

Curriculum Vitae

Marco Moscarelli



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SYMPLECTIC ELEMENTS (Imperial College London)	https://www.imperial.ac.uk/SymplecticElements/default.html

Education

Undergraduate

Giulio Cesare High School – Rome, Italy (1990-1995)

Graduate

Tor Vergata University of Rome Medical School

Primary Medical Qualification cum laude (1995-2001)

Postgraduate

General and Cardiac Surgery Residency, Department of Cardiac Surgery Tor Vergata - University of Rome (2001-2010) (MD it)

Clinical and Research Fellow in the Vascular Science section of the National Heart and Lung Institute, Faculty of Medicine, London UK (2010-2015) (MDres)

Present appointment

Cardiac Surgeon, Anthea Hospital, Bari, It

Scientific Officer GVM Care & Research

Special appointment

Lecturer, master in bio-statistic ('R-project based')

<http://www.uniba.it/didattica/master-universitari/short-master/short-master-aa-2017-2018/statistica-ricerca-biomedica-salute>

MICS, Mitral Conferences, and Mitral Academy, scientific coordinator

<https://www.mitralacademy.it/it-it/mics/mics-2018>

SICCH, Societa' Italiana Cardiochirurgia, member of fondazione scientifica. <https://www.sicch.it>

Registration

UK General Medical Council registration n° 6161556

Italy: "Abilitazione all'esercizio della professione" n° M52268 (University of Rome)

Special courses

GCP, Good Clinical Practice (Protocol and Associated Documents / Applications, Agreements and Approvals / Trial Master Files / Conducting the trial / Safety Reporting) Hammersmith, Imperial College (2014) / ATLS, Advance Trauma Life Support St Marys Hospital, Imperial College, 2013

RESEARCH

(pubmed)

- A Trial of Two Anesthetic Regimes for Minimally Invasive Mitral Valve Repair. Moscarelli M, et al. (2018), doi.org/10.1053/j.jvca.2018.01.028. In press.
- Nasso G, Moscarelli M, Fattouch K, Zebele C, Iacopino S, Fiore F, Speziale G. Mid-Term Performance of Bipolar Radiofrequency Ablation for Isolated Atrial Fibrillation Through a Right Minithoracotomy. *Semin Thorac Cardiovasc Surg*. 2017 Summer;29(2):160-172. doi: 10.1053/j.semctvs.2017.01.005. Epub 2017 Jan 14. PubMed PMID: 28823322.
- Moscarelli M, Athanasiou T, Speziale G, Punjabi PP, Malietzis G, Lancellotti P, Fattouch K. The value of adding sub-valvular procedures for chronic ischemic mitral regurgitation surgery: a meta-analysis. *Perfusion*. 2017 Sep;32(6):436-445. doi: 10.1177/0267659117693683. Epub 2017 Feb 1. PubMed PMID: 28820034.
- Margaryan R, Moscarelli M, Gasbarri T, Bianchi G, Kallushi E, Cerillo AG, Farneti P, Solinas M. EuroSCORE Performance in Minimally Invasive Cardiac Surgery: Discrimination Ability and External Calibration. *Innovations (Phila)*. 2017 Jul/Aug;12(4):282-286. doi: 10.1097/IML.0000000000000377. PubMed PMID: 28582328.
- Fattouch K, Moscarelli M, Castrovinci S, Murana G, Dioguardi P, Guccione F, Nasso G, Speziale G, Lancellotti P. Mid-term results of bicuspid aortic valve repair guided by morphology and function assessment. *Interact Cardiovasc Thorac Surg*. 2017 Jul 1;25(1):83-88. doi: 10.1093/icvts/ivx027. PubMed PMID: 28379458.
- Abdullahi YS, Athanasopoulos LV, Casula RP, Moscarelli M, Bagnall M, Ashrafian H,

Athanasίου T. Systematic review on the predictive ability of frailty assessment measures in cardiac surgery. *Interact Cardiovasc Thorac Surg.* 2017 Apr 1;24(4):619-624. doi: 10.1093/icvts/ivw374. Review. PubMed PMID: 28069729.

