Klinika za Kardiovaskularne bolesti „Magdalena”

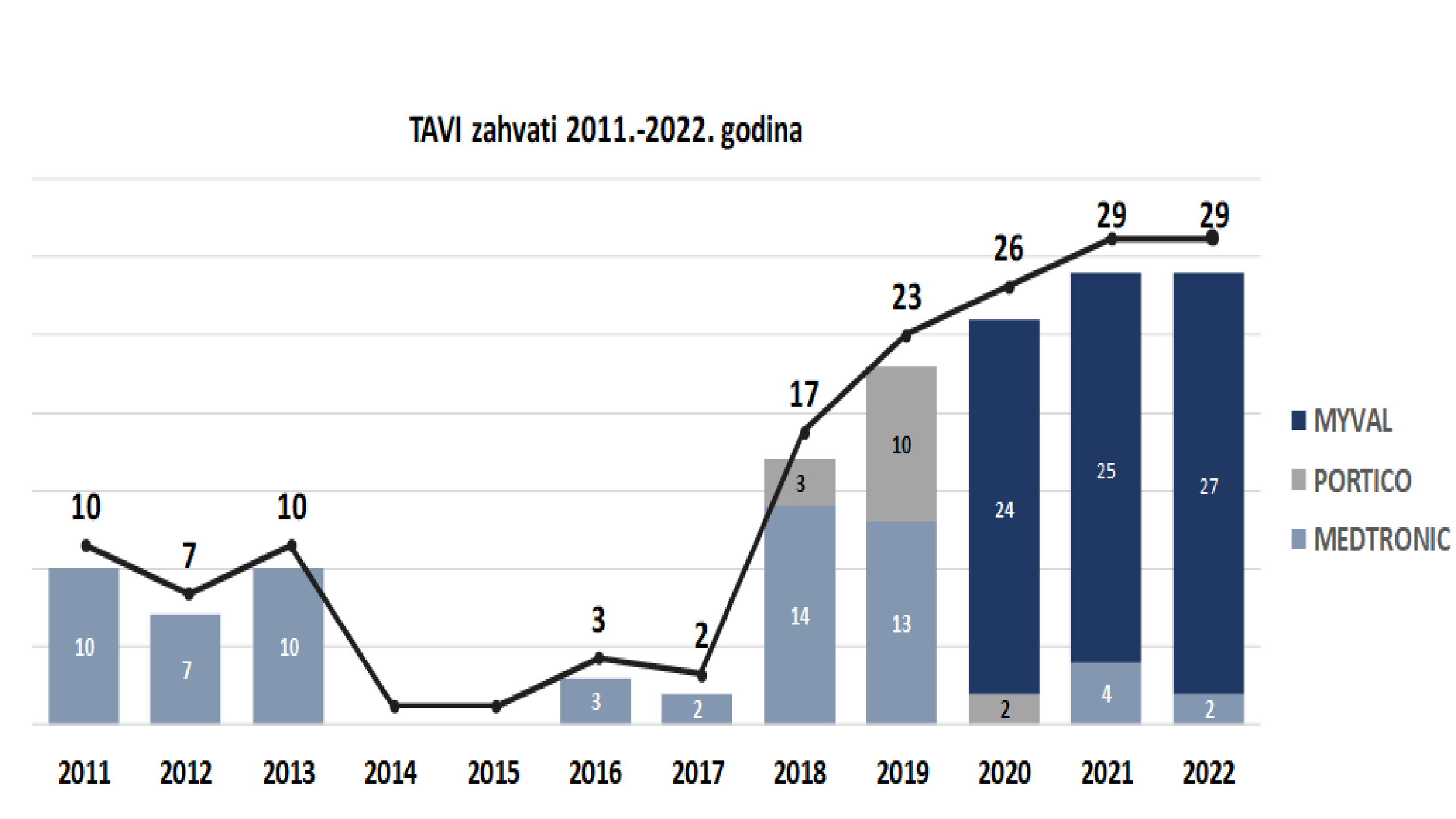
Luka Rotkvić, dr. med

Alan Jelić, dr.med

Doc. dr.sc. Krešimir Štambuk, dr.med

PRESENTATION OF TAVI CENTER….

- Start of the TAVI program (1st TAVI):2011
- Number of TAVI till now:156
- Number of TAVI in 2022:29
- Number of independent operators in 2022:1 + 2 in training
- Valves implanted: BE 53%
- 30-day mortality (from the beginning): NA
- 30-day mortality in 2021/22: 5%


TAVI zahvati 2011.-2022. godina
10
7
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3
2
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23
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29
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2
3
14
10
13
24
2
25
4
27
2
MYVAL
PORTICO
MEDTRONIC
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022

