



# Patient selection and long term follow up

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„Never, under any circumstances, we could not forget the humanistic principles that are the basis of our profession.”

Dr. René G. Favaloro

Opening Session of the Congress on Cardiac Rehabilitation, Buenos Aires, 1996



# How we started TAVI program in MC MEDICOR Slovenia

- Long learning discussions with prof. Marko Noč, MD, PhD, and constructing potential team with other collaborators
- Long learning discussions with prof. Roberto Favalaro, MD, PhD, in Buenos Aires and during his visits in MC MEDICOR Slovenia
- Complaining for not reimbursement of health insurance





# How we started TAVI program in MC MEDICOR Slovenia

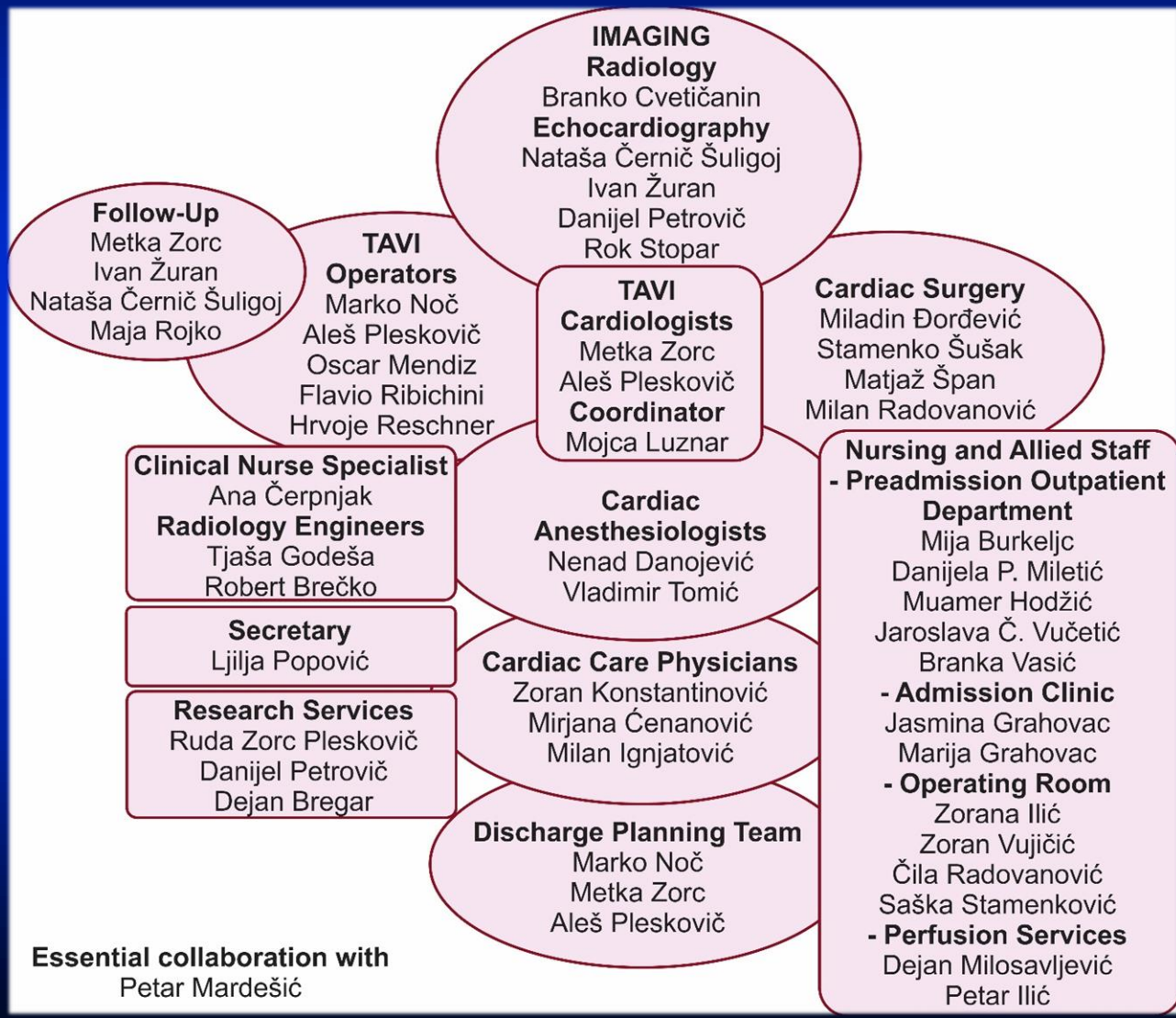
- Collecting sponsors for TAVI payment
- Help of prof. Roberto Favalaro, MD, PhD
- Organization with Medtronic, Buenos Aires
- Prof. Oscar Mendiz, MD, PhD, and prof. Flavio Ribichini, MD, PhD, as proctors
- Prim. Nataša Černič Šuligoj, MD, as EHO cardiographer
- Consultations with the member of supervising committee prof. Sabial Kar, MD, PhD
- Creating TAVI team with head of cardiac surgery prim. Miladin Đorđević, MD
- Creating Cat-lab team with head nurse Ana Čerpnjak, RTG engineer Tjaša Godeša and Rober Brečko
- Creating outpatient department for TAVI patients with coordinator Mrs. Mojca Luznar and nursery team: Danijela P. Miletić, Jaroslava Č. Vučetić, Muamer Hođić





