

CURRICULUM VITAE

DENISA MURARU, MD, PHD, FESC, FACC, FASE



Present Position and Address:

- Associate Professor - Department of Medicine and Surgery, University of Milano-Bicocca
- Cardiologist/Echocardiographer - Integrated Cardiovascular Imaging Center, Istituto Auxologico Italiano, IRCCS, Milan, Italy
- Head of Heart Valve Clinic, Department of Cardiology, San Luca Hospital, Piazzale Brescia 20, 20149, Milan, Italy

Training and Education:

- **1997-2003** - Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
- **2004-2010** - Speciality training in Cardiology, Bucharest, Romania
- **2006-2008** - Training in Echocardiography laboratory with accreditation by the European Association of Echocardiography (Director of Echo Lab: Prof. Bogdan Popescu) Emergency Institute for Cardiovascular Diseases Prof. Dr. C.C. Iliescu, Bucharest, Romania

Research Activity and Academic Positions:

- **2009-2010** - Research Fellow on 3D Echocardiography - Echocardiography laboratory with advanced level accreditation by the European Association of Echocardiography (Director of Echo Lab: Prof. Luigi Badano), Udine, Italy
Research topics: right ventricular remodeling in pulmonary hypertension by 3DE; validation of 3DE software for LV quantification against CMR. Training in advanced echocardiography (3D TTE, 3D TEE, 2D/3D STE, exercise and pharmacological stress echocardiography, coronary flow reserve, contrast echocardiography)
- **2011-2013** - PhD Fellow - Department of Cardiac, Thoracic and Vascular Sciences, University of Padua
PhD Thesis: "Exploring the clinical feasibility and reliability of three-dimensional echocardiography for advanced quantitative analysis of left ventricular myocardial deformation"
- **2014-2015** - Postdoctoral Research Fellow - Department of Cardiac, Thoracic and Vascular Sciences, University of Padua
Research topics: validation of 3D echocardiography against CMR for RV and atrial quantification, reference values for chamber quantification by 3D TTE and STE, mitral valve abnormalities and LV geometry and function in hypertrophic cardiomyopathy by 3DE.

- **2016–2020** - Senior Researcher - Department of Cardiac, Thoracic and Vascular Sciences, University of Padua
Set up the advanced echo research laboratory (3D echo, deformation imaging, particle-image velocimetry), research, development and clinical testing of 3D echocardiography scanners and prototype software tools, consultancy for 3D echocardiography manufacturers.
Research topics: functional tricuspid regurgitation and right heart geometry and function by 3DE

- **2018** - National Scientific Qualification as Associated Professor

- **01/04/2020 - 01/04/2023** - Assistant Professor - University of Milano-Bicocca

Set up an advanced echo imaging protocol in patients with genetic cardiomyopathies for both clinical and research purposes. Conducted validation against cardiac CT and clinical testing of 3D echocardiography software for tricuspid annulus quantification, providing practical insights and authoring a dedicated White paper for users. Set up the specialized Heart Valve Clinic at the San Luca Hospital, Istituto Auxologico Italiano, IRCCS, in Milan, focusing on patient selection for interventional and surgical valve procedures, optimal timing of valvular intervention, and postprocedural follow-up.

Nominated and selected as the **American Society of Echocardiography's 22nd Annual Feigenbaum Lecturer in 2021** "Right Heart, Right Now: The Role of 3DE" - being the first time that the American Society of Echocardiography selected a European female researcher to receive this recognition for significant contribution to the field <https://www.asecho.org/feigenbaum-lecturer/>

- **Since 01/04/2023 - Associate Professor** - Department of Medicine and Surgery, University of Milano-Bicocca
Promoted the research on 3D echocardiography in the field of tricuspid regurgitation for a more accurate and reproducible assessment of right heart structures and regurgitation severity compared to conventional echocardiography.

