



31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

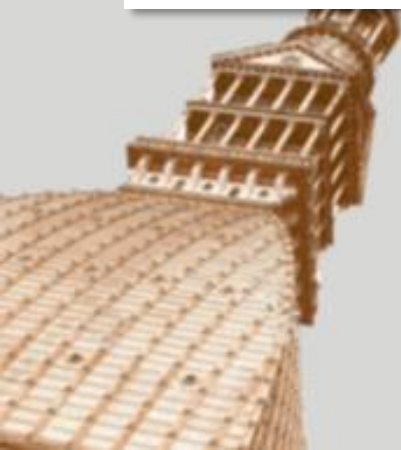
FRIDAY October 25th 2019

TAVI: NEW APPROACHES

LIVE IN THE BOX: “Transcatheter Aortic Valve Implantation”

Operators: F. CONROTTO, M. D'AMICO, M. LA TORRE, T. MODINE,
S. SALIZZONI

Presenter: F. CONROTTO





31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

Male, 64 y

- **Non cardiac medical history**

Polycystic kidney disease 2013 Right nephrectomy
>>>haemodialysis

In kidney transplant waiting list since 2014

Factor V Leiden thrombophilia

Chronic obstructive pulmonary disease in steroid therapy

Hyperhomocysteinemia

Hypothyroidism

Hyperparathyroidism