# MC MEDICOR Heart Team

In Hospital Department MC Medicor Izola,  
in Outpatient Department Medicor Ljubljana





# First TAVI, December 2016





# Success for TAVI

## Proper patient selection

- Deep understanding of valvular pathology and pathophysiology
- Precise evaluation of patient medical history
- Precise clinical investigation
- Evaluation of cognitive function
- Non-invasive diagnostic procedures (ultrasounds, CT scan)
- Invasive diagnostic procedure (coronary angiography)
- Individual treatment
- Defining risk (prior cardiac surgeries, mitral valvular disease, pulmonary disease, peripheral artery disease, calcified aorta, thrombus in the left ventricle, bicuspid or not calcified valves LVEF < 20%, inadequate annulus size, active endocarditis, frailty, liver disease, kidney disease, cancer)
- Evaluation of patient and family expectations
- Reasonable expectation of improved quality of life post procedure

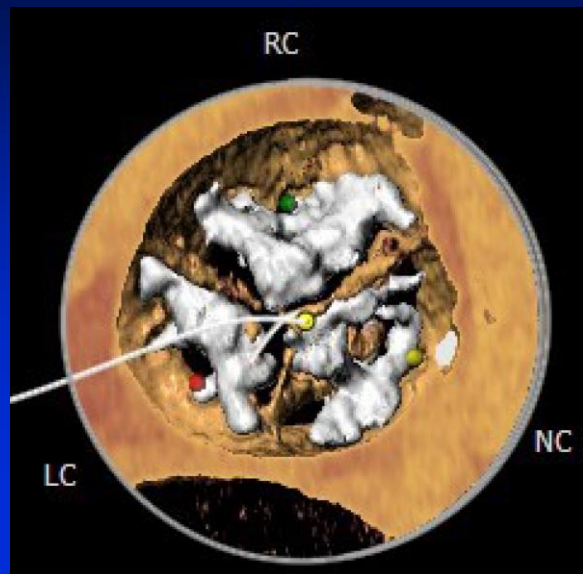


# Success for TAVI Heart Team decision

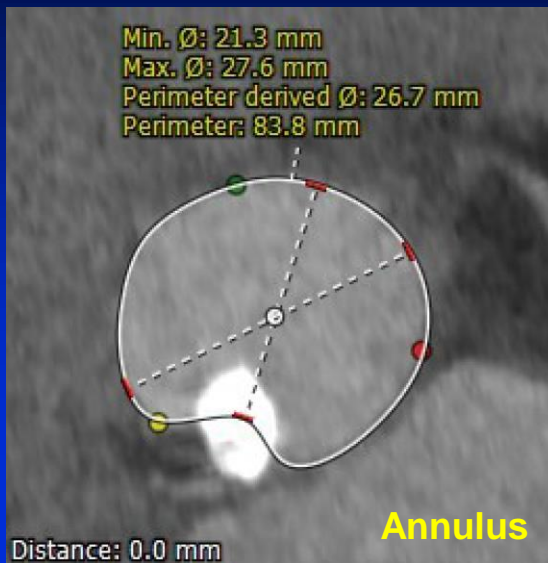
- Presentation of patients data (age), history of the disease with clinical evaluation
- Surgical risk scoring (STS, EuroScore)
- Analyses of non-invasive (echocardiography CT scan) and invasive procedures (coronary angiography)
- Comorbidity and patient frailty
- Anatomical evaluation (arterial vasculature, aortic valve complex, extent and distribution of calcification, sinus dimension, effective annular diameter, height of the coronary ostium above the valve annulus)



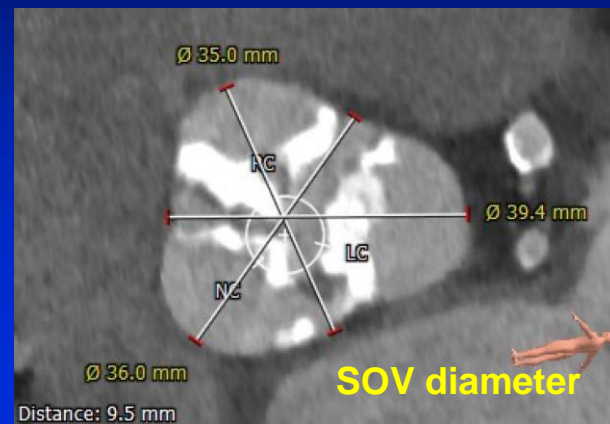
# Precise analysis of preoperative images of aortic valve, aortic annulus and aorta