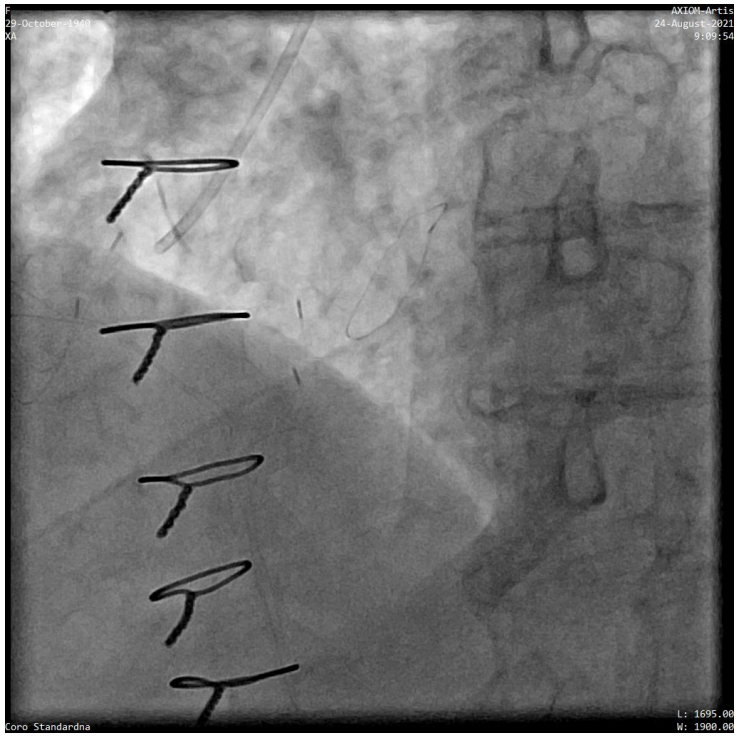
F, 82 y.o.

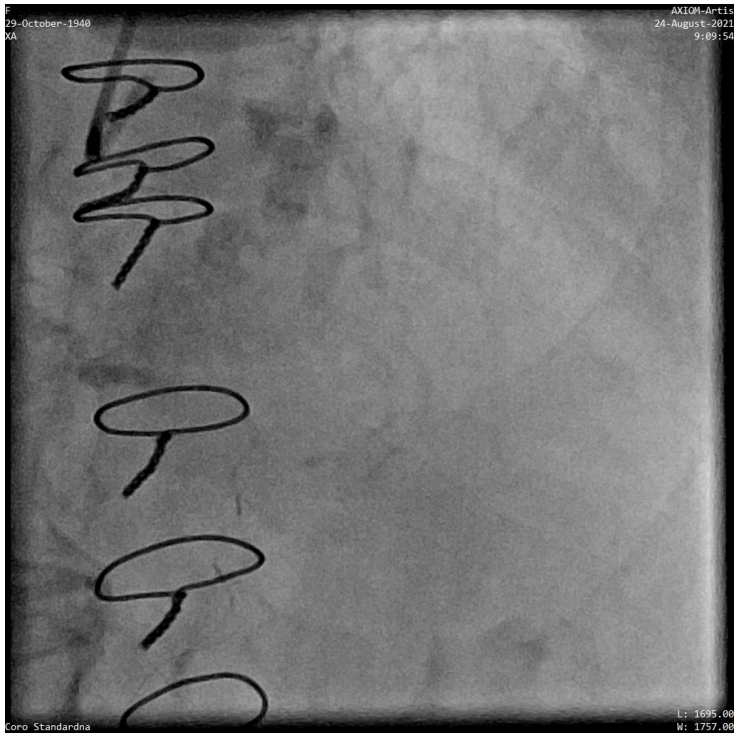
- St. post AVR with biological prothesis (**St. Jude Biocor A23**) and CABG x 1 (VSM-OM) – 2011.
- Paroxysmal AF
- HA, DM type 2, CKD, HLP, Obesity
- 2021. Multiple exacerbations of chronic HF
- ECHO: Severe aortic regurgitation (2/5 para-valvular and 3/5 valvular)

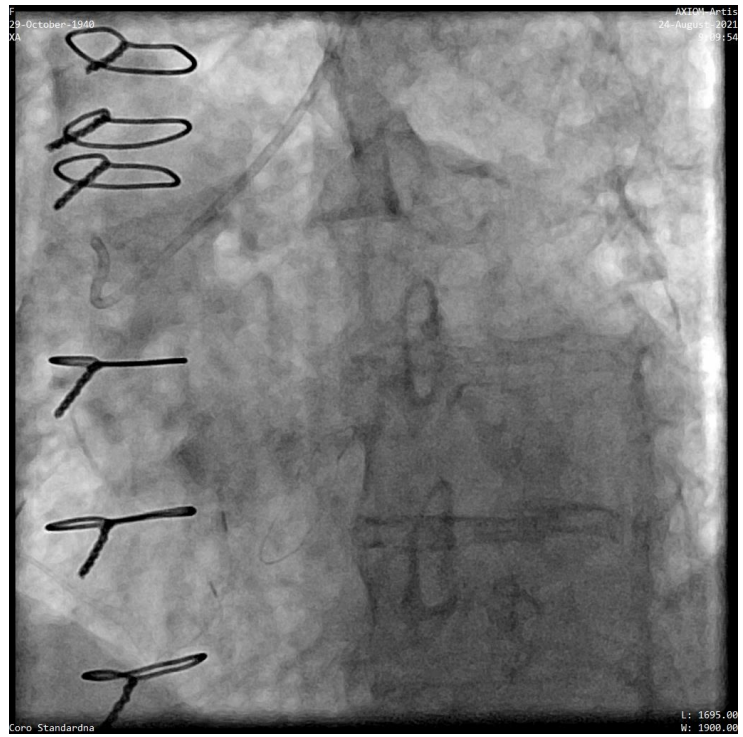
EuroSCORE II (8.61%)	STS (9.52%)