31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

- **Cardiac medical history**

2016 dilated cardiomyopathy and mild aortic stenosis

2016 Negative coronary angiography

2016 ICD implantation

2018 Severe LFLG aortic stenosis



31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

Echocardiography 2/2019

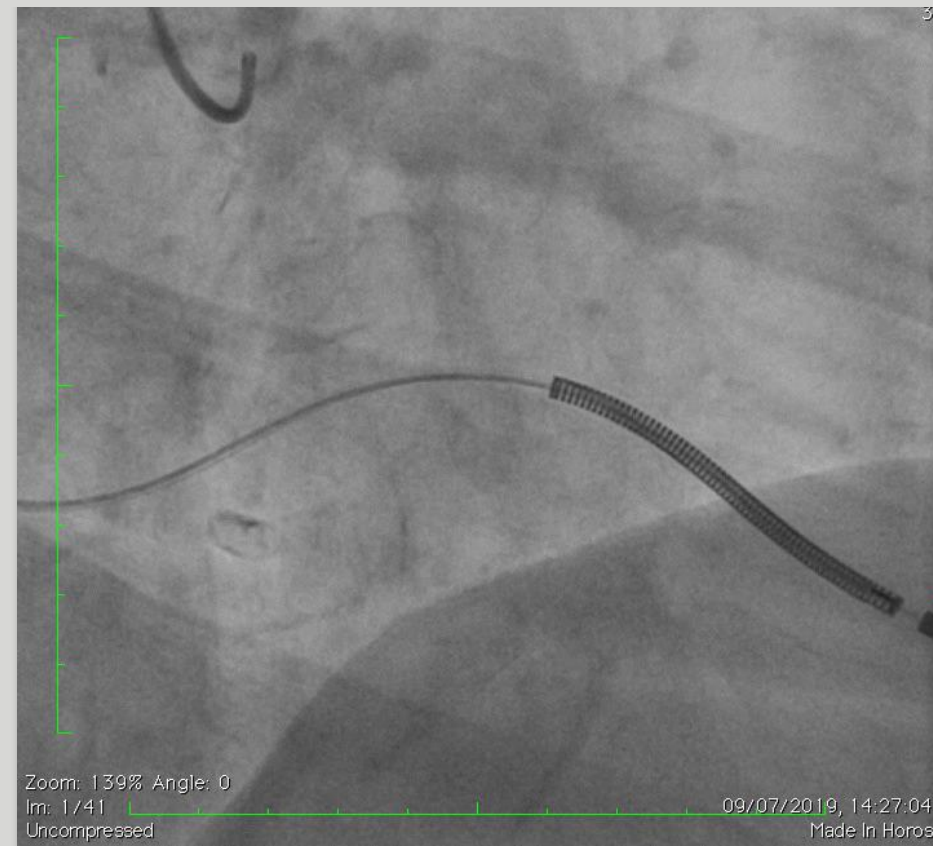
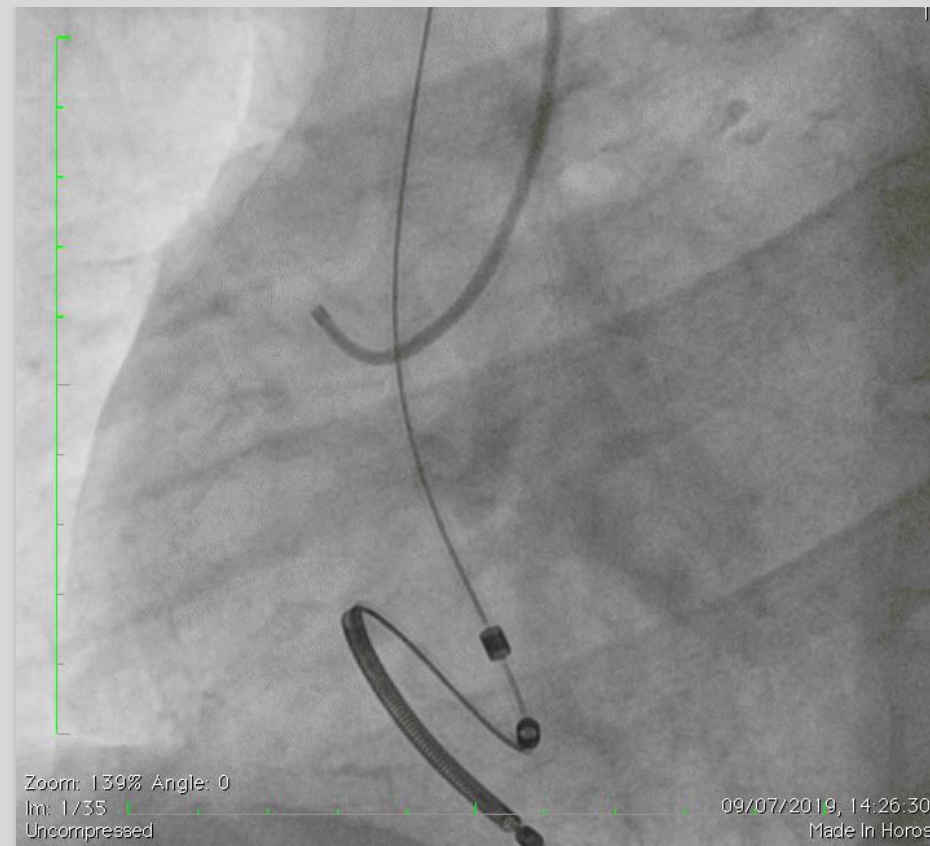
- Left ventricle chamber size severely dilated (DTD 69 mm; EDV/ESV 217/170 ml)
- Severely Reduce ventricular function for diffuse hypokinesis (EF 31%)
- SVi 27 ml/mq
- Severely calcified tricuspid aortic stenosis (PG 63/37, Vmax 3.9; Functional AVA 0.7)
- Mild 1+ mitral regurgitation
- Mild tricuspid regurgitation. PAPs 27 mmHg



