Antonio Mangieri, MD



# General data

Data of birth: May 6<sup>th</sup>, 1985 Place of birth: Battipaglia, Italy Citizenship: Italian

### **Current position**

2021-today: Consultant in Interventional Cardiology, Humanitas Research Institute. I am involved in complex percutaneous coronary interventions and structural heart disease procedures. I am part of the group of interventionalists led by Dr. Bernahard Reimers and Prof. Antonio Colombo.

# Education

**2018-February 2021:** *Consultant in Interventional Cardiology*, GVM care and research, Cotignola, Italy.

**2015-2018:** Consultant in Interventional Cardiology, San Raffaele Hospital, Milan, Italy. I gained experience in complex PCI and in structural interventions.

- **2015- today:** *residency in interventional cardiology* at San Raffaele Hospital, Milan, Italy. The San Raffaele Hospital Institute is an internationally renowned hospital devoted to the diagnosis and treatment of the whole spectrum of heart disease. It is a world-class institution that has trained global leaders in Interventional Cardiology and is very active in research. After months completely dedicated to clinical research, in which I have designed and led several original studies in the field of coronary artery and structural heart disease, I am currently training in percutaneous coronary interventions and structural heart disease interventions.
- 2017 2nd level master in Interventional cardiology at San Raffaele Hospital. During this year of training I performed more than 100 PCI as first operator. I started my training in structural heart disease participating in TAVI as 2nd second operator as well as in MitraClip procedures. Thesis title "Predictors of Advanced Conduction Disturbances Requiring a Late (≥48 H) Permanent Pacemaker Following Transcatheter Aortic Valve Replacement." published as original research article on JACC interv.
- 2011-2016 Resident in Cardiology, San Raffaele Hospital, Milan, Italy. I was exposed daily to complex patients with acute coronary syndrome and chronic ischemic heart disease, advanced acute and chronic heart failure, arrhythmias, valvulopathies, either in clinical ward, emergency department, step-down unit and cardiac intensive care unit.
  Thesis title: "Single-Antiplatelet Therapy in Patients with Contraindication to Dual-Antiplatelet Therapy After Transcatheter Aortic Valve
- **2010-2015 MD degree** at San Raffaele University hospital Grade: 110/110 cum laude (this is the maximum achievable grade in the Italian system). *Thesis title: platelet-leukocyte interaction in atrial fibrillation: the dark side of the moon?*

Implantation." Published as original research article on Am J Cardiol.

**2005-2010** High School (Humanistic Path) Diploma, Liceo-Ginnasio Marco Tullio Cicerone, Sala Consilina, Salerno, Italy. Grade: 100/100

Principal speaker experiences

Case Presentation: A Real-World Case of Functional TR Not Considered in the Guidelines September, 28<sup>th</sup> 2019, Moscone Center, San Francisco, TCT 2019 TCT 80: Predictors of residual significant mean gradient after TAVR in bicuspid aortic valve stenosis: insights from the BEAT international collaborative registry. **September, 25<sup>th</sup> 2019, Moscone Center, San Francisco, TCT 2019** 

TCT 19: Outcome of Coronary Ostial Stenting to Prevent Coronary Obstruction During TAVR: an International Multicenter Registry **September, 25<sup>th</sup> 2019, Moscone Center, San Francisco, TCT 2019** 

TAVR for aortic regurgitation and need of alternative access **February 15<sup>th</sup>, Milan, Joint international Meeting 2019**.

Coronary perforation: how to bail yourself out of trouble February 13<sup>th</sup>, Milan, Joint international Meeting 2019.

Chest pain after TAVI: delayed coronary obstruction or atherosclerosis disease progression? May, 23th 2019, Palais de congress Paris, euroPCR 2019

Beyond coronary angiography: integrating multiple imaging modalities in the acute setting May, 22th 2019, Palais de congress Paris, euroPCR 2019

Balloon vs. self-Expandable valve for the treatment of bicuspid Aortic valve sTenosis: insights from the BEAT international collaborative registry May, 21th 2019, Palais de congress Paris, euroPCR 2019

Eligibility for new percutaneous techniques in patients with severe tricuspid regurgitation: a contemporary survey from a tertiary referral centre.

May, 25th 2018, Palais de congress Paris, euroPCR 2018

Minimising the risk of contrast-induced nephropathy and haemodynamic collapse during CTO PCI with a percutaneous left ventricular assist device. May, 23th 2018, Palais de congress Paris, euroPCR 2018

Percutaneous annuloplasty and MitraClip: how to replicate a complete mitral surgical repair May, 23th 2018, Palais de congress Paris, euroPCR 2018

Pacemaker-related complications in patients undergoing TAVI: a single-centre experience May, 22th 2018, Palais de congress Paris, euroPCR 2018

Predictors of advanced conduction disturbances requiring a late (up to 48 hours) permanent pacemaker following TAVI

May, 22th 2018, Palais de congress Paris, euroPCR 2018

Antegrade fenestration and re-entry: a new controlled subintimal technique for CTO recanalization

May, 22th 2018, Palais de congress Paris, euroPCR 2018

Perforation of a segmentary artery during right ventricular catheterization: percutaneous management of a potentially life threatening complication. May, 17th 2017, Palais de congress Paris, euroPCR 2017

Two-step percutaneous AVR for pure aortic regurgitation and mitral valve repair for organic mitral regurgitation May, 17th 2017, Palais de congress Paris, euroPCR 2017

Percutaneous tricuspid valve annuloplasty under conscious sedation May, 17th 2017, Palais de congress Paris, euroPCR 2017

VSD and left ventricular outflow tract obstruction after TAVI May, 17th 2017, Palais de congress Paris, euroPCR 2017

Prevalence, burden and mid-term clinical outcomes of severe tricuspid regurgitation: insights from a tertiary referral center.