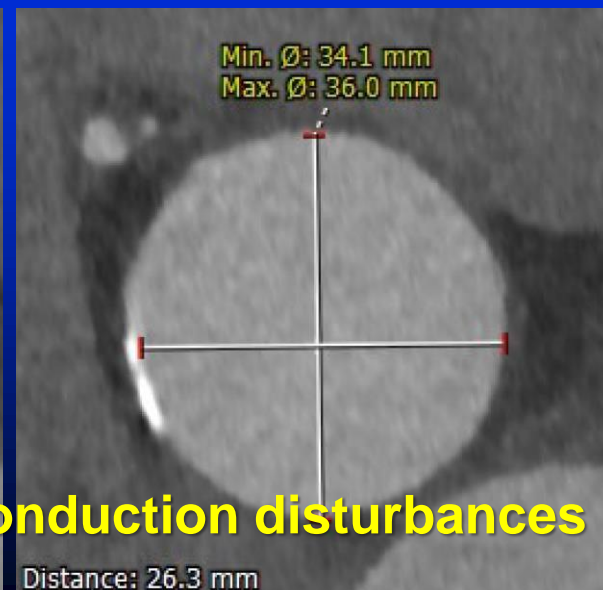
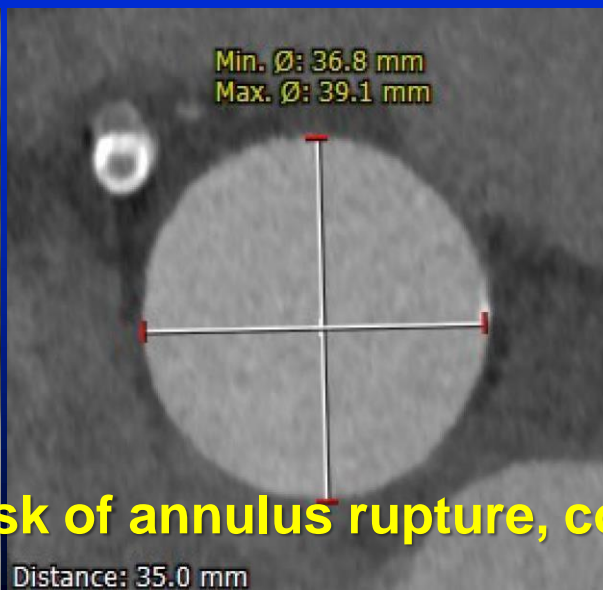
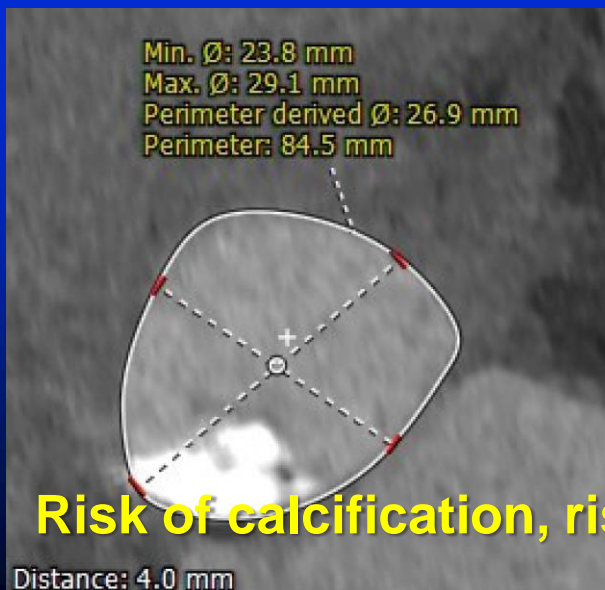
**LVOT**