- Accepted for TAVR on heart team discussion
- *Plan: - To terminate valvular leak with optional reduction of PVL (by cracking).*
  - *Low profile vascular plug as „bail out" method*

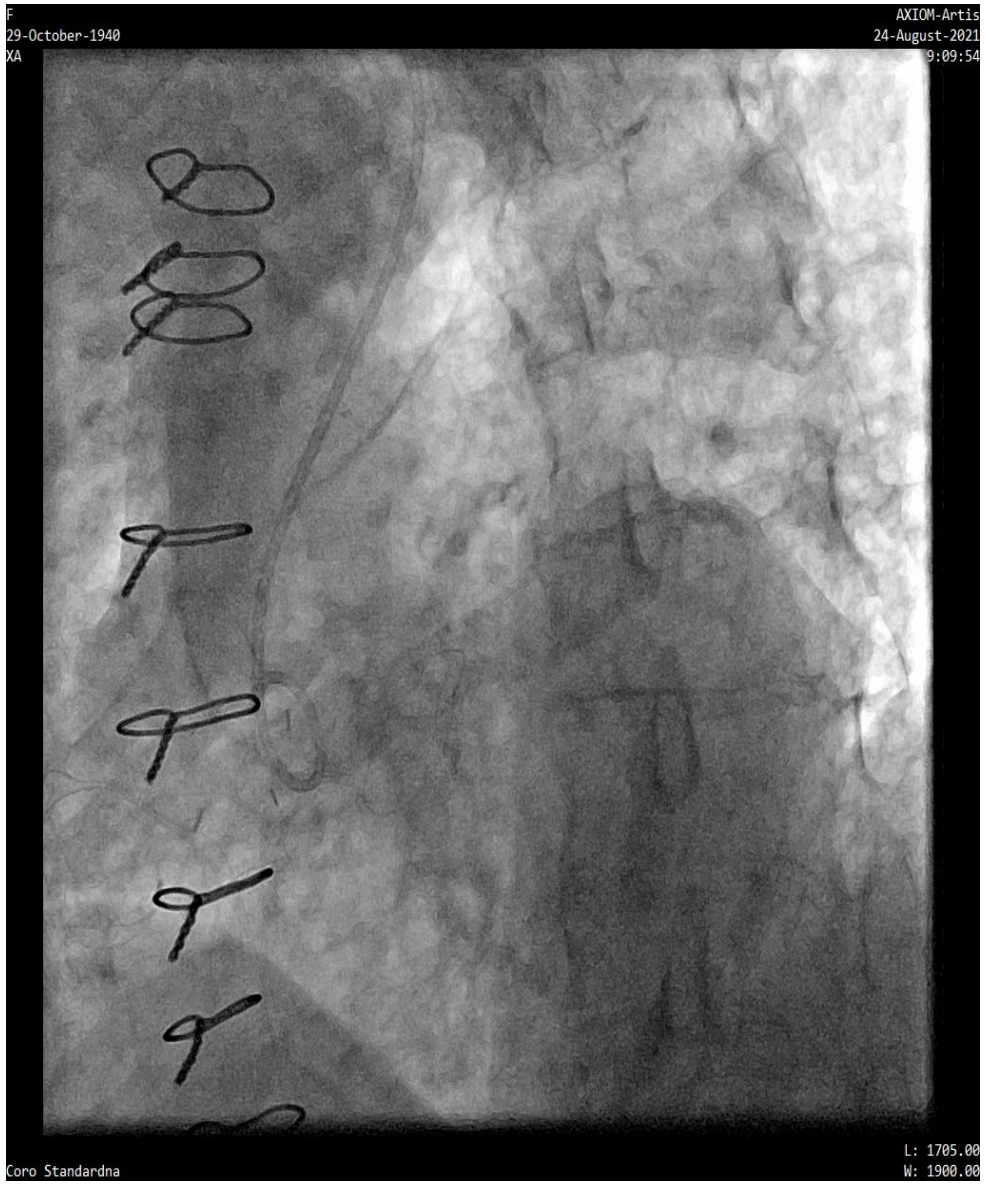
CA – without CAD progression