Had significant contribution to the field with innovative observations and original research on **atrial secondary tricuspid regurgitation (ASTR)** phenotype, proposing and developing the new classification of tricuspid regurgitation from the PCR Tricuspid Focus Group, and led the 2024 expert consensus on the definition and imaging of ASTR ([10.1093/eurheartj/ehae088](https://doi.org/10.1093/eurheartj/ehae088))

Led the EACVI Document: **How to Conduct Clinical Research in Cardiovascular Imaging: A Primer for Clinical Cardiologists and Researchers**. A Statement of the European Association of Cardiovascular Imaging (EACVI) of the ESC (upcoming in 2024)

Promoted the Project on **Radiation Exposure of Interventional Imagers** of the **EACVI echo section** ([10.1093/ehjci/jeae086](https://doi.org/10.1093/ehjci/jeae086))

Research Interests:

- valvular heart disease
- functional tricuspid regurgitation (classification/pathophysiology/quantification/outcome)
- artificial intelligence applied to cardiovascular imaging
- multi-modality imaging of the right heart structures
- multi-modality imaging in arrhythmic mitral valve prolapse
- multi-modality imaging in hypertrophic cardiomyopathy
- 3D echocardiography (software development/clinical applications/validation against CMR and cardiac CT)

Funded Research Grants:

- Co-Principal Investigator, echocardiography core lab supervisor - Bando Ricerca Finalizzata 2021, Ministero della Salute - Project "In-depth characterization of atrio-genic secondary tricuspid regurgitation due to atrial fibrillation. Prevalence, mechanisms, advanced quantification of regurgitation severity, and relative impact of sinus rhythm" (RF-2021-12374122 - 578.812,50 euro)
- Principal Research Collaborator, echocardiography core lab supervisor - Bando PNRR 2022 Ministero della Salute - Project "Use of intepREtable artificial intelligence techniques for a PERsonalized risk prediCTION of sudden cardiac death in patients with ischemic and non-ischemic left ventricular dysfunction. The RESPECT project" (PNRR-MAD-2022-12375700 - 807.500 euro).

International Multicenter Research Activity:

- **EACVI TERRA** Study (TEst Retest reproducibility of Right heArt parameters by echocardiography and cardiac magnetic resonance) ClinicalTrials.gov ID NCT06193655 - Promoter and Principal Investigator
- **WASE** (The World Alliance of Societies of Echocardiography Normal Value Study) - Principal Investigator 10.1016/j.echo.2019.08.012
- **EURO-ENDO** Registry - Investigator (sponsored by ESC-EURObservational Research Programme) 10.1093/ehjqcco/qcz018
- **EACVI MASCOT HIT** study - Principal investigator 10.3390/diagnostics10110946.
- **EchoNoRMAL** study - Collaborator 10.1016/j.jcmg.2015.02.014
- **FAST-EF** study - Investigator 10.1016/j.jacc.2015.07.052

Scientific output (see *Annex 1*):

- **264 papers** in peer-reviewed journals (Scopus 12/08/2024)
- **3 books** as co-editor (including Badano L, Lang RM, Muraru D. Textbook of 3D Echocardiography - 2nd Ed Springer 2019)
- **73 chapters** in international textbooks (including Hurst's the Heart 15th Ed; Solomon's Essential Echocardiography: A Companion to Braunwald's Heart Disease; EACVI Textbook of Echocardiography; ESC Textbook of Cardiovascular Imaging; ESC Textbook of Cardiovascular Medicine; ASE's Comprehensive Echocardiography 2nd and 3rd Ed; ASE's Comprehensive Strain Imaging; Skubas, Nicoara, Savage's Comprehensive Textbook of Intraoperative Transesophageal Echocardiography 3rd Ed; Shiota's 3D Echocardiography 3rd Ed)
- **334 abstracts** at international (ASE, EuroEcho Imaging, ESC) and national congresses

Scopus metrics: H-index = 52, citations = 23502 (as of 13/08/2024)

Google scholar metrics: H-index = 64, citations = 33272 (as of 13/08/2024)

ORCID ID: <https://orcid.org/0000-0003-2514-3668>

Clinical Activity:

- **2011-2019** - Cardiologist/Echocardiographer - Echocardiography Laboratory with advanced level accreditation by the European Association of Cardiovascular Imaging (Director: Prof. Luigi Badano) - Cardiology Division, University of Padua, Padua, Italy
- **Since 2020, June 1st** - Cardiologist/Echocardiographer - Integrated Cardiovascular Imaging Center (Director: Prof. Luigi Badano)
- **Since 2020, September** - Lead Echocardiographer of the Cardiomyopathy Outpatient Clinic (Director: Prof. Lia Crotti) - Istituto Auxologico Italiano, IRCCS, Milan, Italy
- **Since 2023, April 1st** - Head of Heart Valve Clinic, Department of Cardiology, San Luca Hospital, Istituto Auxologico Italiano, IRCCS, Piazzale Brescia 20, 20149, Milan, Italy

Teaching and Academic Activity:

- Excellent teaching skills with **>60 international teaching courses** with hands-on practice on 3D echocardiography, speckle-tracking echocardiography and transesophageal echocardiography (see *Annex 1*)