November, 30th 2017, Washington DC, TCT 2017

Brain injury after transcatheter aortic valve implantation: efficacy of embolic protection devices: a systematic review and metanalysis.

June, 2th 2016, 47mo congresso nazionale ANMCO, Rimini, Italy

Feasibility and safety of mtraclip system for the treatment of severe functional tricuspid regurgitation: a first in man experience

### June, 3th 2016, 47mo congresso nazionale ANMCO, Rimini, Italy

A challenging case of transcatheter aortic prosthesis dysfunction: endocarditis or thrombosis?

### June, 3th 2016, 47mo congresso nazionale ANMCO, Rimini, Italy

Excimer laser facilitated coronary angioplasty of an heavy calcified lesion treated with bioresorbable scaffolds

June, 3th 2016, 47mo congresso nazionale ANMCO, Rimini, Italy

Comparison between first generation medtronic corevalve versus second generation Medtronic Evolut R: a single centre experience.

June, 3th 2016, 47mo congresso nazionale ANMCO, Rimini, Italy

Excimer laser facilitated coronary angioplasty of a heavy calcified lesion treated with drug eluting stents

February, 3th 2016, Joint International Meeting, Milan, Italy.

Current research interests

2018-present: debulking and plaque modification .

I'm currently principal investigator of the COPS trial (Cutting balloon to Optimize Predilatation for Stenting) which received an investigational grant from Boston Scienfitic. The aim of the trial is to evaluate the safety and efficacy of the cutting balloon compared to non-compliant balloon in terms of lumen gain, stent expansion and minimal stent area evaluated with IVUS.

Coinvestigator in the following trials regarding tricuspid intervention: SCOPE I and SCOPE II, TRIREPAIR, TRILUMINATE. I have supported the use of the Navigate System for a compassionate use in a patient with massive tricuspid regurgitation. I'm part of the PCR Tricuspid Focus Group (https://www.pcronline.com/Network/Tricuspid-Focus-Group)

### 2016-present: percutaneous tricuspid interventions.

I have developed observational studies in the field of percutaneous treatment of tricuspid intervention. Actually involved in the collection of data of the large TriValve registry. In San Raffaele Hospital we have started a tricuspid program with a good experience in various devices. We have collected a large database of patients with severe tricuspid regurgitation and treated medically. I'm currently the head of tricuspid intervention at Humanitas Hospital.

**Coinvestigator in the following trials regarding tricuspid intervention**: SCOPE I and SCOPE II, TRIREPAIR, TRILUMINATE. I have supported the use of the Navigate System for a compassionate use in a patient with massive tricuspid regurgitation. I'm part of the PCR Tricuspid Focus Group

(https://www.pcronline.com/Network/Tricuspid-Focus-Group)

### 2016-present: Conduction disturbances after TAVI.

I have developed several research projects on the outcomes of patients after TAVI according to the development of different conduction disturbances after TAVI.

#### 2016-present: antithrombotic therapy in TAVI patients.

I have developed an interest and some projects of research in the use of different antithrombotic regimens after TAVI.

*Coinvestigator in the following trials regarding medical therapy in TAVI*: GALILEO trial.

### 2017-present: percutaneous treatment of bicuspid valve.

Principal investigator of 2 international registries:

- 1) the international experience on Acurate in Bicuspid valve
- 2) The BEAT registry: comparison of balloon vs. self-expandable valves in bicuspid valves.

## Reviewer for the following journals:

- Eurointervention
- Giornale italiano di cardiologia
- Circulation: cardiovascular interventions
- Frontiers cardiovascular medicine
- JACC: cardiovascular interventions
- Journal of American college of cardiology
- JACC: case reports
- Open Heart
- American Heart Journal
- Heart
- Annals of medicine
- Expert review of cardiovascular therapy
- Frontiers of cardiovascular medicine

### Part of the editorial board of the following journals

- Young Leaders Editorial Board of Cardiovascular Revascularization Medicine

### Coinvestigator in the following studies:

**-ONYX-one:** A Randomized Controlled Trial With Resolute Onyx in One Month Dual Antiplatelet Therapy (DAPT) for High-Bleeding Risk Patients, clinical trial NCT03344653.

-REPAIR: Cardioband Adjustable Annuloplasty System for Minimally Invasive Mitral Valve Repair, clinical trial NCT01533883.

-EMBLOCK: first in man evaluation of a novel cerebral protection device.

-SCOPE-II: Safety and Efficacy Comparison Of Two TAVI Systems in a Prospective Randomized Evaluation II, clinical trial NCT03192813

### Principal investigator:

-**COPS:** Cutting balloon to Optimize Predilatation for Stenting: randomized controlled trial to compare cutting versus non compliant balloon for the preparation of calcific lesions.

### Affiliations

Member of the "Digital coverage group" of PCR.

Invited faculty at "CSI Frankfurt 2019"

Invited faculty at "TCT 2019"

Invited faculty at "EuroPCR 2019"

Invited faculty at PCR 2021, Milan Hub

### **Publications**

h-Index: 28

Number of citations: 1147

## Skills

Perfomed as first operator around 700 PCI booth simple and complex. TAVR as first operator: around 100, PFO closure with both Noblestitch and PFO occluder devices; Mitraclip as first operator: 10. Triclip as first operator: around 10.