**Ascending aorta**



**STJ**

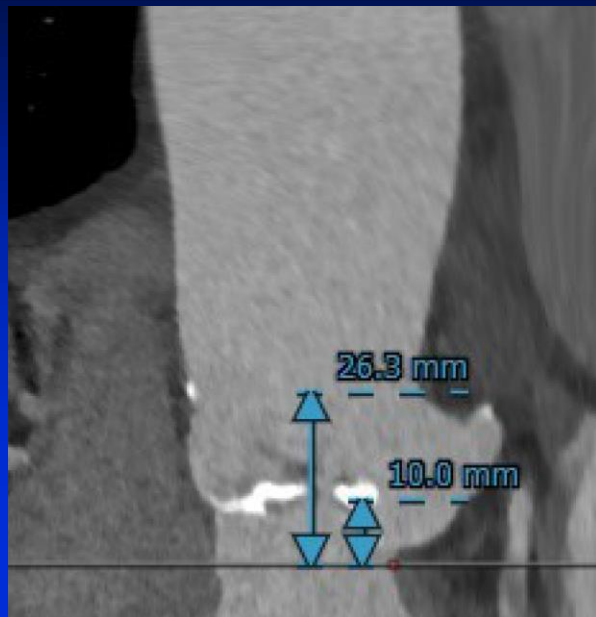


**Risk of calcification, risk of annulus rupture, conduction disturbances**

