


VEITH SYMPOSIUM
Connecting The Vascular Community



New developments with the STABILISE technique for acute and subacute TBADs: How is the STABILISE Registry helping: Technical Tips and Precautions

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San Raffaele Scientific Institute

Disclosures

- Investigator for trials sponsored by CID/Alvimedica, Boston Scientific, Cook Medical, Getinge, Medtronic, W.L. Gore
- Teaching / speaking at courses or symposia hosted by CID/Alvimedica, Terumo, Getinge
- Member of Advisory Board of Boston Scientific, Medtronic

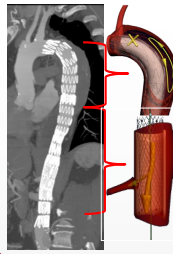
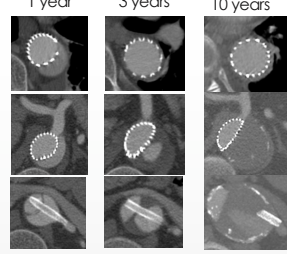
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Background

- 1994 • First report of TEVAR (series)
- 1995 to 2005 • Diffusion of TEVAR for aneurysmal disease
- 2006 • TEVAR proposed for TBD (simple coverage of proximal tear)
- 2006 • Adjunctive TEVAR strategies for TBD (PETTICOAT)
- 2014 • Evaluation of TBD TEVAR follow-up

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PETTICOAT: 1/3 to 1/2 evolve to aneurysm

1 year 3 years 10 years

Lombardi et al. J Vasc Surg 2019

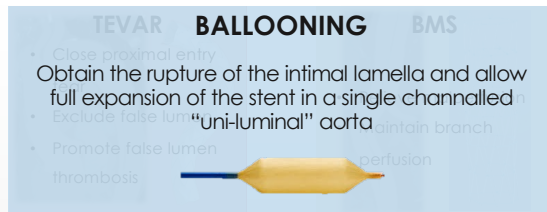
Late (> 5 yrs) volume evolution after PETTICOAT

OSR experience (2005-2014): 28 pts mean FU 85 months (r. 5-156 months)

	Pre-operative volume (mm ³)	Long term volume (mm ³)	Pts long-term variation >10%(N)
	(28 cases)	(16 cases)	(16 cases)
Overall (Thoracic + Abdom.)	274.9± 88,5	318.9± 88,1 (+16%)	8 (50%)
Thoracic Aorta	203,9± 73,8	210,7± 63,6 (+3%)	3 (18%)
Abdominal Aorta	71,0± 24,1	105,3± 41,4 (+48%)	11 (69%)

Mascia et al. J Endovasc Ther 2021

The STABILISE concept
An evolution of PETTICOAT




TEVAR BALLOONING BMS

- Close proximal entry
- Obtain the rupture of the intimal lamella and allow full expansion of the stent in a single channelled stent
- Exclude false lumen
- Promote false lumen thrombosis
- Maintain branch perfusion


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San Raffaele initial experience




Satisfactory short-term outcomes of the STABILISE technique for type B aortic dissection

First 10 cases | Melissano et al, 2018



New technical approach for type B dissection: from the PETICOAT to the STABILISE concept

24 cases | Kahlberg et al, 2019

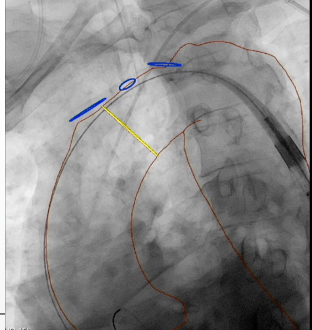


The STABILISE technique to address malperfusion on acute-subacute type B aortic dissections

Review | Mascia et al, 2022

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STABILISE: technique



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Technique: the "10 rules"

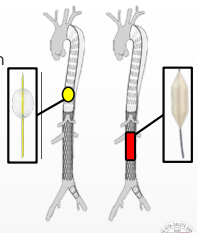
1. **ONLY acute/subacute (< 90 days) TBD** with a proximal suitable non-dissected landing zone (SAT debranching allowed) **NO CHRONIC TBD**
2. Total aortic diameter of the **abdominal aorta** must **not exceed 40 mm**
3. **Proximal covered SG (max 10% oversizing)** +/- a second (distal) **optional** covered SG
4. One or more **aortic BMS (dedicated devices)** to cover ALL dissected abdominal aorta
5. **NO overlap of BMS across VV origin**



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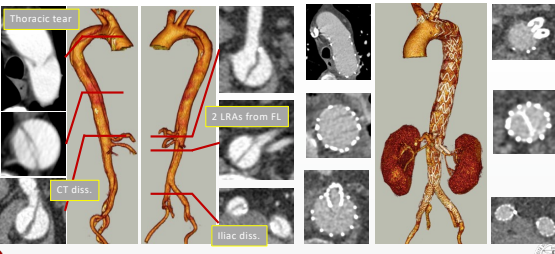
Technique: the "10 rules"

6. **Compliant ballooning** of covered SG
7. **Non-compliant ballooning** of BMS (balloon sized on total aortic diameter)
8. Intraoperative TEE/IVUS monitoring
9. **Protection of VV** arising from the FL and optional stenting
10. Optional coverage of **distal iliac tears**



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STABILISE: 4 years FU



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Literature review: 2014-2023

Tot. patients = 306		N (%)
Timing	Acute	151 (49)
	Subacute	110 (36)
	Chronic	45 (15)
CTD		13* (4)
Technical success		296 (97)
30-day mortality		8 (3)
SCI		6 (2)

*4 papers only

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Case mix bias

Different patients, indications, non-standardized techniques and outcomes



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STABILISE Registry

- Physician-initiated
- No corporate sponsor
- Voluntary and open to everybody
- Retrospective + prospective
- NCT registered, local ECs approved
- Strict inclusion criteria
(only acute/subacute < 90 days TBD)


homogeneous cohort



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STABILISE registry: updated status

24 participating centers
Europe, US, ASIA, Australia, NZ



US: 6 centers
EU: 14 centers
Japan: 1 center
Australia, NZ: 3 centers

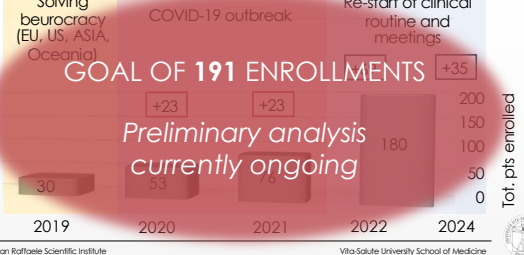
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STABILISE registry: updated status

Solving bureaucracy (EU, US, ASIA, Oceania) | COVID-19 outbreak | Re-start of clinical routine and meetings

GOAL OF 191 ENROLLMENTS

Preliminary analysis currently ongoing



Year	Enrollment Change	Total Enrolled
2019	+30	30
2020	+23	53
2021	+23	76
2022	+180	256
2024	+35	291

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