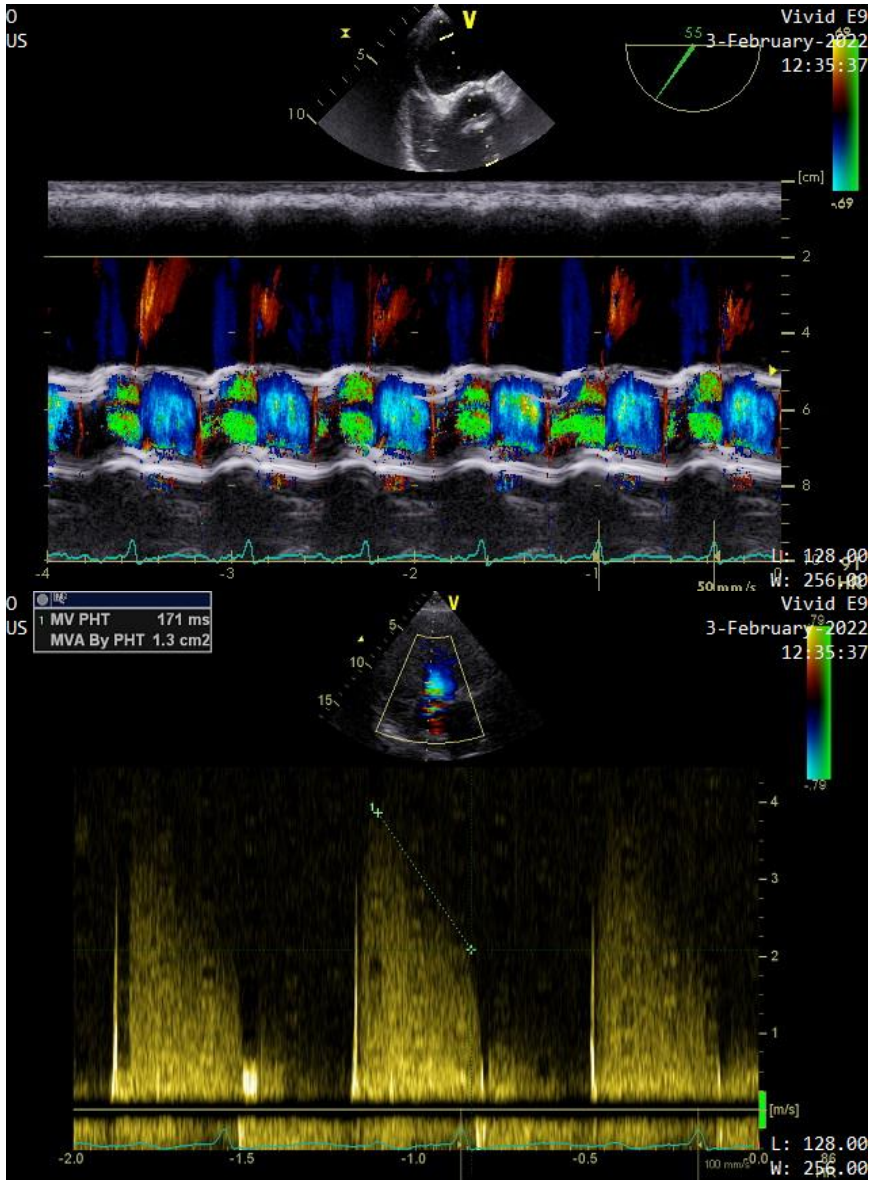


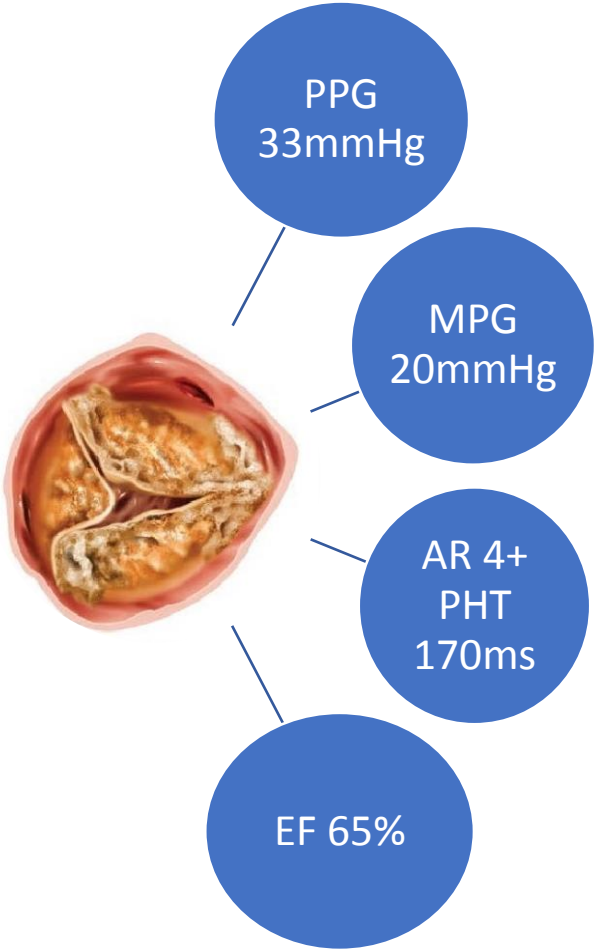




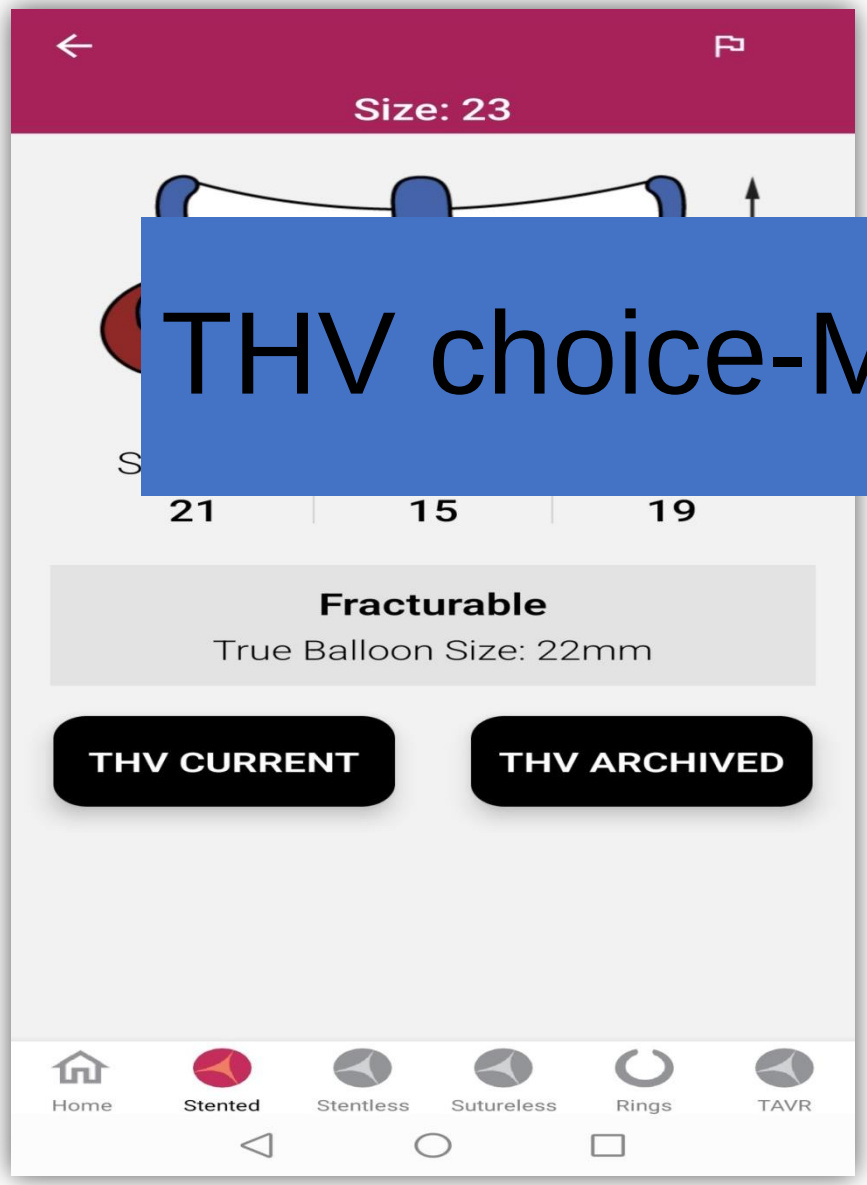
Aortography + TTE/TEE







St. Jude Biocor A23



THV choice-Medtronic Evolut R 23

Table 5. Factors to consider before balloon-expandable versus self-expanding transcatheter aortic valve (TAV) implantation in

Smaller SAV (true ID <23 mm)		✔
Need for coronary re-access	✔	
Pure aortic regurgitation in a stentless SAV	✔	✔
BVF feasible	✔	
BVF not feasible or safe		✔

