

## **Prof. Dr. Med. ENRICO FERRARI**

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### **Posizione clinica e accademica attuale**

- Cardiochirurgo Capo Servizio presso il Cardiocentro Ticino di Lugano, Svizzera (dal 2015)
- Professore Assistente (PD) - Università della Svizzera Italiana (USI) (dal 2019)
- Cardiochirurgo (40%) e Direttore della Ricerca Cardiovascolare. Ospedale Universitario di Zurigo, Svizzera (dal 2020)
- Professore Titolare di Chirurgia Cardiovascolare – Scuola di Medicina dell’Università di Zurigo, Svizzera (dal 2020)

### **Carriera accademica**

- Professore Titolare di Chirurgia Cardiovascolare – Università di Zurigo, Svizzera (dal 2020)
- Professore Assistente (PD) – Università della Svizzera Italiana (USI) (dal 2019)
- Professore Assistente (PD) – Ospedale Universitario di Losanna, Svizzera (2011-2018)

### **Istruzione**

- European Board of Thoracic and Cardiovascular Surgery (FETCS) 2005
  - Swiss Board of Cardiovascular Surgery (FMH) 2003
- Qualifica conseguita: *Specializzazione in chirurgia cardiaca e vasi toracici*
- Università degli studi di Padova, Facoltà di Medicina. Padova, Italia 2002
- Qualifica conseguita: *Specializzazione in cardiochirurgia – 70/70 e Lode*
- Università degli studi di Torino, Facoltà di Medicina. Torino, Italia – (Dr. Med) 1997
- Qualifica conseguita: *Laurea in Medicina e Chirurgia – 110/110*

## **Esperienze lavorative**

- Ospedale Universitario di Zurigo (40%)  
Cardiochirurgo Associato e Professore Titolare  
Direttore della Ricerca Cardiovascolare
  - *Chirurgia mini-invasiva valvolare*
  - *Nuove tecnologie valvolari aortiche e mitraliche.*
  - *Ricerca cardiovascolare clinica e di base.*dal 2020
- Cadiocentro Ticino di Lugano, Svizzera  
Capo Servizio di Cardiochirurgia
  - *Coordinatore Heart-Team per valvole transcatetere chirurgiche (TAVI).*
  - *Nuove tecnologie valvolari aortiche e mitraliche.*
  - *Ricerca cardiovascolare clinica e di base.*
  - *Supervisione formazione Medici Capoclinica e Assistenti in formazione.*dal 2015
- Ospedale Universitario di Losanna, Svizzera  
Cardiochirurgo Associato e Professore Assistente (PD).
  - *Coordinatore Heart-Team per valvole transcatetere chirurgiche (TAVI)*
  - *Nuove tecnologie valvolari aortiche e mitraliche.*
  - *Chirurgia valvolare mini-invasiva e coronarica ibrida*
  - *Ricerca cardiovascolare clinica e di base.*
  - *Supervisione formazione Medici Capoclinica e Assistenti in formazione.*2003-2015
- Ospedale Cantonale di Sion, Svizzera  
Responsabile di unità semplice di Cardiochirurgia.
  - *Gestione e organizzazione reparto e sala operatoria.*
  - *Chirurgia mini-invasiva.*
  - *Formazione Medici Capoclinica e Assistenti in formazione.*2011-2014
- Ospedale Catharina di Eindhoven, Olanda  
Assistente in Cardiochirurgia2001-2003
- Ospedale Universitario di Padova, Italia  
Specializzando in formazione in Cardiochirurgia1998-2001

## **Esperienza chirurgica**

Più di 3500 interventi di chirurgia cardiaca valvolare, coronarica e vascolare eseguiti dal 2000 al 2020. Esperienza avanzata in chirurgia coronarica con condotti arteriosi, chirurgia valvolare aortica e mitralica mini-invasiva e sostituzione valvolare aortica con tecnica transcatetere (TAVI). Leader nello sviluppo e impegno di tecnologie valvolari innovative quali valvole ad impianto rapido e valvole sutureless. Esperienza avanzata in tecniche di impianto di endoprotesi aortiche toraciche (TEVAR).