- Fattouch K, Moscarelli M, Castrovinci S, Guccione F, Dioguardi P, Speziale G, Lancellotti P. A Comparison of 2 Mitral Annuloplasty Rings for Severe Ischemic Mitral Regurgitation: Clinical and Echocardiographic Outcomes. *Semin Thorac Cardiovasc Surg.* 2016 Summer;28(2):261-268. doi: 10.1053/j.semtcvs.2016.04.007. Epub 2016 Apr 25. PubMed PMID: 28043427.

- Moscarelli M, Athanasίου T, Sevdalis N, Vescovi F, Fattouch K, Nasso G, Speziale G. Controlled Exponentially Weighted Moving Average Chart in Cardiac Surgery: A Simulation Study Across 9 Italian Cardiac Centers. *Semin Thorac Cardiovasc Surg.* 2016 Summer;28(2):253-258. doi: 10.1053/j.semtcvs.2016.04.005. Epub 2016 Apr 30. PubMed PMID: 28043425.

- Abdullahi YS, Athanasopoulos LV, Moscarelli M, Casula RP, Speziale G, Fattouch K, Castrovinci S, Athanasίου T. What are the benefits of a minimally invasive approach in frail octogenarian patients undergoing aortic valve replacement? *J Geriatr Cardiol.* 2016 Sep;13(6):514-6. doi:10.11909/j.issn.1671-5411.2016.06.007. PubMed PMID: 27582767; PubMed Central PMCID: PMC4987421.

- Mylotte D, Sharif F, Piazza N, Moscarelli M, Fattouch K, Modine T. Transcatheter aortic valve implantation in 2015. *J Geriatr Cardiol.* 2016 Sep;13(6):511-3. doi: 10.11909/j.issn.1671-5411.2016.06.003. PubMed PMID: 27582766; PubMed Central PMCID: PMC4987420.

- Mylotte D, Sharif F, Piazza N, Moscarelli M, Fattouch K, Modine T. Transcatheter aortic valve implantation in 2015. J Geriatr Cardiol. 2016 Sep;13(6):511-3. doi: 10.11909/j.issn.1671-5411.2016.06.003. PubMed PMID: 27582766; PubMed Central PMCID: PMC4987420.

- Cheng A, Bookun HR, Rasmussen M, Lee D, Siew Lee C, Zhang XB, Gangahanumaiah S, Moscarelli M, Bianchi G, Farneti P, Solinas M. Left Atrial Diameter is an Independent Predictor of Postoperative Atrial Fibrillation after Minimally Invasive Mitral Valve Surgery. J Cardiothorac Surg. 2015; 10(Suppl 1): A25. Published online 2015 Dec 16. doi: 10.1186/1749-8090-10-S1-A25 PMCID: PMC4693935

- Castrovinci S, Emmanuel S, Moscarelli M, Murana G, Caccamo G, Bertolino EC, Nasso G, Speziale G, Fattouch K. Minimally invasive aortic valve surgery. J Geriatr Cardiol. 2016 Sep;13(6):499-503. doi: 10.11909/j.issn.1671-5411.2016.06.005. PubMed PMID: 27582764; PubMed Central PMCID: PMC4987418.

- Cheng A, Bookun HR, Rasmussen M, Lee D, Siew Lee C, Zhang XB, Gangahanumaiah S, Moscarelli M, Bianchi G, Farneti P, Solinas M. Mini-Thoracotomy Access Reduces the Incidence of Postoperative Atrial Fibrillation after Aortic Valve Replacement J Cardiothorac Surg. 2015; 10(Suppl 1): A77. Published online 2015 Dec 16. doi: 10.1186/1749-8090-10-S1-A77 PMCID: PMC4693759.

