



Cerebral Protection After TAVR Will be Used Sparingly (if at all) in the Future

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Disclosure Statement of Financial Interest

Within the past 12 months, I or my spouse/partner have had a financial interest/arrangement or affiliation with the organization(s) listed below.

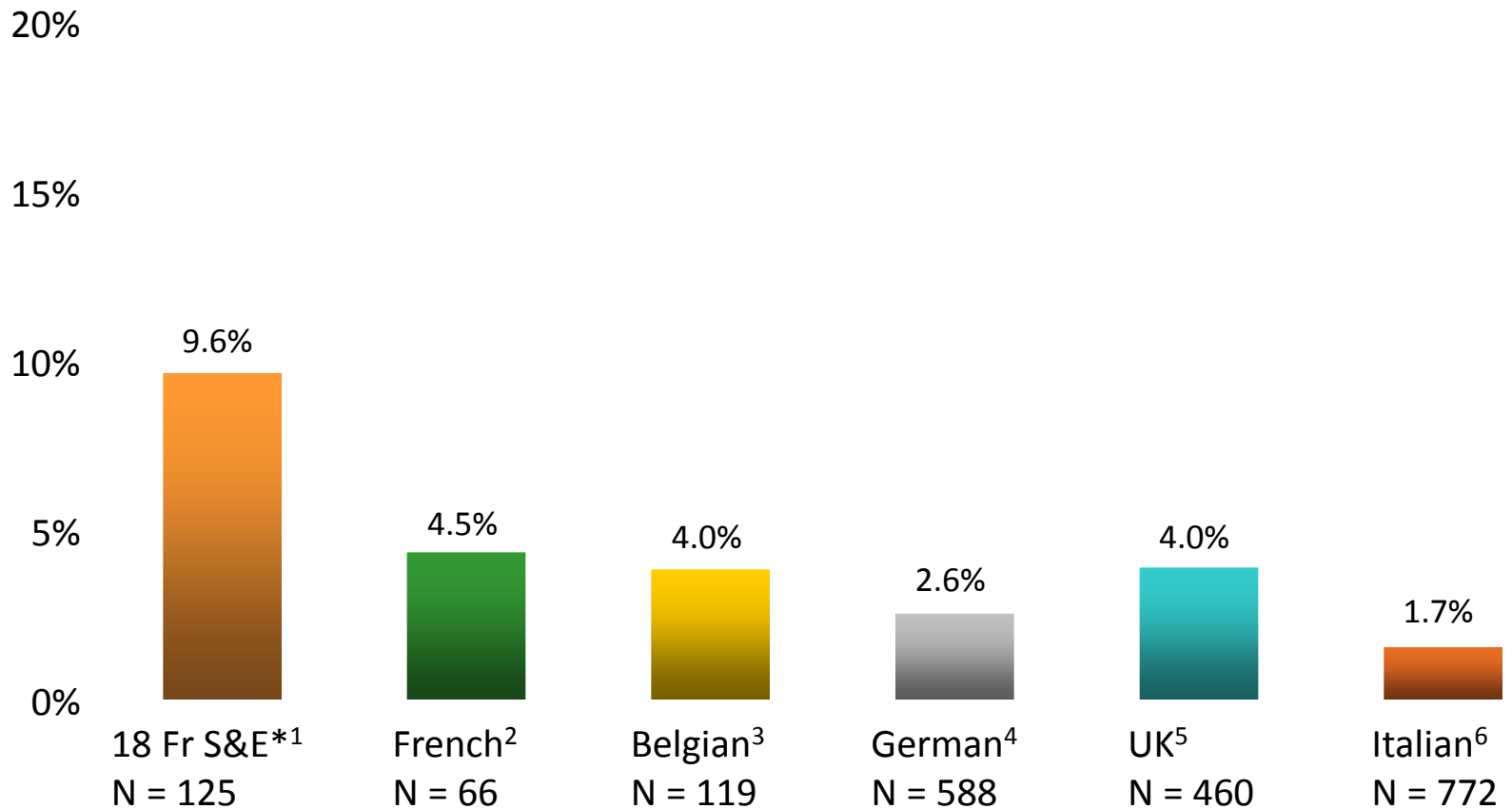
Affiliation/Financial Relationship	Company
<ul style="list-style-type: none">Consulting Fees/Honoraria	<ul style="list-style-type: none">MedtronicBoston ScientificSt Jude Medical