## Ricerca cardiovascolare

- 2010-2011. New transcatheter stent-valve applications: the transapical approach for minimal invasive mitral procedure (FNS grant application).
- 2011-2013. Clinical and basic science investigations on transapical TAVR and new transcatheter mitral devices.
- 2013-2014. Long-term durability of biological heart valves with the Edwards Perimount valve (FU 1990 to 2013).
- 2013-2015. Mid-term results of rapid-deployment aortic bioprostheses (INTUITY valve, Edwards Lifesciences) – grant from Industry
- 2013-2014. Apical closure device. Feasibility tests. Development of the device in partnership with industry – grant from industry.
- 2013-2015. TF vs TA TAVR procedures at University of Lausanne, Switzerland. Retrospective clinical study.
- 2014-2016. Use of 3D printers to assess transcatheter valve size during planned TAVR procedures.
- 2014-2016. Transcatheter aortic root procedure. Bench tests with 3D printed aortic root models.
- 2014-2016. Apical closure device. Stress tests in a minimally invasive animal setting. Partnership with industry – grant from industry.
- 2015-2017. Long-term durability of Edwards Perimount mitral bioprostheses (FU 2000-2015).
- 2016-2017. New surgical technique: annulus stabilization technique for rapid-deployment aortic valve implantation (FU 2015-2019)
- 2017-2018. Apical closure device. Tests in animals in a full-percutaneous setting at University of Zurich, Switzerland. Partnership with industry.
- 2016-2017. Apical closure device for TA-TAVR. Long-term tests in animals (full-percutaneous). Partnership with industry.
- 2016-2019. DuraGraft solution for preserving vascular grafts in CABG. Multicentre clinical registry. PI for site.
- 2016-2019. Long-term follow-up of BIMA grafts for CABG (FU 2001-2016).
- 2017-2018. Long-term follow-up and valve performance of Perimount Magna vs Hancock-II aortic valve replacement (FU 2000-2016).
- 2017-2019. Development of a new concept for transcatheter aortic root replacement (TARR technique). Swiss Grant from SHF (90000 chf).
- 2019-2020. Research on exosomes expression in cardiac surgery patients developing postoperative vasoplegia.
- 2018-2019. Research on spontaneous apoptosis in vein samples for CABG protected with saline, autologous blood or Duragraft storage solution.
- 2019-2021. Computational model analysis of coronary blood flow through the TARR technology. Partnership with University of Pavia.
- 2019-2020. Self-expanding bidirectional flow cannula for percutaneous ECMO treatment in cardiogenic shock.
- 2020-2021. hemodynamic assessment of TARR technology in a pulsatile bench test model.

## Attività editoriale scientifica

- Editore associato European Journal of Cardio-thoracic Surgery (EJCTS) dal 2017
- Editore associato Interactive Cardiovascular and Thoracic Surgery (ICVTS) 2013-2017
- Editore assistente European Journal of Cardio-thoracic Surgery (EJCTS) 2007-2013
- Editore assistente Interactive Cardiovascular and Thoracic Surgery (ICVTS) 2010-2013
- Editorial Board Multimedia Manual of Cardio-Thoracic Surgery 2014-2017
- Editorial Board member Journal of Visualized Surgery since 2015
- Editorial Board member Journal of Clinical Cardiology and Cardiac Therapy since 2016
- Editorial Board member GSL Journal of Cardiovascular Diseases since 2017
- Editorial Board member Annals of Cardiovascular Surgery since 2017
- Editorial Board member Journal of Cardiology Research since 2018
- Editorial Board member Journal of Integrative Cardiology since 2016

## Conoscenze linguistiche

- **Italiano e Francese:** madrelingua
- **Inglese:** fluente
- **Tedesco e Spagnolo:** Basico

## Pubblicazioni scientifiche recenti (2015-2020)

### 2015

87) **Ferrari E**, Locca D, Berdajs D, Marcucci C, Gronchi F, Lavanchy J, Prêtre R, Tozzi P  
Use of a VSD occluder for apical closure in transapical aortic valve replacement.  
Innovations. 2015;10:68-70

**PMID: 25621876**

88) Li L, Abdel-Sayed S, Berdajs S, **Ferrari E**, von Segesser LK.  
Venous cannula performance assessment in a realistic caval tree model  
Eur J Cardiothorac Surg. 2015;20:194-199

**PMID: 25368132**

89) **Ferrari E**, von Segesser LK, Berdajs D.  
Improving coronary artery bypass graft durability: use of the external saphenous vein graft support.  
Multimed Man Cardiothorac Surg. 2015. Pii: mmv005. Doi: 10.1093/mmcts/mmv005.