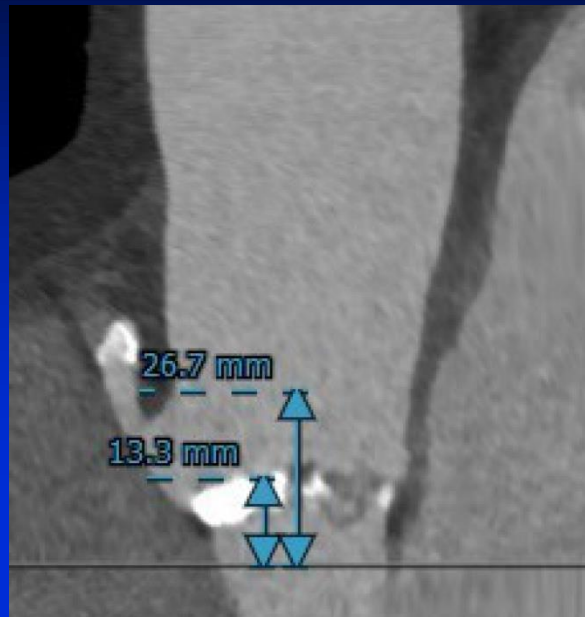


# Precise analysis of preoperative images

Sinus height - LCC



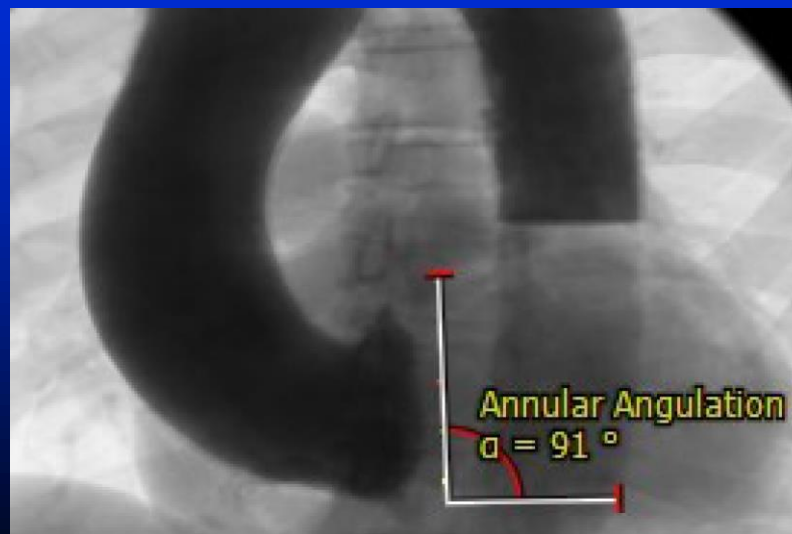