- Cheng A, Bookun HR, Rasmussen M, Lee D, Siew Lee C, Zhang XB, Gangahanumaiah S, Moscarelli M, Bianchi G, Farneti P, Solinas M. Sutureless bioprosthesis may increase postoperative atrial fibrillation after aortic valve replacement J Cardiothorac Surg. 2015; 10(Suppl 1): A26. Published online 2015 Dec 16. doi: 10.1186/1749-8090-10-S1-A26 PMCID: PMC4693736

- Carità P, Coppola G, Novo G, Caccamo G, Guglielmo M, Balasus F, Novo S, Castrovinci S, Moscarelli M, Fattouch K, Corrado E. Aortic stenosis: insights on pathogenesis and clinical implications. *J Geriatr Cardiol*. 2016 Sep;13(6):489-98. doi: 10.11909/j.issn.16715411.2016.06.001. PubMed PMID: 27582763; PubMed Central PMCID: PMC4987417.

- Athanasopoulos LV, Moscarelli M, Speziale G, Punjabi PP, Athanasiou T. Are adjunct subvalvular techniques more effective than isolated restrictive annuloplasty for treating ischemic mitral regurgitation? *Perfusion*. 2017 Mar;32(2):92-96. doi: 10.1177/0267659116662520. Epub 2016 Jul 28. PubMed PMID: 27469247.

- Fattouch K, Moscarelli M, Del Giglio M, Albertini A, Comoglio C, Coppola R, Nasso G, Speziale G. Non-sutureless minimally invasive aortic valve replacement: mini-sternotomy versus mini-thoracotomy: a series of 1130 patients. *Interact Cardiovasc Thorac Surg*. 2016 Aug;23(2):253-8. doi: 10.1093/icvts/ivw104. Epub 2016 May 8. PubMed PMID: 27160409.

- Moscarelli M, Emmanuel S, Athanasiou T, Speziale G, Fattouch K, Casula R. The role of minimal access valve surgery in the elderly. A meta-analysis of observational studies. *Int J Surg*. 2016 Sep;33 Pt A:164-71. doi: 10.1016/j.ijsu.2016.04.040. Epub 2016 Apr 27. Review. PubMed PMID: 27131758.

- Acharya M, Harling L, Moscarelli M, Ashrafian H, Athanasiou T, Casula R. Influence of body mass index on outcomes after minimal-access aortic valve replacement through a J-shaped partial upper sternotomy. *J Cardiothorac Surg*. 2016 Apr 27;11(1):74. doi: 10.1186/s13019-016-0467-2. PubMed PMID: 27118140; PubMed Central PMCID: PMC4847251.

- Moscarelli M, Cerillo A, Athanasiou T, Farneti P, Bianchi G, Margaryan R, Solinas M. Minimally invasive mitral valve surgery in high-risk patients: operating outside the boxplot. *Interact Cardiovasc Thorac Surg.* 2016 Jun;22(6):756-61. doi: 10.1093/icvts/ivw038. Epub 2016 Mar 6. PubMed PMID: 26953330; PubMed Central PMCID: PMC4986782.

- Moscarelli M, De Paulis R. The golden perfection of the aortic valve. *Int J Cardiol.* 2016 Feb 15;205:165-166. doi: 10.1016/j.ijcard.2015.12.018. Epub 2015 Dec 15. PubMed PMID: 26740035.

- Moscarelli M, Fattouch K, Casula R, Speziale G, Lancellotti P, Athanasiou T. What Is the Role of Minimally Invasive Mitral Valve Surgery in High-Risk Patients? A Meta-Analysis of Observational Studies. *Ann Thorac Surg.* 2016 Mar;101(3):981-9. doi: 10.1016/j.athoracsur.2015.08.050. Epub 2015 Oct 23. Review. PubMed PMID: 26603021.

- Moscarelli M, Margaryan R, Cerillo A, Kallushi E, Farneti P, Solinas M. Minimally Invasive Mitral Valve Surgery in Truly High-Risk Patients: Are We Pushing the Boundaries?: An Observational Study. *Innovations (Phila).* 2015 Sep-Oct;10(5):328-33. doi: 10.1097/IMI.000000000000197. PubMed PMID: 26575380.