**PMID: 25976117**

90) **Ferrari E**, Siniscalchi G, Tozzi P, von Segesser LK.

Aortic annulus stabilization technique for rapid deployment aortic valve replacement.

Innovations. 2015;10:360-362

**PMID:** 26575385

91) **Ferrari E**, Berdajs D, Tozzi P, Siniscalchi G, von Segesser LK.

Apical closure device for transapical valve procedures.

Interact Cardiovasc Thorac Surg. 2015;21:561-564

**PMID:** 26265071

92) Fournier S, Monney P, **Ferrari E**, Lglesias JF, Roguelov C, Zuffi A, Eeckhout E, Muller O.

Transcatheter aortic valve implantation: update on indications.

Rev Med Suisse. 2015;11:1197-1200

**PMID:** 26182639

94) Binder RK, Stortecky S, Heg D, Tueller D, Jeger R, Toggweiler S, Pedrazzini G, Amann FW, **Ferrari E**, Noble S, Nietlispach F, Maisano F, Räber L, Roffi M, Grünenfelder J, Jüni P, Huber C, Windecker S, Wenaweser P.

Procedural Results and Clinical Outcomes of Transcatheter Aortic Valve Implantation in Switzerland: An Observational Cohort Study of Sapien 3 Versus Sapien XT Transcatheter Heart Valves.

Circ Cardiovasc Interv. 2015 Oct;8(10). pii: e002653. doi:  
10.1161/CIRCINTERVENTIONS.115.002653

**PMID:** 26453687

95) Samim D, Tozzi P, **Ferrari E**

Surgical outcome after isolated on-pump and off-pump anterior descending coronary revascularization. Swiss Med Wkly. 2015;145:w14239. doi:10.4414/smw.2015.14239.

**PMID:** 26709551

## 2016

96) Berdajs D, Mosbahi S, Forro Z, Gerber C, **Ferrari E**, Charbonnier D, von Segesser LK.

Numerical analysis of the aortic root 3-dimensional aortic root morphology during the cardiac cycle.

Eur J Cardiothorac Surg. 2016;49:1213-1221

**PMID:** 26354961

97) **Ferrari E**

Apical access and closure devices for transapical transcatheter heart valve procedures.

Swiss Med Wkly 2016;22;146:w14237. doi: 10.4414/smw.2016.14237.

**PMID:** 26900765

98) Gallo M, Dvir D, Demertzis S, Pedrazzini G, Berdajs D, **Ferrari E**

Transcatheter valve-in-valve implantation for degenerated bioprosthetic aortic and mitral valves.

Expert Rev Med Devices. 2016;13:749-758

**PMID:** 27359372

99) **Ferrari E**, Muller O, Demertzis S, Moccetti M, Moccetti T, Pedrazzini G, Eeckhout E. Transaortic transcatheter aortic valve replacement through a right mini-thoracotomy with balloon-expandable Sapien™ 3 valve. Multimed Man Cardiothorac Surg. 2016 Jul 8;2016. pii: mmw011. doi: 10.1093/mmcts/mmw011  
PMID: 27401072

100) **Ferrari E**, Dvir D, Guerrero M  
Transatheter mitral valve replacement in degenerated calcified native mitral valves: is the currently available technology suitable? Eur J Cardiothorac Surg. 2016;50:391-395  
PMID: 27247377