31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

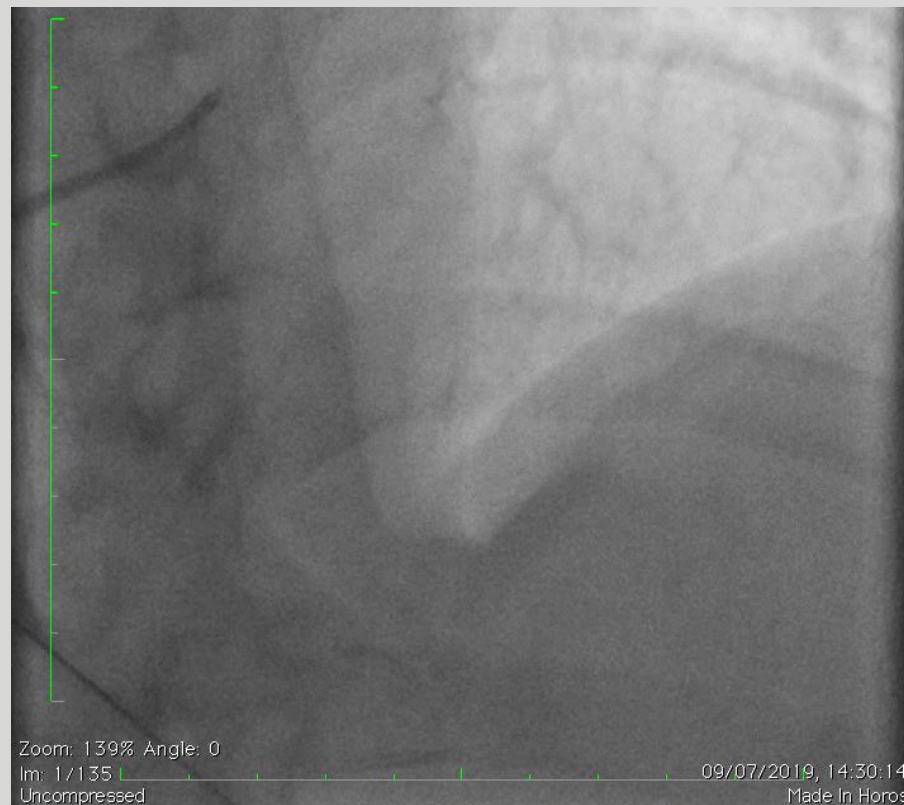
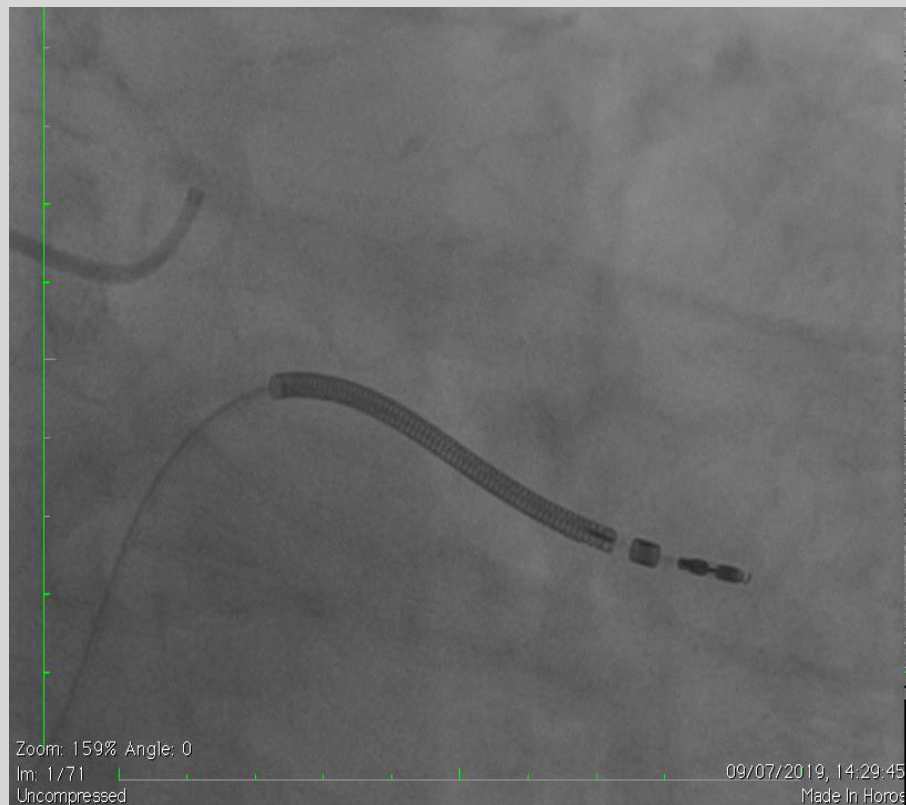
- **Coronary angiography**