- Moscarelli M, Casula R, Speziale G, Athanasiou T. Can we use minimally invasive mitral valve surgery as a safe alternative to sternotomy in high-risk patients? *Interact Cardiovasc Thorac Surg.* 2016 Jan;22(1):92-6. doi: 10.1093/icvts/ivv275. Epub 2015 Oct 8. Review. PubMed PMID: 26451001

- Moscarelli M, Bianchi G, Margaryan R, Cerillo A, Farneti P, Murzi M, Solinas M. Accuracy of EuroSCORE II in patients undergoing minimally invasive mitral valve surgery. *Interact Cardiovasc Thorac Surg.* 2015 Dec;21(6):748-53. doi: 10.1093/icvts/ivv265. Epub

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- Moscarelli M, Angelini GD, Suleiman S, Fiorentino F, Punjabi PP. Remote ischaemic preconditioning: is it a flag on the field? *Perfusion*. 2015 Sep;30(6):438-47. doi: 10.1177/0267659115570720. Epub 2015 Feb 4. Review. PubMed PMID: 25651827.

- Moscarelli M, Punjabi PP, Miroslav GI, Del Sarto P, Fiorentino F, Angelini GD. Myocardial conditioning techniques in off-pump coronary artery bypass grafting. *J Cardiothorac Surg*. 2015 Jan 20;10:7. doi: 10.1186/s13019-014-0204-7. Review. PubMed PMID: 25599579; PubMed Central PMCID: PMC4304196.

- Fattouch K, Castrovinci S, Murana G, Moscarelli M, Speziale G. Surgical management of moderate ischemic mitral valve regurgitation: Where do we stand? *World J Cardiol*. 2014 Nov 26;6(11):1218-22. doi: 10.4330/wjc.v6.i11.1218. Review. PubMed PMID: 25429333; PubMed Central PMCID: PMC4244618.

- Kanaganayagam GS, Moscarelli M, Punjabi PP, Fox KF. Feeling dizzy? A giant incidental finding. *Eur Heart J*. 2014 Sep 14;35(35):2343. doi: 10.1093/eurheartj/ehu237. Epub 2014 Jun 18. PubMed PMID: 24944327.

- Moscarelli M, Harling L, Ashrafian H, Athanasiou T, Casula R. Challenges facing totally endoscopic robotic coronary artery bypass grafting. *Int J Med Robot.* 2015 Mar;11(1):18-29. doi: 10.1002/rcs.1598. Epub 2014 Jun 18. Review. PubMed PMID: 24944107.

- Attaran S, Harling L, Ashrafian H, Moscarelli M, Casula R, Anderson J, Punjabi P, Athanasiou T. Off-pump versus on-pump revascularization in females: a meta-analysis of observational studies. *Perfusion.* 2014 Sep;29(5):385-96. doi: 10.1177/0267659114525985. Epub 2014 Mar 7. Review. PubMed PMID: 24609839.

- Moscarelli M, Harling L, Attaran S, Ashrafian H, Casula RP, Athanasiou T. Surgical revascularisation of the acute coronary artery syndrome. *Expert Rev Cardiovasc Ther.* 2014 Mar;12(3):393-402. doi: 10.1586/14779072.2014.890889. Epub 2014 Feb 19. Review. PubMed PMID: 24552545.

- Moscarelli M, Attaran S, Thomas C, Anderson JR. Contained rupture of the sinus of valsalva associated with infective endocarditis and untreated congenital ventricular septal defect. *World J Pediatr Congenit Heart Surg.* 2013 Jul;4(3):312-4. doi: 10.1177/2150135112474025. PubMed PMID: 24327505.

- Harling L, Moscarelli M, Kidher E, Fattouch K, Ashrafian H, Athanasiou T. The effect of off-pump coronary artery bypass on mortality after acute coronary syndrome: a meta-analysis. *Int J Cardiol.* 2013 Nov 20;169(5):339-48. doi: 10.1016/j.ijcard.2013.09.003. Epub 2013 Oct 3. PubMed PMID: 24161532.