101) Guerrero M, Dvir D, Himbert D, Urena M, Eleid M, Wang DD, Greenbaum A, Mahadevan VS, Holzhey D, O'Hair D, Dumonteil N, Rodes-Cabau J, Piazza N, Palma JH, DeLago A, **Ferrari E**, Witkowski A, Wendler O, Kornowski R, Martinez-Clark P, Ciaburri D, Shemin R, Alnasser S, McAllister D, Bena M, Kerendi F, Pavlides G, Sobrinho JJ, Attizzani GM, George I, Nickenig G, Fassa AA, Cribier A, Bapat V, Feldman T, Rihal C, Vahanian A, Webb J, O'Neill W. Transcatheter mitral valve replacement in native mitral valve disease with severe mitral annular calcification: results from the first multicenter global registry. JACC Cardiovasc Interv. 2016;9:1361-1371  
PMID: 27388824

102) von Segesser L, Marinakis S, Berdajs D, **Ferrari E**, Wilhelm M, Maisano F  
Prevention and therapy of leg ischaemia in extracorporeal life support and extracorporeal membrane oxygenation with peripheral cannulation. Swiss Med Wkly. 2016.146:w14304. doi: 10.4414/smw.2016.14304  
PMID: 27153458

103) von Segesser LK, Berdajs D, Abdel-Sayed S, Tozzi P, **Ferrari E**, Maisano F  
New, Virtually Wall-less Cannulas Designed for Augmented Venous Drainage in Minimally Invasive Cardiac Surgery. Innovations. 2016;11:278-281  
PMID: 27561178

105) Pilgrim T, Stortecky S, Nietlispach F, Heg D, Tueller D, Toggweiler S, **Ferrari E**, Noble S, Maisano F, Jeger R, Roffi M, Grünenfelder J, Huber C, Wenaweser P, Windecker S. Repositionable Versus Balloon-Expandable Devices for Transcatheter Aortic Valve Implantation in Patients With Aortic Stenosis. J Am Heart Assoc. 2016 Nov 17;5(11). pii: e004088  
PMID: 27856487

106) Putzu A, Capelli B, Belletti A, Cassina T, **Ferrari E**, Gallo M, Casso G, Landoni G. Perioperative statin therapy in cardiac surgery: a meta-analysis of randomized controlled trials. Critical Care 2016;20:395  
PMID: 27919293

## 2017

107) Franciosi G, Trunfio R, **Ferrari E**, Demertzis S.  
Yacoub procedure to treat giant pulmonary artery aneurysm.  
Eur Heart J. 2017;38:3393-3394  
**PMID: 27694192**

108) **Ferrari E**, Franciosi G, Clivio S, Faletra F, Moccetti M, Moccetti T, Pedrazzini G, Demertzis S.  
Stent valve implantation in conventional redo aortic valve surgery to prevent patient-prosthesis mismatch.  
Interact Cardiovasc Thorac Surg. 2017;24:319-323  
**PMID: 28040758**

109) Tozzi P, Hayoz D, Antona C, Fiore GB, Siniscalchi G, **Ferrari E**, Baeriswyl G, Vismara R.  
Mastering mitral leaflets coaptation after valve repair with adjustable annuloplasty ring: prove of concept in mock loop study.  
ASAIO J. 2017;63:168-173  
**PMID: 27861426**

110) Noble S, Stortecky S, Heg D, Tuller D, Jeger R, Toggweiler S, **Ferrari E**, Nietlispach F,  
Taramasso M, Maisano F, Grünenfelder J, Jüni P, Huber C, Carrel T, Windecker S, Wenaweser P, Roffi M.  
Comparison of procedural and clinical outcomes with Evolut R versus Medtronic CoreValve: a Swiss TAVI registry analysis.  
EuroIntervention. 2017;12:e2170-e2176  
**PMID: 28067197**

111) **Ferrari E**, Demertzis S, Angelella J, Berdajs D, Tozzi P, Moccetti T, Maisano F, von Segesser LK.  
Apical closure device for full-percutaneous transapical valve implantation: stress-test in an animal model.  
Interact Cardiovasc Thorac Surg. 2017;24:721-726  
**PMID: 28329078**

112) Gallo M, Demertzis S, Gerosa G, **Ferrari E**.  
Leaflet ipomobility after transcatheter aortic valve replacement: thrombosis or mechanical factors? A possible pathophysiologic pattern.  
J Heart Valve Dis. 2017;26:9-11  
**PMID: 28544825**

113) Berdajs D, Mosbahi S, **Ferrari E**, Charbonnier D, von Segesser LK.  
Aortic valve pathology as predictive factor for acute aortic dissection.  
Ann Thorac Surg. 2017;104:1340-1348  
**PMID: 28587739**

114) Caporali E, Pedrazzini G, Demertzis S, **Ferrari E**.