31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

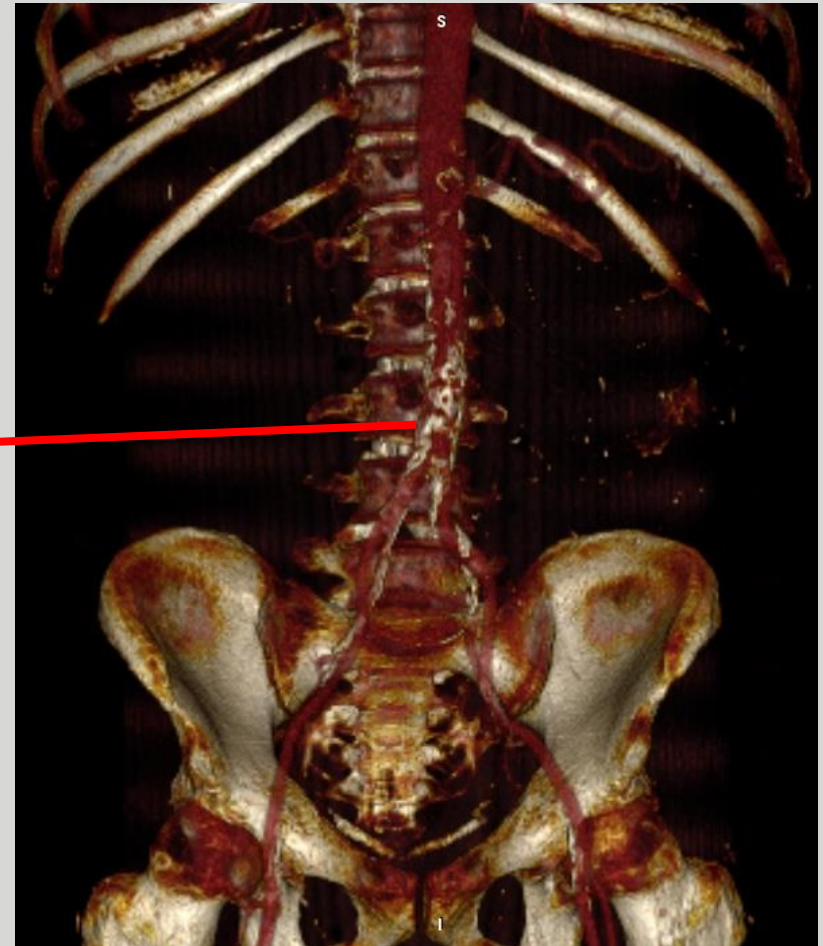
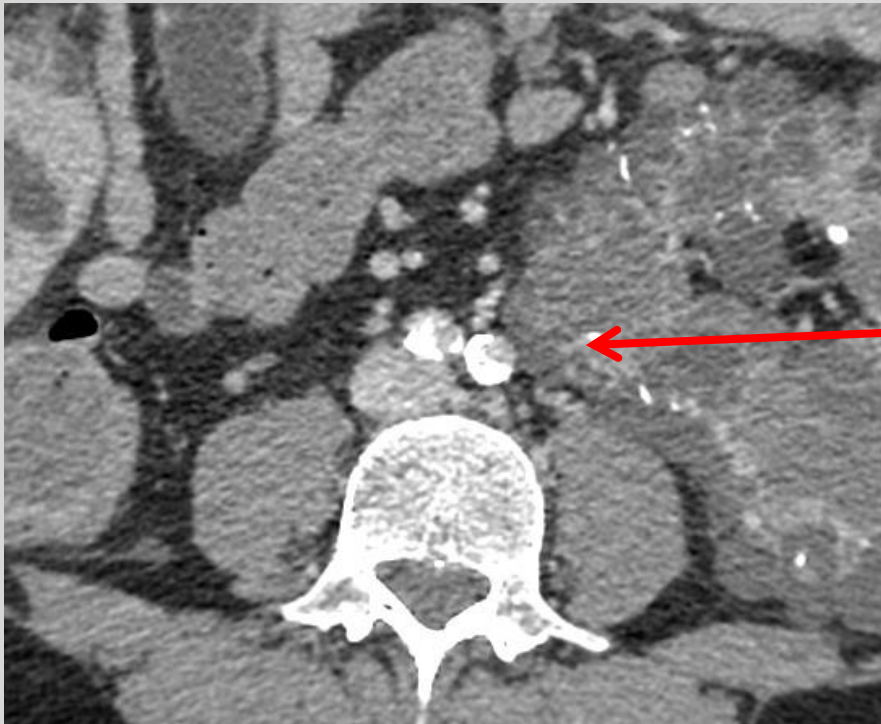