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Cardiovasc Thorac Surg. 2013 Mar;16(3):350-5. doi: 10.1093/icvts/ivs476. Epub 2012 Nov 25. Review. PubMed PMID: 23184562; PubMed Central PMCID: PMC3568801.

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- Fattouch K, Runza G, Moscarelli M, Trumello C, Incalcaterra E, Corrado E, La Grutta L, Patni R, Midiri M, Novo S, Ruvolo G. Graft patency and late outcomes for patients with ST-segment elevation myocardial infarction who underwent coronary surgery. Perfusion. 2011 Sep;26(5):401-8. doi: 10.1177/0267659111411354. Epub 2011 May 31. PubMed PMID: 21628339.

- Fattouch K, Sampognaro R, Bianco G, Navarra E, Moscarelli M, Speziale G, Ruvolo G. Implantation of Gore-Tex chordae on aortic valve leaflet to treat prolapse using "the chordae technique": surgical aspects and clinical results. Ann Thorac Surg. 2008 Jun;85(6):2019-24. doi: 10.1016/j.athoracsur.2007.11.083. PubMed PMID: 18498812.

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- Forlani S, De Paulis R, Guerrieri Wolf L, Greco R, Polisca P, Moscarelli M, Chiariello L. Conversion to sinus rhythm by ablation improves quality of life in patients submitted to mitral valve surgery. Ann Thorac Surg. 2006 Mar;81(3):863-7. PubMed PMID: 16488685.

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- De Paulis R, Cetrano E, Moscarelli M, Andò G, Bertoldo F, Scaffa R, Tomai F, Chiariello L. Effects of ascending aorta replacement on aortic root dilatation. *Eur J Cardiothorac Surg*. 2005 Jan;27(1):86-9. PubMed PMID: 15621476.

- Forlani S, Tomai F, De Paulis R, Turani F, Colella DF, Nardi P, De Notaris S, Moscarelli M, Magliano G, Crea F, Chiariello L. Preoperative shift from glibenclamide to insulin is cardioprotective in diabetic patients undergoing coronary artery bypass surgery. *J Cardiovasc Surg (Torino)*. 2004 Apr;45(2):117-22. PubMed PMID: 15179345.

- Forlani S, Moscarelli M, Scafuri A, Pellegrino A, Chiariello L. Combination therapy for prevention of atrial fibrillation after coronary artery bypass surgery: a randomized trial of sotalol and magnesium. *Card Electrophysiol Rev*. 2003 Jun;7(2):168-71. PubMed PMID: 14618045.

Book chapters

- Fiorella De Vito, Marco Moscarelli, Marco Matteo Ciccone, Paola Rizzo, Roberto Ferrari, and Giuseppe Speziale. The Impact of Surgical and Trans-Catheter Aortic Valve Replacement on Endothelial Function: New Markers Ahead. Springer International Publishing AG 2018, *Advances in Treatments for Aortic Valve and Root Diseases*, in press.

- Fattouch K, Moscarelli M. Chapter 2. Anatomical changes associated with secondary mitral

regurgitation: Difference between ischemic and idiopathic cardiomyopathy. Secondary mitral valve regurgitation. Springer 2015 ISBN 978-1- 4471-6488-3 (Editors: Fattouch K, Lancellotti P, Angelini G).

- Punjabi P, Moscarelli M. Chapter 24: ‘Predictors of recurrent mitral regurgitation after mitral valve repair surgery. Secondary mitral valve regurgitation. Springer 2015 ISBN 978-1-4471-6488-3 (Editors: Fattouch K, Lancellotti P, Angelini G).

- Hillecke M, Moscarelli M, Sutaria N, Angelini G, Bello F. Computer-assisted surgical planning for mitral valve repair using 4D echocardiograms. 2014 6th International Symposium on Biomedical Simulation (ISBMS), Publisher: SPRINGER INT PUBLISHING AG, Pages: 163-172, ISSN: 0302-9743.