Sinus height - RCC



Sinus height - NCC

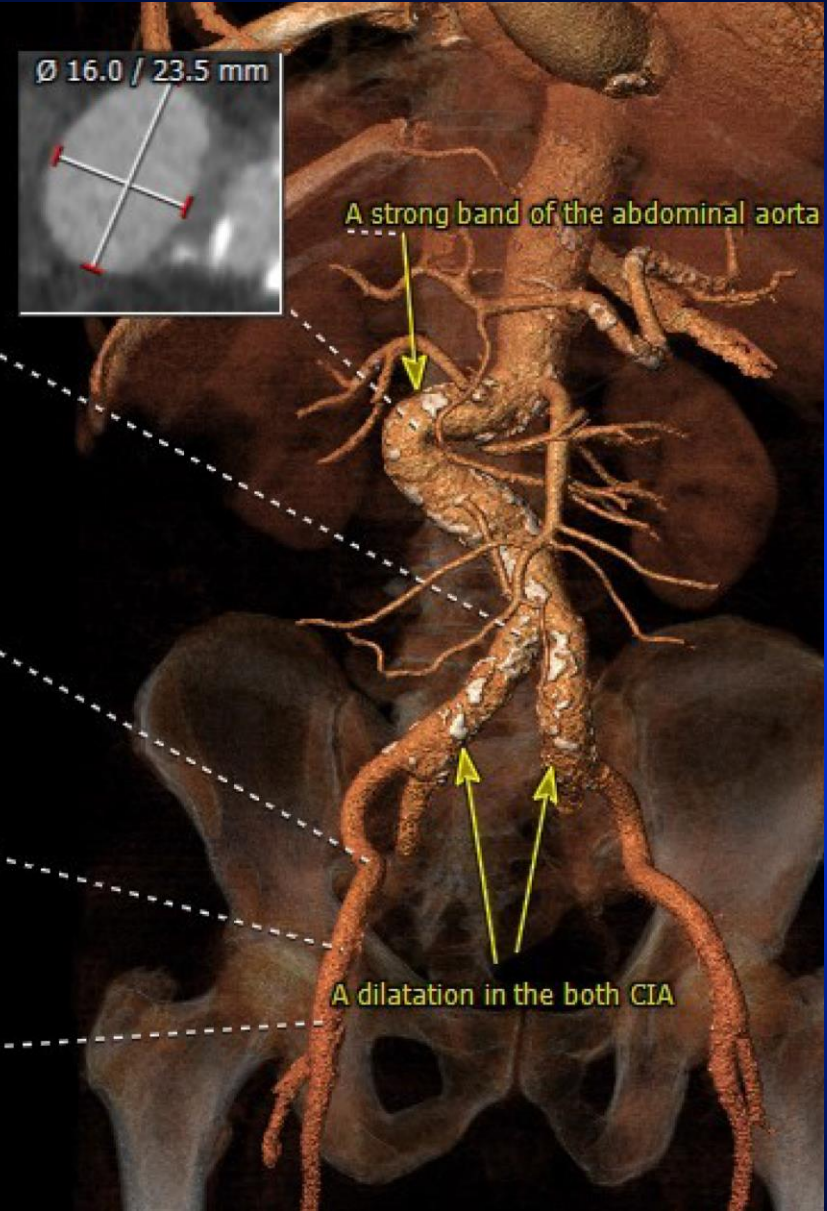
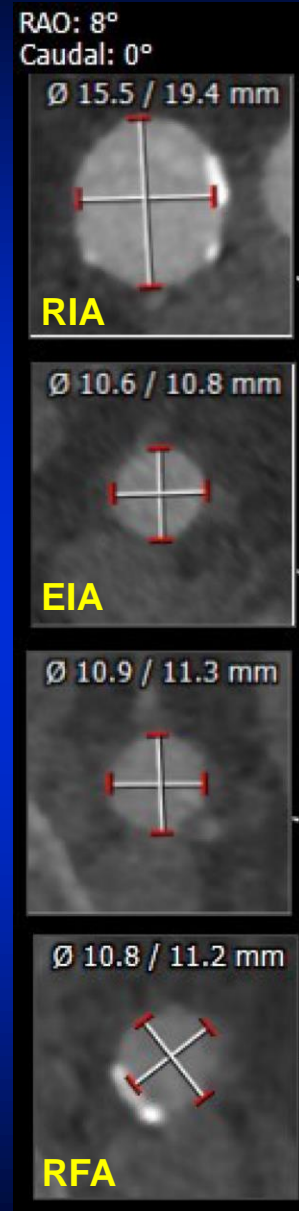
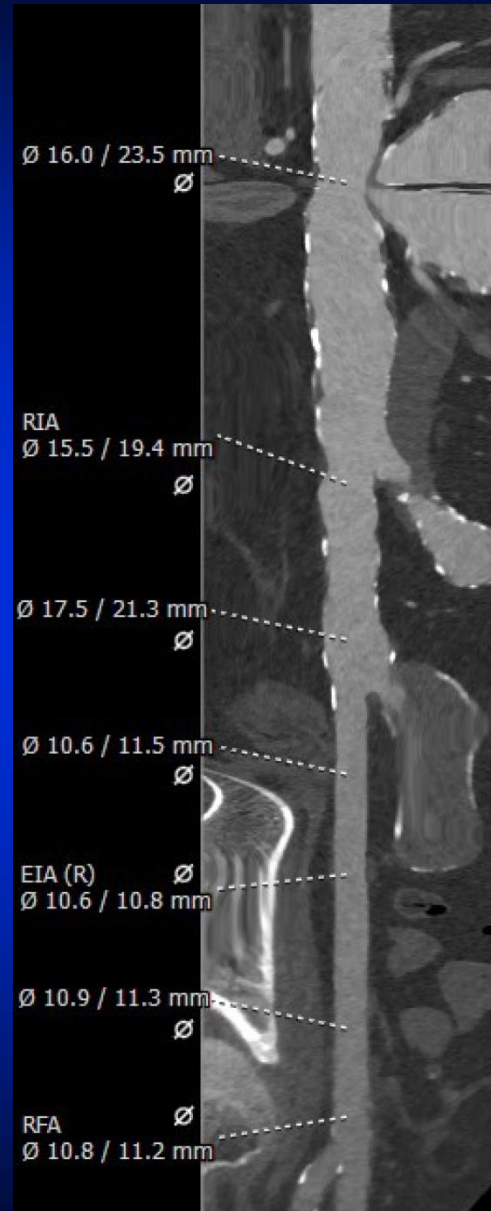