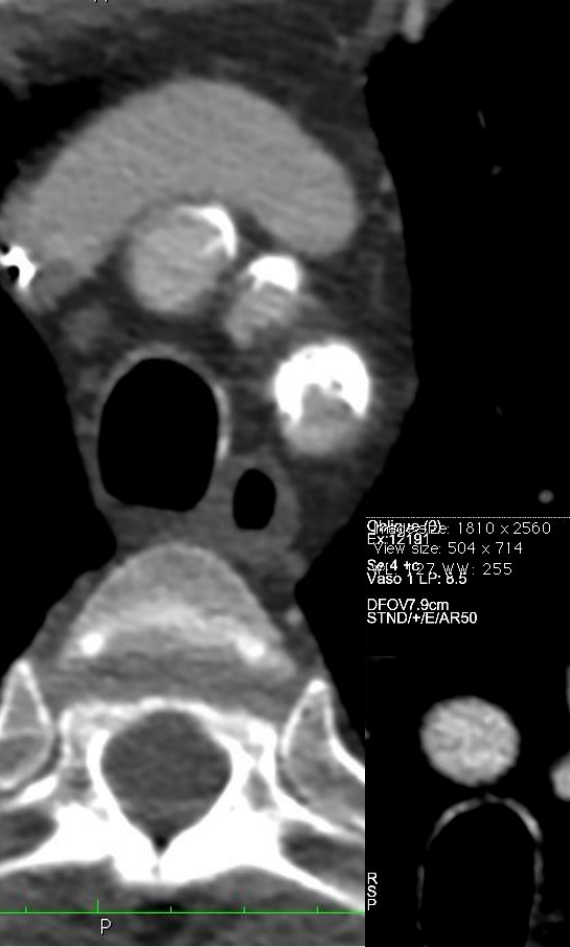
31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

- Cardiac CT



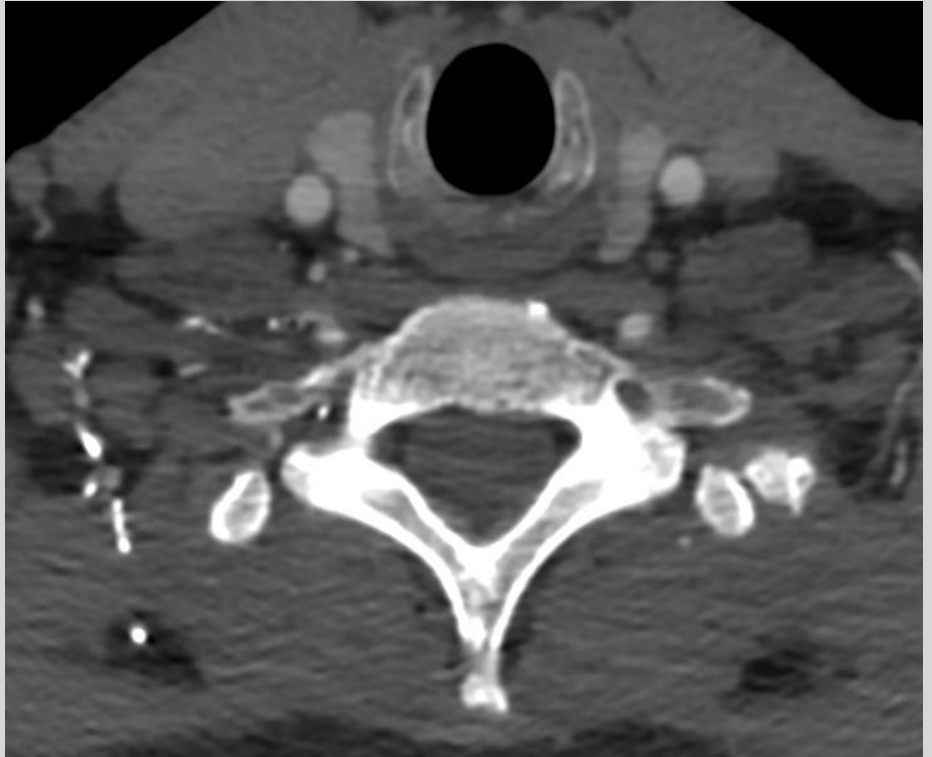
31 GIORNATE DIAGNOSTICHE TORINESI



Observ: 1810 x 2560
Ex: 12191
View Size: 504 x 714
S: 4 127 W: 255
Vaso: 1 LP: 8.5
DFOV: 9cm
STND: +/E/AR50