- Moscarelli M, Patel N, Angelini GD. Chapter 1. Indication and contraindication for off-pump coronary artery bypass grafting. In Off-pump Coronary Artery Bypass Grafting: Outcomes, Concerns, Controversies. Raja SG (ed) m. 2012. Novapublisher, London.

- Moscarelli M, Punjabi P. Thoracotomy Surgery. 2011 May;29(5):242-243.
<http://dx.doi.org/10.1016/j.mpsur.2011.02.008>

Trials – prospective studies

~ Local Investigator

ERICCA trial	Remote Ischemic Preconditioning and Outcomes of Cardiac Surgery	ClinicalTrials.gov Identifier: NCT01247545	Status: concluded
RIPC trial	A MULTI-CENTRE RANDOMISED CONTROLLED TRIAL INVESTIGATING THE EFFECT OF REMOTE ISCHAEMIC PRECONDITIONING (RIPC) ON BLOOD AND MYOCARDIAL BIOMARKERS OF STRESS AND INJURY-RELATED SIGNALLING IN PATIENTS HAVING ISOLATED CORONARY ARTERY BYPASS GRAFTING (CABG) OR AORTIC VALVE REPLACEMENT (AVR) USING CARDIOPULMONARY BYPASS (CPB)	ISRCTN (international standard randomised controlled trial number): 33084113 UKCRN (UK controlled randomised trial number): ID 13672	Status: concluded

~ Principal Investigator

MINI SEVO	A Trial of Two Anaesthetic Regimes for Minimally Invasive Mitral Valve Repair	ClinicalTrials.gov Identifier: NCT02551328.	Status: concluded
PROCIDA	A multi-centre randomised controlled trial investigating the effect of <i>PRO</i> plylactic triCuspID Annuloplasty in patients with dilated tricuspid annulus on tricuspid regurgitation progression, right ventricular remodeling and functional outcomes		Status: ongoing
FRAILTY	‘USING QUALITY OF LIFE AND FRAILTY AS PREDICTORS OF RECOVERY IN CARDIAC SURGERY PATIENTS’	observational	Status: ongoing
ENDOTavi	The effect of transcatheter vs surgical aortic valve replacement on endothelial function	observational	Status: ongoing

Audit

- Minimally Invasive Aortic Valve Replacement. Single surgeon experience (Registered 03/2014 as Clinical Audit Project)

M. Moscarelli, L Athanapoulos, R Casula.

- Frequency of using intraoperative and postoperative echocardiography after valve repair/replacement (Presented at the local HH teaching meeting 09/11/2012)