Annular angulation





# Precise analysis of preoperative procedural access





# Success for TAVI

## Postoperative treatment

- The postprocedure care plan
- Minimized postoperative risk for complications
- Focus on relevant clinical factors
- Vulnerability of the geriatric patients
- Multidisciplinary approach for the patient treatment
- Patient and family education for early discharge planning
- Need for rehabilitation



Essential need for rehabilitation



# Success for TAVI

(long term results)

## Exact strategy when the patient goes home

- Regular outpatient control (ECG, laboratory tests)
- Plan for medical treatment
- Patients self control of blood pressure and heart-rate
- Control of potential pace-maker
- The plan for careful physical activity (frail, old patient)
- Non-invasive diagnostic procedures (ultrasound of the heart in 1., 3., 6., 12. month). In the case of elevated gradient CT scan of aorta
- Quality of life evaluation (questionnaire KCCQ, QUOLINS – prof. N. Radovanović)

SPRAVDA JE VEŠETI  
KOLIKO JE DUBOKO SVETLO  
KOLIKO JE TEMA I VEDEN  
KOLIKO JE VIDA I POKOJ  
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SRCP





# Measuring success of TAVI

Quality indicators of successful procedure (VARC2)

- Mortality
- Myocardial infarction
- Bleeding
- Acute kidney injury
- Vascular access site complications
- Conduction disturbances and arrhythmias
- Device success
- Quality of life





# Conclusion

## MC Medicor experiences

- Number of patients: **377** (2016 – 2022)
- 30 days mortality: **1,6%**
- **Heart Team is essential to achieve optimal results**
- Consultations with prof. Oscar Mendiz (Favaloro Foundation), prof. Flavio Ribichini (University of Verona) and prof. Saibal Kar (Los Angeles) is helpful for decision making
- **Precise outpatient treatment** and family education for patients quality of life

# Clinical follow-up and quality of life management



Special thanks to our TAVI coordinator Mrs. Mojca Luznar

Dear Metka!



CONGRATULATION!!!!

**Excellent publication with excellent results. Thank you for mentioning me in the publication.**

I remember at the beginning that I tried very hard that Medtronic help/finance the project with Maria Ines Capristo from Medtronic Argentina so that Mendiz could go to MEDICOR.

**I am very proud for you, Marko and Ales who is the first author. I feel so happy...**

However at Favaloro Foundation we are operating up to 3 cardiac surgeries /day and performing multiple organ transplant (Rene's dream).

Regards to everybody.

Best wishes, Roberto



V SVETLOBI V SENCI  
MENJAJO OBRAZ STVARI SVE  
RA: NAJLEPSA VIGRED SLEC  
ROŠNA ČUDA, A ČESAR NE  
ZAMETE ZIMSKI ČAS, KAR  
SIJE VEDOMER KOT DRA  
GA RUDA JE LUC  
SRCA

C. VIPOTNIK