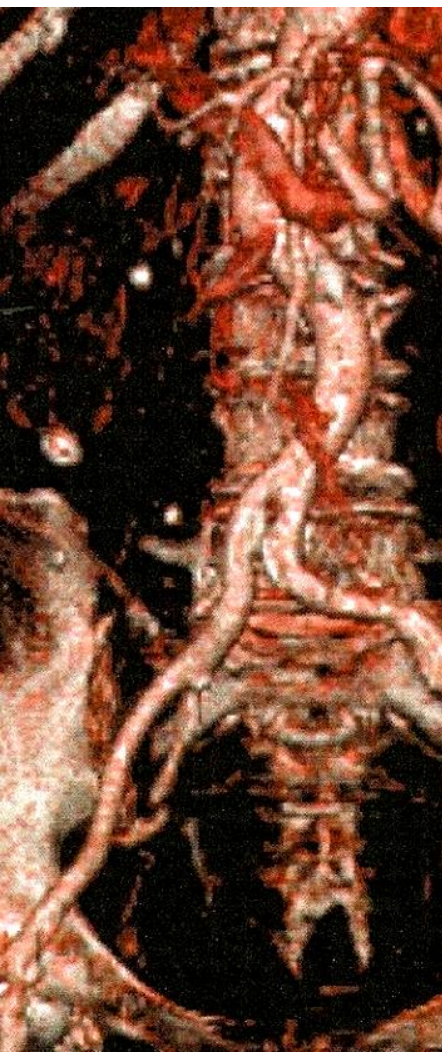
**Patients with higher risk scores
may not be good candidates for TAVI**