Evolut R 23 – after deployment

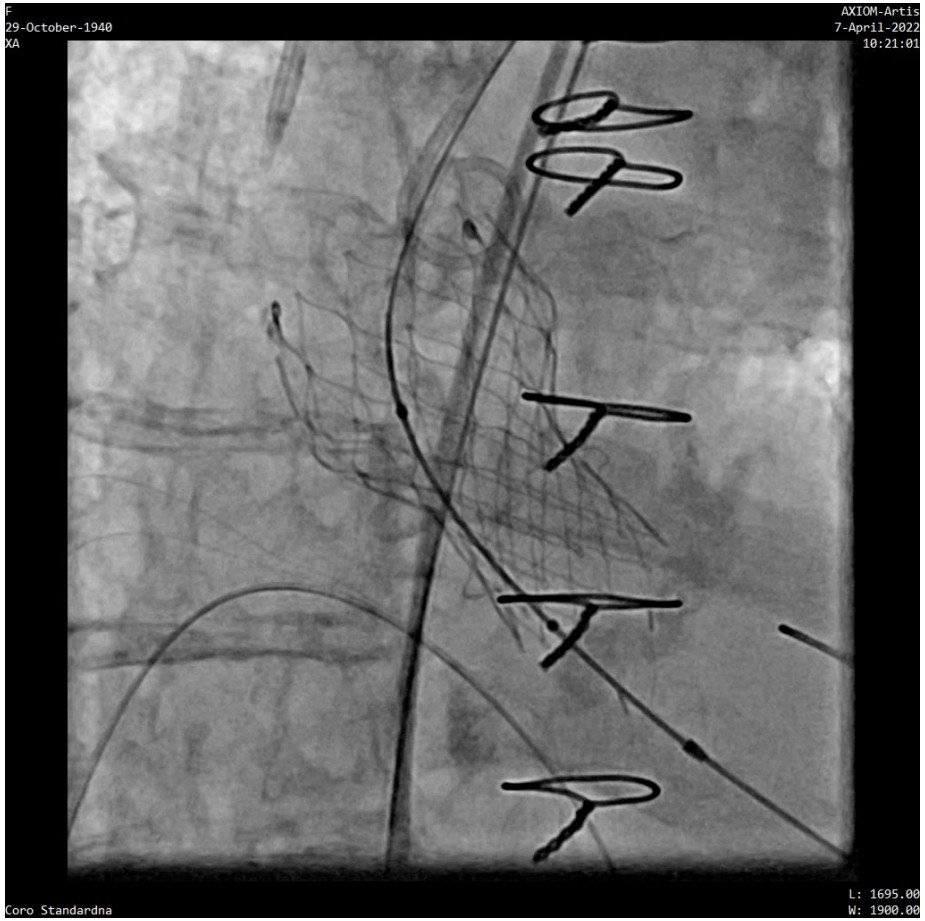
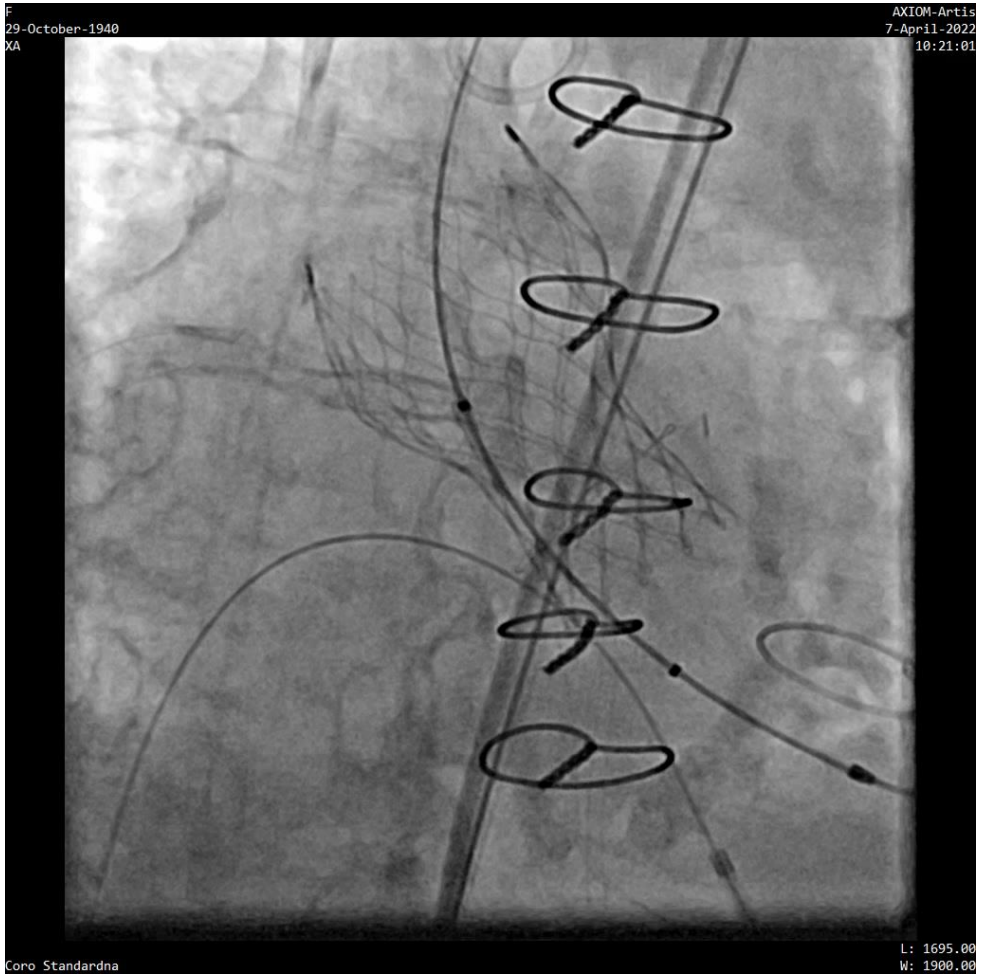


Table 6. Potential advantages and disadvantages of balloon valve fracture (BVF) before or after transcatheter aortic valve implantation (TAVI).