Transcatheter aortic valve implantation for recurrent Valsalva sinus re-dissection and severe aortic regurgitation shortly after surgery for type-A aortic dissection.

Interact Cardiovasc Thorac Surg. 2017;25:839-841

PMID: 28535198

115) **Ferrari E**, Roduit C, Salamin P, Caporali E, Demertzis S, Tozzi P, Berdajs D, von Segesser LK. Rapid-deployment aortic valve replacement vs standard bioprostheses implantation.

J Card Surg. 2017;32:322-327

PMID: 28493342

116) Putzu A, Gallo M, Martino EA, **Ferrari E**, Pedrazzini G, Moccetti T, Landoni G, Cassina T. Coronary artery bypass graft surgery versus percutaneous coronary intervention with drug-eluting stents for left main coronary artery disease: a meta-analysis of randomized trials.

Int J Cardiol. 2017;241:142-148

PMID: 28438354

117) **Ferrari E**, Eeckhout E, Keller S, Muller O, Tozzi P, Berdajs D, von Segesser LK. Transfemoral versus transapical approach for transcatheter aortic valve implantation: hospital outcome and risk factor analysis.

J Cardiothorac Surg. 2017;12:78

PMID: 28874169

118) Fournier S, Monney P, Roguelov C, **Ferrari E**, Eeckhout E, Muller O, Durko A, Van Mieghem NM, Kappetein AP, Margey R.

How should I treat an Edwards SAPIEN 3 aortic valve embolisation during a transaortic transcatheter aortic valve implantation?

EuroIntervention. 2017;13:495-498

PMID: 28735254

119) Pedrazzini GB, **Ferrari E**, Zellweger M, Genoni M.

Heart-Team: joint position of the Swiss society of cardiology and the Swiss society of cardiac surgery. Thorac Cardiovasc Surg. 2017; 65:519-523

PMID: 28922674

120) Yoon SH, Schmidt T, Bleiziffer S, Schofer N, Fiorina C, Munoz-Garcia AJ, Yzeiraj E, Amat-Santos IJ, Tchetche D, Jung C, Fujita B, Mangieri A, Deutsch MA, Ubben T, Deuschl F, Kuwata S, De Biase C, Williams T, Dhoble A, Kim WK, **Ferrari E**, Barbanti M, Vollema EM, Miceli A, Giannini C, Attizzani GF, Kong WKF, Gutierrez-Ibanes E, Jimenez Diaz VA, Wijeyesundara HC, Kaneko H, Chakravarty T, Makar M, Sievert H, Hengstenberg C, Prendergast BD, Vincent F, Abdel-Wahab M, Nombela-Franco L, Silaschi M, Tarantini G, Butter C, Ensminger SM, Hildick-Smith D, Petronio AS, Yin WH, De Marco F, Testa L, Van Mieghem NM, Whisenant BK, Kuck KH, Colombo A, Kar S, Moris C, Delgado V, Maisano F, Nietlispach F, Mack MJ, Schofer J, Schaefer U, Bax JJ, Frerker C, Latib A, Makkar RR.

Transcatheter aortic valve replacement in pure native aortic valve regurgitation.

J Am Coll Cardiol. 2017;70:2752-2763.

PMID: 29191323

121) Pilgrim T, Franzone A, Stortecky S, Nietlispach F, Haynes AG, Tueller D, Toggweiler S, Muller O, **Ferrari E**, Noble S, Maisano F, Jeger R, Roffi M, Grünenthaler J, Huber C, Wenaweser P, Windecker S.

Predicting mortality after transcatheter aortic valve replacement: external validation of the transcatheter valve therapy registry model.