Disclosures for this presenter and this presentation are available on the Fellows2014 App

Association of Stroke and TAVR

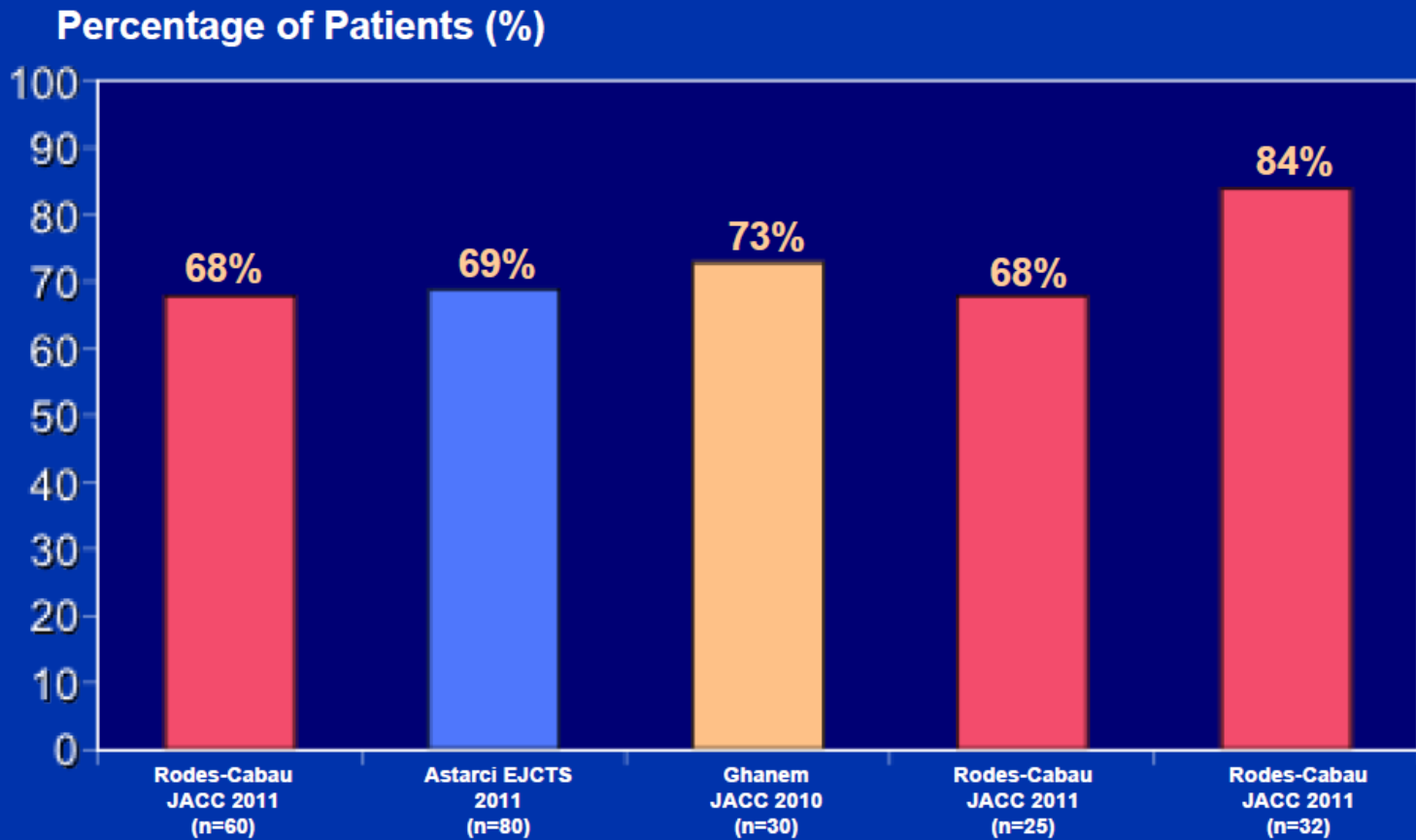
- It happens
- It is real
- It is devastating when it occurs
 - Death increases
 - Morbidity increases
- Significant impact on family and carers
- Significant impact on the health care system