	BVF before TAVI	BVF after TAVI
Advantages	– Easier to implant self-expanding valve with less sizing mismatch – Can confirm successful fracture before finalising TAV size	– Better TAV expansion, especially in balloon-expandable valves – Less risk of acute severe aortic regurgitation
Disadvantages	– Acute severe aortic regurgitation causing haemodynamic collapse – May need to post-dilate to optimise haemodynamics	– TAV migration or embolisation – Acute TAV failure from leaflet injury – Unknown effect on TAV durability

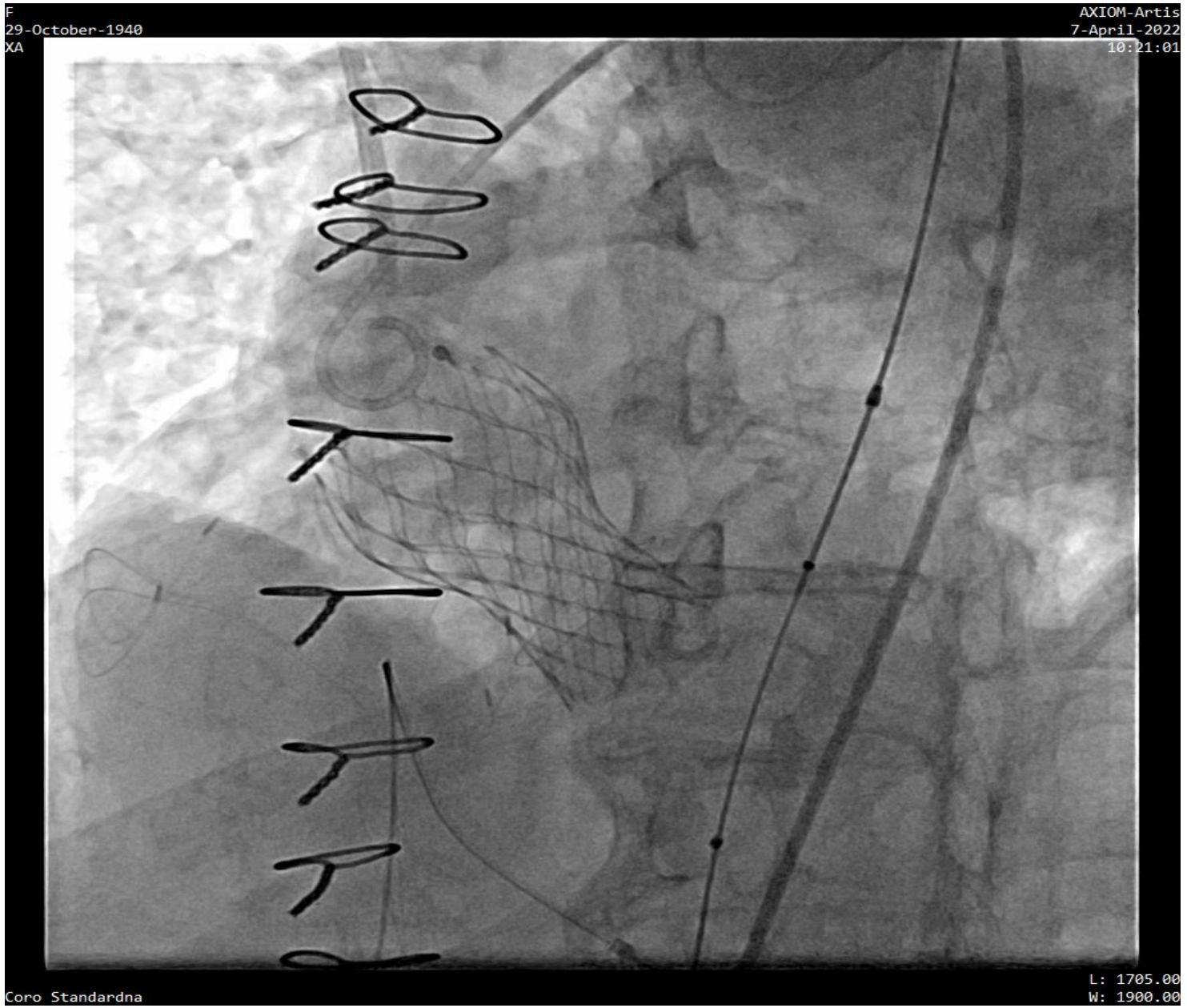
Giuseppe Tarantini1, MD, PhD; Danny Dvir2, MD; Gilbert H.L. Tang3, MD, MSc, MBA
1. Department of Cardiac, Thoracic and Vascular Sciences and Public Health, University of Padua, Padua, Italy; 2. Jesselson Integrated Heart Centre, Shaare Zedek Medical Center, Hebrew University, Jerusalem, Israel; 3. Department of Cardiovascular Surgery, Mount Sinai Health System, New York, NY, USA EuroIntervention 2021;17:709-719. DOI: 10.4244/EIJ-D-21-00157