Circ Cardiovasc Interv. 2017 Nov;10(11). pii: e005481. doi:  
10.1161/CIRCINTERVENTIONS.117.005481.

PMID: 29127116

## 2018

122) Wang C, Regar E, Lachat M, von Segesser LK, Maisano F, **Ferrari E**.

Endovascular treatment of non-dissected ascending aorta disease: a systematic review.

Eur J Cardiothorac Surg. 2018;53:317-324

PMID: 28958041

123) Gallo M, Putzu A, Conti M, Pedrazzini G, Demertzis S, **Ferrari E**.

Embolization protection devices for transcatheter aortic valve replacement.

Eur J Cardiothorac Surg. 2018;53:1118-1126

PMID: 29253108

124) Wang C, Lachat M, Regar E, von Segesser LK, Maisano F, **Ferrari E**.

Suitability of the porcine aortic model for transcatheter aortic root repair.

Interact Cardiovasc Thorac Surg. 2018;26:1002-1008

PMID: 29415164

125) **Ferrari E**, Biasco L, Faletra F, Banai S, Cheung A, Moccetti M, Pedrazzini G, Demertzis S, Moccetti T.

Tiara valve implantation in a patient with previously implanted mono-disk mechanical aortic prosthesis.

Semin Thorac Cardiovasc Surg. 2018;30:160-163

PMID: 29518534

126) **Ferrari E**, Caporali E, Pedrazzini G, Demertzis S.

Trans-carotid access for TAVR allows safe and rapid exchange for bailout valve-in-valve procedures.

J Card Surg. 2018;33:4-6

PMID: 29377318

127) Tozzi P, Siniscalchi G, **Ferrari E**, Kirsch M, Hayoz D.

Percutaneous increase of mitral leaflet coaptation length after mitral valve repair: results from a preclinical study.

Interact Cardiovasc Thorac Surg. 2018;26:681-686

PMID: 29244156

128) Bleiziffer S, Erlebach M, Simonato M, Pibarot P, Webb J, Copek L, Windecker S, George I, Sinning JM, Horlick E, Napodano M, Holzhey DM, Petrusson P, Cerillo A, Bonaros N, **Ferrari E**,

Cohen MG, Baquero G, Jones TL, Kalra A, Reardon MJ, Chhatriwala A, Gama-Ribeiro V, Alnasser S, Van Mieghem NM, Rustenbach CJ, Schofer J, Garcia S, Zeus T, Champagnac D, Bekeredjian R, Kornowski R, Lange R, Dvir D.

Incidence, Predictors and Clinical Outcomes of Residual Stenosis after Aortic Valve-in-Valve.  
Heart. 2018;104:828-834

PMID: 29352008

129) Berdajs D, Mosbahi S, Charbonnier D, **Ferrari E**, von Segesser LK.  
Impact of the bicuspid aortic valve on aortic root hemodynamics: three-dimensional  
computed fluid dynamics simulation.  
Interact Cardiovasc Thorac Surg. 2018;27:446-454

PMID: 29579303

130) Putzu A, **Ferrari E**, Gallo M, Cassina T, Landoni G.  
Randomized Evidence on Perioperative Statin Therapy in Cardiac Surgery.  
Ann Thorac Surg. 2018;105:665-666

PMID: 29362180

131) **Ferrari E**, von Segesser LK, Berdajs D, Muller L, Halbe M, Maisano F.  
Clinical experience in minimally invasive cardiac surgery with virtually wall-less venous cannulas.  
Innovations. 2018;13:104-107

PMID: 29677020

132) Berdajs D, Mosbahi S, Eckstein F, Reuthebuch O, Grapow M, **Ferrari E**, von Segesser LK.  
Impact of aortic root annuloplasty on 3D aortic root geometry.  
J Surg Res. 2018;225:45-53

PMID: 29605034

133) Von Segesser LK, Berdajs D, Abdel-Sayed S, **Ferrari E**, Halbe M, Wilhelm M, Maisano F.  
New, optimized, dual lumen cannula for veno-venous ECMO  
Perfusion. 2018;33:18-23