30-Day Stroke Rate



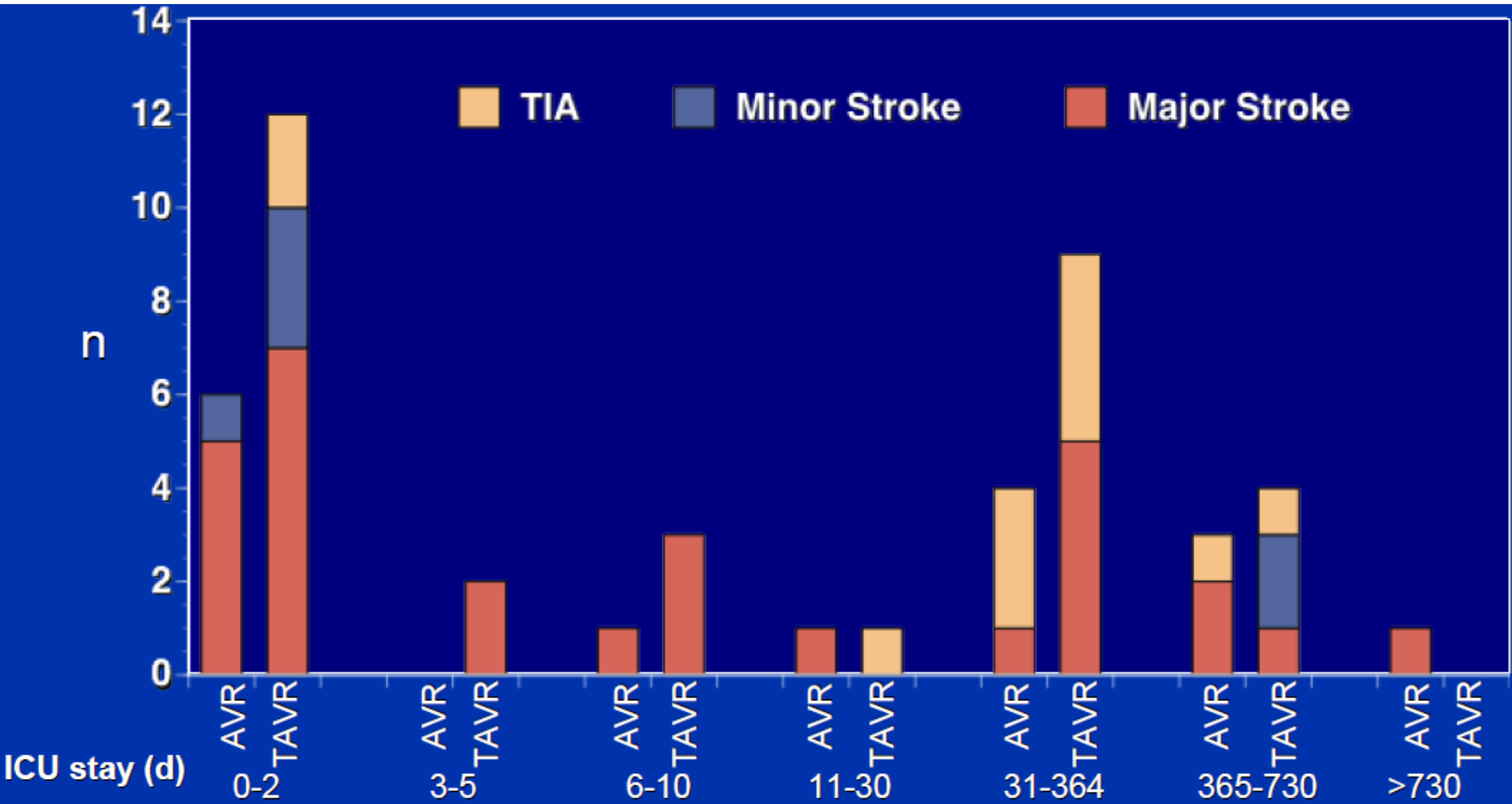
Embolism - MRI evidence

Diffusion Weighted MRI



But NO correlation with clinical stroke

Timing of stroke post TAVI: PARTNER A



Improving outcomes with adherence to best practice and next generation devices

Primary Endpoint: 1 Year All-cause Mortality

CoreValve US Clinical Trial
ACC 2014



Clinical Safety Results



All events are adjudicated by an independent clinical events committee

Event	30 day Rate (%) (per subject basis)* n=102	Overall Rate (%) day 1 up to 1 year (per subject basis)* n=102
Death	2.9	7.8
- Cardiovascular Death	2.9	4.9
Disabling (Major) stroke	2.9	3.9
Non-disabling (Minor) stroke	1.0	2.0
New pacemaker implantation	9.8	10.8
Myocardial infarction	2.0	2.0
Acute kidney injury	7.8	0.9

Better patient selection, better procedural techniques, improved device capabilities, standardised reporting

No. at Risk
Surgical
Euro
PCR
2014

Reprise

Clinical Outcome	EVENT RATE IN THE AT POPULATION # PATIENTS (KM %)		
	TF (N = 96)	TAA (N = 54)	Overall (N = 150)
All-Cause Mortality	2 (2.1%)	6 (11.1%)	8 (5.3%)
Cardiac Mortality	2 (2.1%)	5 (9.3%)	7 (4.7%)
All-Stroke*	1 (1.0%)	3 (5.6%)	4 (2.7%)
Disabling Stroke	0 (0.0%)	0 (0.0%)	0 (0.0%)
Major Vascular Complication	5 (5.2%)	4 (7.4%)	9 (6.0%)
Major Bleeding	19 (19.8%)	11 (20.4%)	30 (20.0%)