Logistic EuroSCORE > 50

STS score > 15

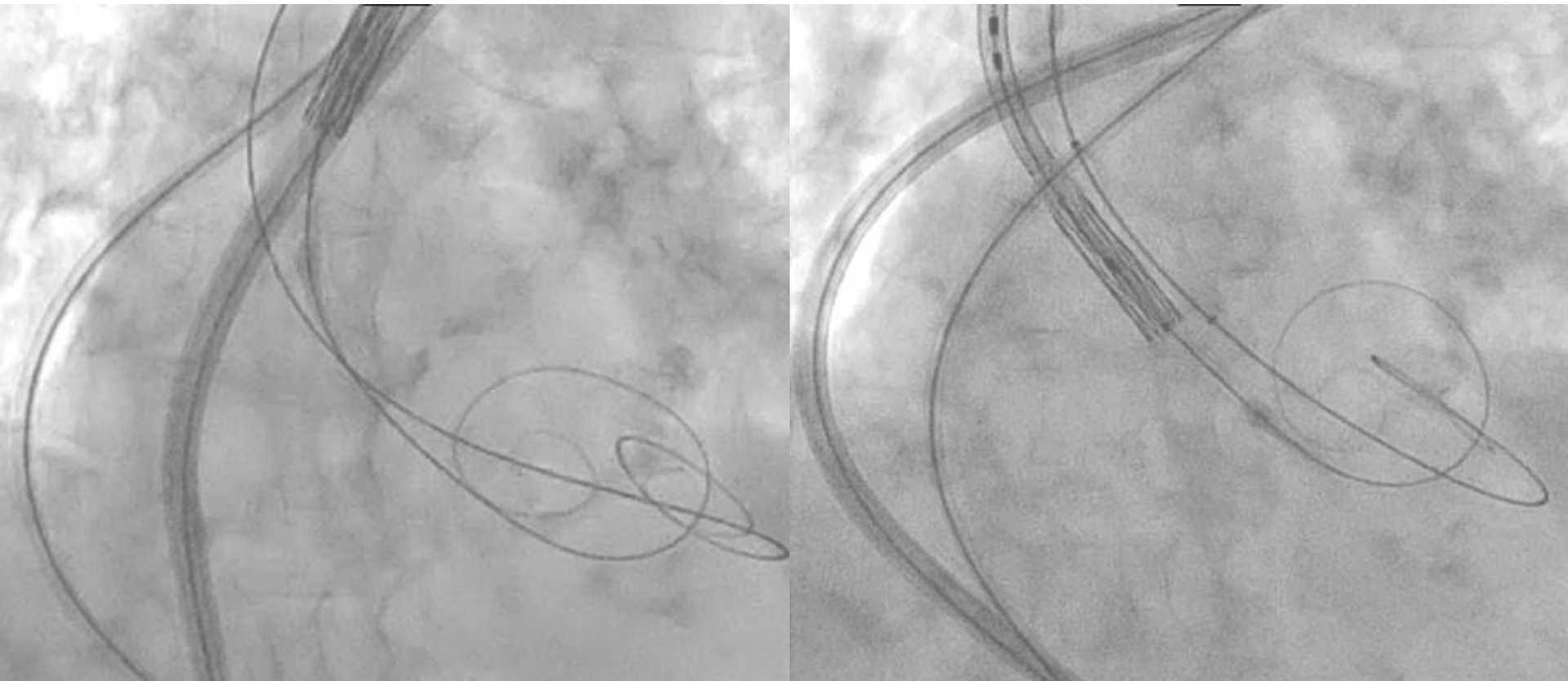
Technical aspects

Very tortuous anatomy

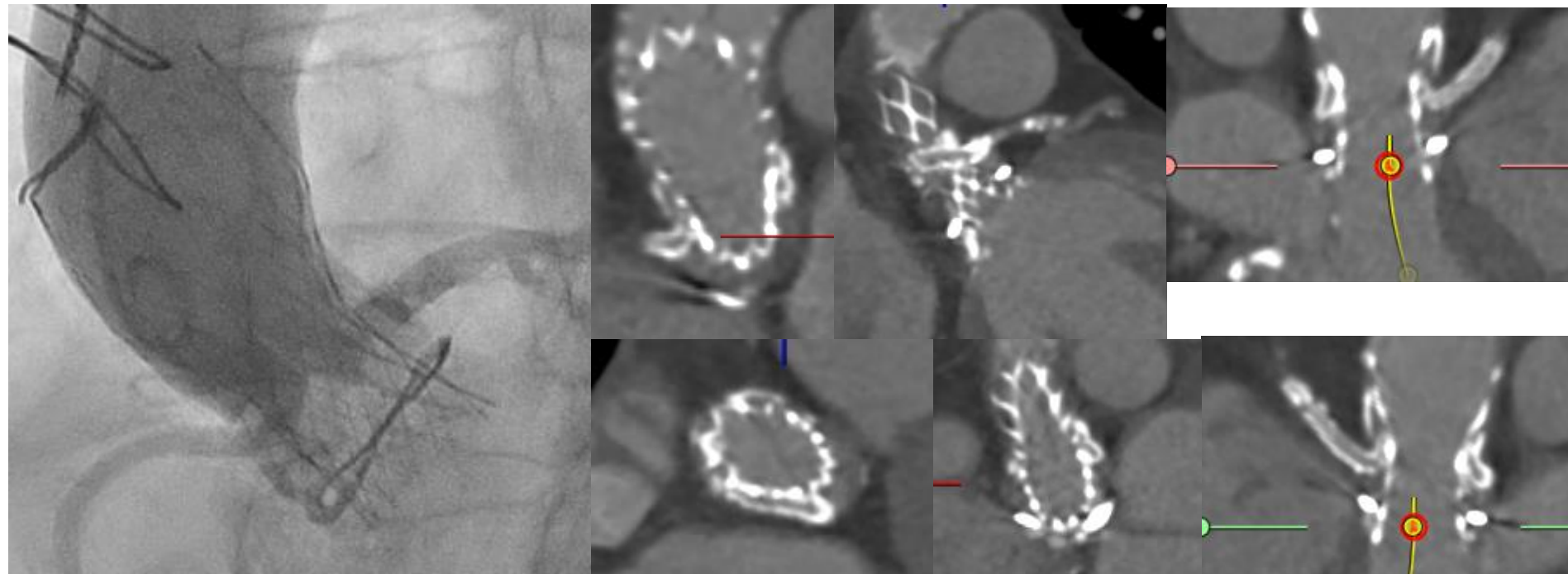


Combinaison Flex-Tension guide

Very tortuous anatomy



A valve-in-valve at high risk of coronary obstruction



Key Message

***Procedural outcomes depend
on
the appropriateness of the access route
and
the techniques anticipated for TAVI***

Surgery may be a better option in some High risk patients

Conclusion

TAVI is not a good indication

Patients with (very) short or long life-expectancy

Patients with limited autonomy

Patients with extremely high risk scores

Too challenging anatomical conditions

There is no consensus in the Heart Team



MERCI

THANK YOU

DANKE

どうもありがとう

GRACIAS

谢谢

OBRIGADO

GRAZIE

BEDANKT

DEKUJI

Спасибо

ΕΦΗΑΡΙΣΤΟ