PMID: 29788840

134) Guerrero M, Urena M, Himbert D, Wang DD, Eleid M, Kodali S, George I, Chakravarty T, Mathur M, Holzhey D, Pershad A, Fang HK, O'Hair D, Jones N, Mahadevan VS, Dumonteil N, Rodés-Cabau J, Piazza N, **Ferrari E**, Ciaburri D, Nejjari M, DeLago A, Sorajja P, Zahr F, Rajagopal V, Whisenant B, Shah PB, Sinning JM, Witkowski A, Eltchaninoff H, Dvir D, Martin B, Attizzani GF, Gaia D, Nunes NSV, Fassa AA, Kerendi F, Pavlides G, Iyer V, Kaddissi G, Witzke C, Wudel J, Mishkel G, Raybuck B, Wang C, Waksman R, Palacios I, Cribier A, Webb J, Bapat V, Reisman M, Makkar R, Leon M, Rihal C, Vahanian A, O'Neill W, Feldman T.

1-Year Outcomes of Transcatheter Mitral Valve Replacement in Patients with Severe Mitral Annular Calcification.

J Am Coll Cardiol. 2018;71:1841-1853

PMID: 29699609

135) Wahlers TCW, Andreas M, Rahamanian P, Candolfi P, Zemanova B, Giot C, **Ferrari E**, Laufer G.

Outcomes of a rapid deployment aortic valve versus its conventional counterpart: a propensity-matched analysis.

Innovations 2018;13:177-183

PMID: 29912142

136) Putzu A, Gallo M, **Ferrari E**, Cassina T, Landoni G.

Statin Therapy before Cardiac Surgery: Neutral or Detrimental Effects?

Anesthesiology. 2018;128:685-686

PMID: 29438254

137) Caporali E, Van Den Berg JC, **Ferrari E**.

Endovascular treatment of complex aortic injuries 40 years after surgery for aortic coarctation.

J Vasc Surg Cases Innov Tech. 2018;4:181

PMID: 29942917

138) Cheung A, Webb J, Schaefer U, Moss R, Deuschl F, Conradi L, Denti P, Latib A, Kiaii B, Bagur R, **Ferrari E**, Moccetti M, Biasco L, Blanke P, Ben-Gal Y, Banai S.

Transcatheter mitral valve replacement in patients with previous aortic valve replacement.

Circ Cardiovasc Interv. 2018; 11(10):e006412. doi: 10.1161/CIRCINTERVENTIONS.118.006412

PMID: 30354628

139) Biasco L, Pedrazzini G, De Backer O, Klersy C, Bellesi L, Presilla S, Badini M, Faletra F, Pasotti E, **Ferrari E**, Demertzis S, Moccetti T, Aviano D, Moccetti M.

Radiological exposure of patients undergoing transcatheter aortic valve implantation in contemporary practice.

J Cardiovasc Med. 2018;19:579-585

PMID: 30045085

140) Biasco L, **Ferrari E**, Pedrazzini G, Faletra F, Moccetti T, Petracca F, Moccetti M.

Access sites for TAVI: patient selection criteria, technical aspects, and outcomes.

Front. Cardiovasc Med. 2018;5:88

PMID: 30065928

141) Torre T, Leo LA, Demertzis S, **Ferrari E**.

Giant Left Coronary Artery Aneurysms and Concomitant Coronary Disease.

Ann Cardiovasc Surg. 2018;1:1005

142) Gallo M, Demertzis S, Torre T, **Ferrari E**.

Direct surgical transcatheter heart valve implantation in a calcified mitral valve.

Multimed Man Cardiothorac Surg. 2018;2018. doi: 10.1510/mmcts.2018.053.

PMID: 30285323

**2019**

143) **Ferrari E**, Piazza G, Scoglio M, Berdajs D, Tozzi P, Maisano F, von Segesser LK.

Suitability of 3D-printed root models for the development of transcatheter aortic root repair

technologies.

ASAIO J. 2019;65:874-881

PMID: 30325848

144) Conti M, Vandenberghe S, Marconi S, **Ferrari E**, Romarowski RM, Morganti S, Auricchio F, Demertzis S.

Reversed auxiliary flow to reduce embolism risk during TAVI: a computational simulation and experimental study.

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