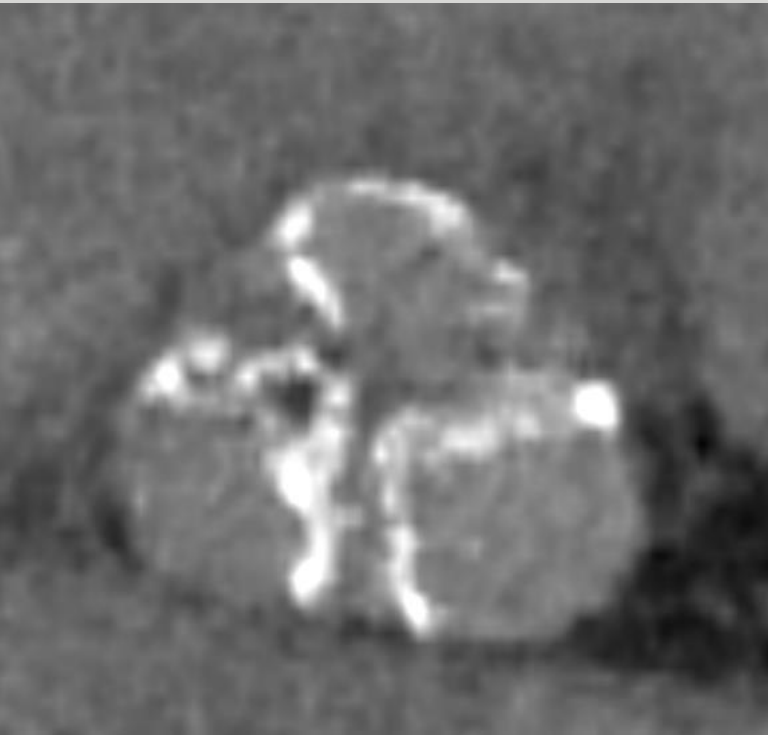
0.48/XSection
RV: 120
mAb: 0.32 Angle: 0
Rot: 0.593 HE: 72.4mm/rot
0.8mm @ 992: 10.62sp
Tilt: 0.0 compressed
12:53:23 PM
Position: HFS
Dmin=5.1 mm
04/02/2019 Max=70.6 mm
Made In Horos





31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019



Perimeter 88 mm

Area 62 mm

Diameter Annulus 26 x 29 mm

GST 29 x 28 mm

Sinus 31-34-33

Coronary 12mm R 18mm L

Calcium 4+



31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

Medical Therapy

- STS 7%
- Euroscore II 6.

**Transcarotid
TAVI**

TAVI

Which access?



31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

Transcarotid Approach for Transcatheter Aortic Valve Replacement With the Sapien 3 Prosthesis

A Multicenter French Registry

6,680 patients
314 (4.7%) transcarotid access
mean age 83 years
STS score 5.8%.

TABLE 2 Outcomes (N = 314)

General anesthesia	286 (91.1)
Pre-implant balloon valvuloplasty	115 (36.6)
Post-implant balloon valvuloplasty	45 (14.3)
Left carotid	231 (73.6)
Prosthesis size (mm)	
20	2 (0.6)
23	83 (26.4)
26	147 (46.8)
29	82 (26.1)
Procedural success	305 (97.1)
Reasons of procedural failure	
Valve-in-valve	3 (1.0)
Annulus rupture	3 (1.0)
Conversion to open surgery	2 (0.6)
Left-ventricle perforation	1 (0.3)

Procedural mortality	3 (1.0)
STEMI	2 (0.6)
Tamponade	3 (1.0)
Valve malpositioning	0.0
Major vascular complication	5 (1.6)
Major bleeding	13 (4.1)
Moderate to severe PVL on TTE	16 (5.1)
Post-implant echocardiographic mean gradient (mm Hg)	11 (8-13)
New permanent pacemaker	51 (16.2)
Stroke/TIA (30 days)	5 (1.6)
Hospital stay (days)	7 (5-10)
Mortality (30 days)	10 (3.2)



31 GIORNATE CARDIOLOGICHE TORINESI

TURIN
October
24th-26th
2019

Transcarotid Compared With Other Alternative Access Routes for Transcatheter Aortic Valve Replacement

Circ Cardiovasc Interv. 2018;11

	Unmatched Data			Propensity Score-Matched Data*		
--	----------------	--	--	--------------------------------	--	--

WHAT THE STUDY ADDS

- Transcarotid TAVR is safe compared with transthoracic access with comparable mortality and stroke risk.
- Transcarotid TAVR may offer several advantages over transthoracic TAVR, including lower rates of atrial fibrillation, major bleeding, and renal failure, as well as reduced hospital stay.

Outcomes	Unmatched Data			Propensity Score-Matched Data*			P Value
Mortality							0.37
Stroke/TIA							0.67
New pacem							0.34
New-onset a							0.002
Myocardial i							0.19
Major or life							0.002
Major vascu							0.05
Acute kidne							0.002
Median LOS							<0.001

Composite end points	Unmatched Data			Propensity Score-Matched Data*			P Value
Device success	197 (86.8)	86 (86.9)	1.0	89.8	89.1		0.75
Early safety	161 (70.6)	93 (92.1)	<0.0001	71.7	92.6		0.002