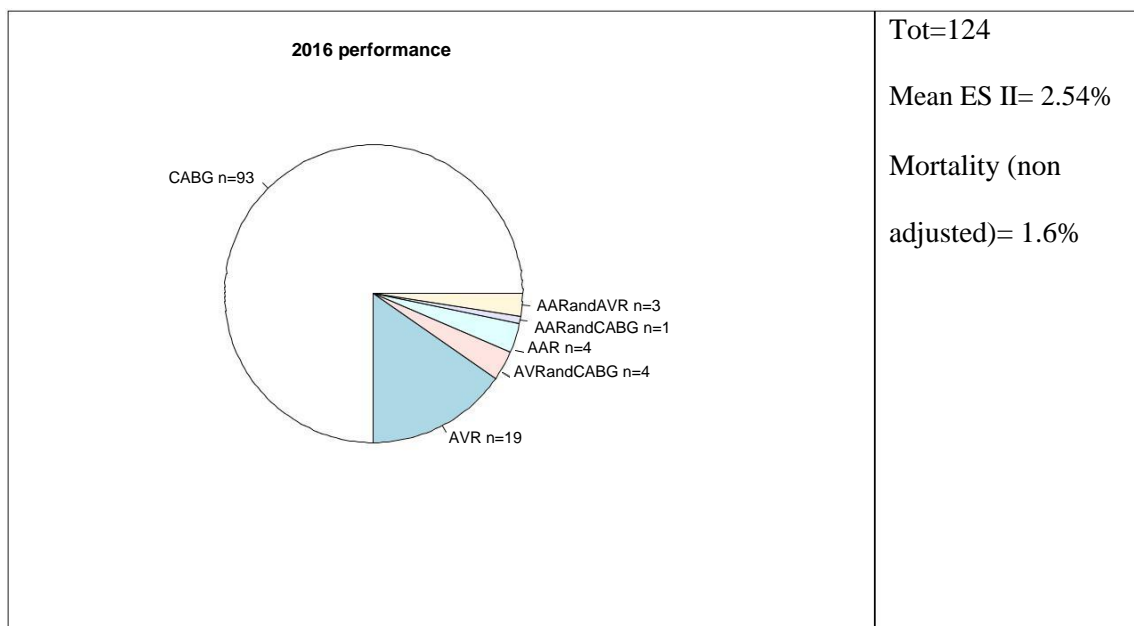
M. Moscarelli

SURGERY ACTIVITIES (2012-up till now)

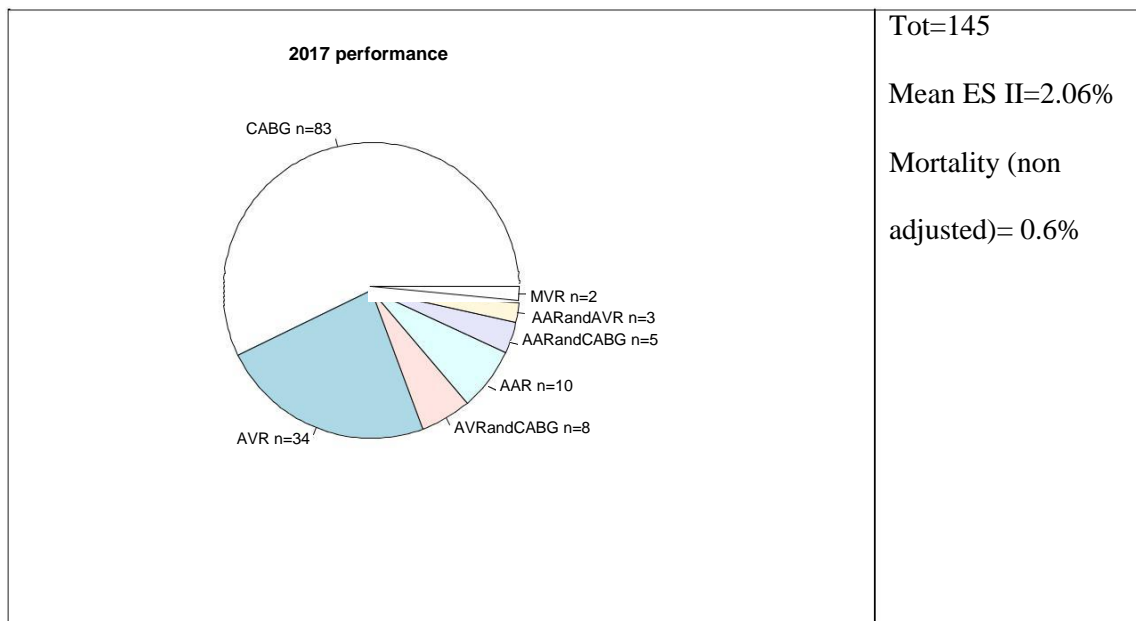
	N=
Isolated CABG	405
Isolated AVR	92
Isolated ascending aorta	23
Isolated AF minimally invasive AF ablation	12
CABG + AVR	22
CABG + ascending aorta	6
AVR + ascending aorta	12
Mitral valve combined	2
Tot	574

(update 18 February 2018)

Performance 2016 (GVM Care&Research, Anthea, Bari, It)



Performance 2017 (GVM Care&Research, Anthea, Bari, It)



Bari, IT

19/02/2018

Marco Moscarelli