Life-Threatening Bleeding	2 (2.1%)	3 (5.6%)	5 (3.3%)
Rehospitalization†	0 (0.0%)	0 (0.0%)	0 (0.0%)

Primary Endpoint	EVENT RATE IN THE VI POPULATION # PATIENTS (KM %)		
	TF (N = 95)	TAA (N = 54)	Overall (N = 149)
All-Cause Mortality	1 (1.1%)	6 (11.1%)	7 (4.7%)

Event	Discharge/7d	30 Days*	3 Months	6 Months
All-cause death	1.7% (2/120)	4.2% (5/119)	5.0% (6/119)	8.4% (10/119)
Cardiovascular death	1.7% (2/120)	4.2% (5/119)	5.0% (6/119)	5.9% (7/119)
All stroke†	5.8% (7/120)	5.9% (7/119)	6.7% (8/119)	9.2% (11/119)
Disabling stroke	1.7% (2/120)	1.7% (2/119)	2.5% (3/119)	3.4% (4/119)
Non-disabling stroke	4.2% (5/120)	4.2% (5/119)	4.2% (5/119)	5.9% (7/119)

Non-CV Deaths: 1) SCC at 110d, 2) severe hyperthyroidism at 158d, 3) pneumocystis pneumonia at 97d
CV Death: 1 at 123d disabling spontaneous haemorrhagic stroke

* All patients were assessed by a neurologist before and after TAVR
* One patient withdrew consent after the discharge/7d time point

Challenges for device based solutions

- **Majority of stroke occurs after procedure**
- **Need more data to show that it reduces MRI events**
- **Cost and ease of use**
- **Overall, stroke rate is reducing, mainly due to technique and device improvements**

My Challenge to you, Please:

Show me the evidence

Give me a clear reason to use CPD

Thank You