„Cracking” with Atlas 20mm



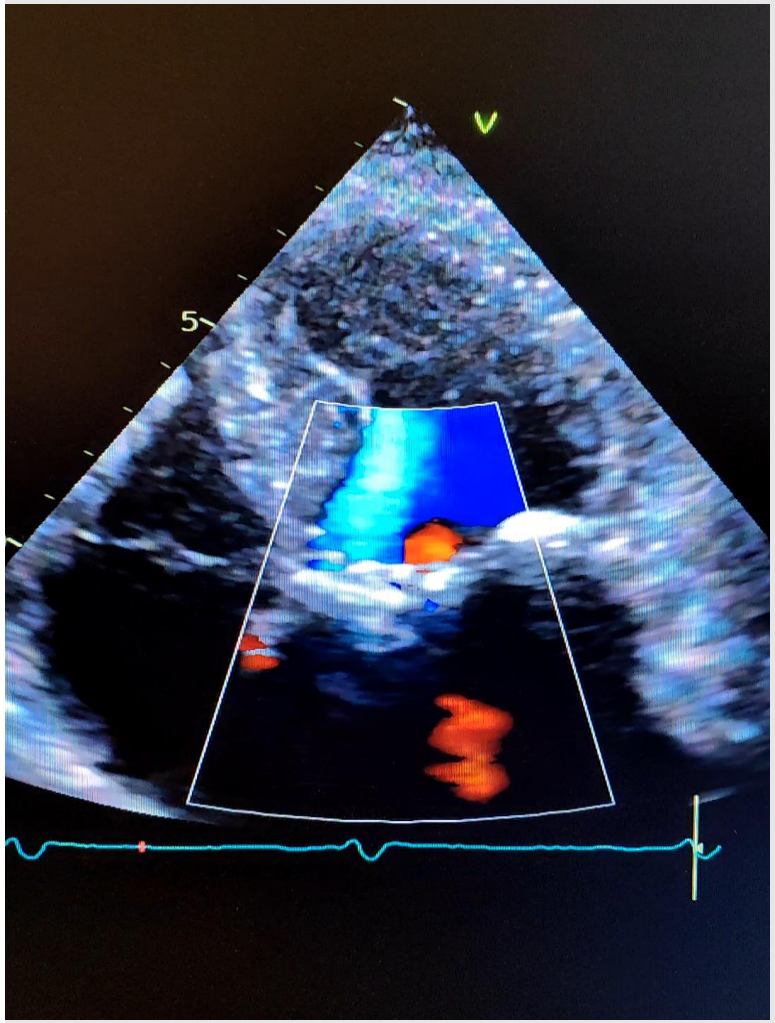
Keith B. Allen, MD, Adnan K. Chhatriwalla, MD, David J. Cohen, MD, MS, John T. Saxon, MD, Sanjeev Aggarwal, et. al. Bioprosthetic Valve Fracture to Facilitate Transcatheter Valve-in-Valve Implantation Ann Thorac Surg 2017;104:1501–8

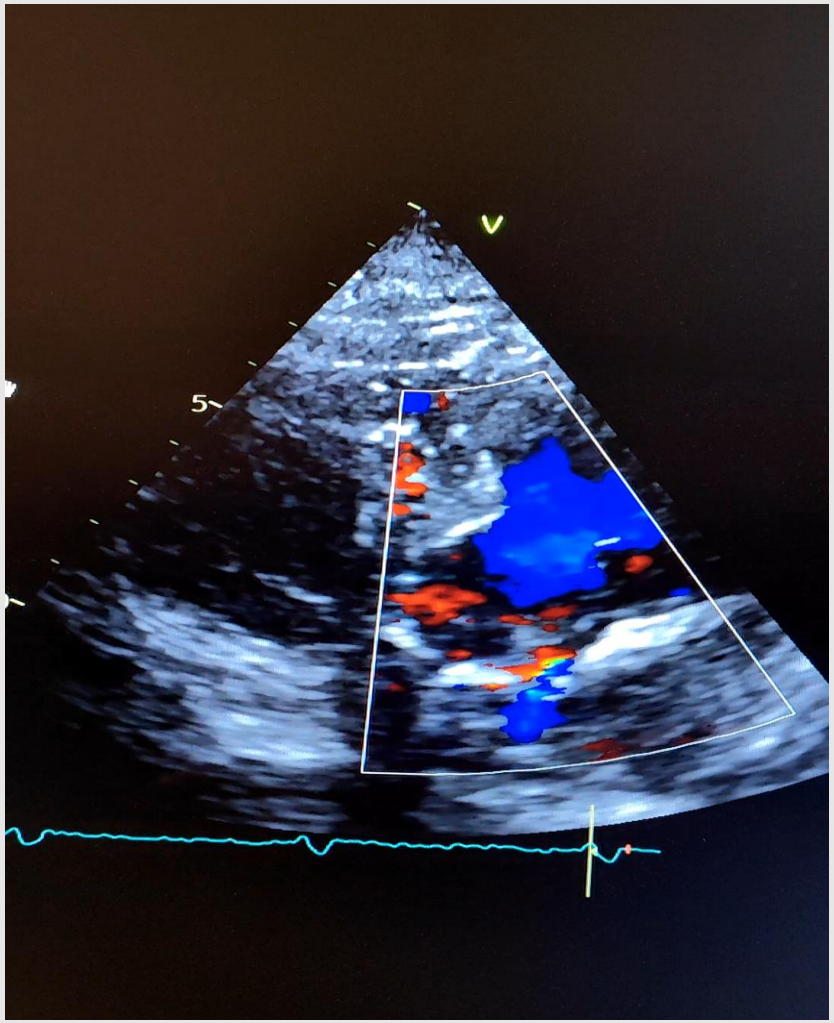
Final result



- Patient discharged home 5th post procedural day

- ECHO at discharge: Vmax. 2.4m/s, PPG 23mmHg, mild PVL (1+)





Thank you on your attention