- Invited **Visiting Professor at Mayo Clinic** – *Cardiac Imaging Grand Rounds* – and presenter of hands-on workshops for sonographers on transthoracic 3D echocardiography – Rochester, US – 2017
- Invited **Opponent for PhD Defense** of PhD Candidate Hjertaas J. “Measurement of LV Deformation using 3D Echocardiography”- University of Bergen, Bergen, Norway – 2023
- Promoter and reference person for the **educational and scientific exchange, and cooperation agreement** between the University of Milano-Bicocca and the Carol Davila University of Medicine and Pharmacy in Bucharest, Romania
- **Teaching 3D echocardiography, research support and mentoring activity** to international research and training fellows:
 - Dr. Alexandra Buta (Romania) – Cardiologist trainee from Bucharest (Romania), currently performing 1-year research fellowship with a project on tricuspid regurgitation at the Istituto Auxologico Italiano, Milan, Italy buta.alexandram@gmail.com
 - Dr. Alexandra Clement (Romania) – Cardiologist trainee from Iasi (Romania) – alexandram.clement@gmail.com
 - Dr. Ionela Movileanu (Romania) – Cardiologist trainee from Targu-Mures (Romania), who won a training grant from the Romanian Society of Cardiology – movileanu.ionela@yahoo.com
 - Dr. Noela Radu (Romania) – Cardiologist trainee from Bucharest (Romania), currently working as Cardiologist at the Istituto Auxologico Italiano, Milan, Italy – noela.radu91@gmail.com
 - Dr. Diana Ruxandra Florescu (Romania) – Cardiology trainee from Craiova (Romania) with Erasmus + traineeship agreement – dianarflorescu@yahoo.com
 - Dr. Pelegrino Ciampi (Italy) – Cardiology trainee from Fondazione Policlinico Universitario A. Gemelli IRCCS, Roma – pellegrino.ciampi.rc@gmail.com
 - Dr. Diana Mihalcea (Romania) – Cardiologist from Bucharest (Romania) who won an EACVI Training Grant in 2019 – dyddy.free@yahoo.com
 - Dr. Roberto Carlos Ochoa Jimenez (Republic of Honduras) – currently Cardiology Fellow at the Division of Cardiology, Department of Medicine, Mount Sinai Fuster Heart Hospital, New York, USA – roberto_ochoa@hotmail.es
 - Dr. Andrada Camelia Guta (Romania) – Cardiologist trainee from Bucharest who won a research grant from the Romanian Society of Cardiology, currently working as Cardiologist performing perioperative 2D and 3DTEE and CMR in Romania – andrada_guta@yahoo.com
 - Dr Sorina Mihaila (Romania) – Cardiologist from Bucharest (Romania) who won an EACVI Training Grant in 2012 and an ESC Research Grant in 2013, now Senior Lecturer at the University of Medicine in Bucharest performing clinical and interventional 2D/3DTEE – sorinamihaila1981@gmail.com
 - Dr. Marcelo Haertel Miglioranza (Brazil) – Cardiologist from Porto Alegre (Brazil) currently working as Professor at the post-graduation program and lead of Research Lab in Cardiovascular Imaging and Innovation marcelohaertel@gmail.com
 - Dr. Hugo Zanella (Mexico) – Cardiologist from National Institute of Cardiology Ignacio Chavez, Mexico City, Mexico – hugordzanella@gmail.com
 - Dr. Sebastian Onciul (Romania) – Cardiologist from Bucharest (Romania) expert in CMR imaging – sebastian.onciul@gmail.com
 - Dr. Csaba Jenei (Hungary) – Cardiologist from Debrecen, currently Assistant Professor of Cardiology csjenei@gmail.com
 - Dr. Jurate Bidviene (Lithuania) – Cardiologist from Kaunas, currently Assistant Professor at the Lithuanian University of Health Sciences, Kaunas, Lithuania jurate.bidviene@ismuni.lt
 - Dr. Elena Surkova (Russia) – Cardiologist who won EACVI and ESC research grants, currently an international expert in cardiovascular imaging and congenital heart disease, Senior Medical Director at AstraZeneca and Honorary Consultant Cardiologist at Royal Brompton and Harefield Hospitals (UK) – elena.surkova.md@gmail.com
 - Dr. Attila Kovács (Hungary) – Cardiologist from Hungary, currently an Assistant Prof at Semmelweis University, Head of Echocardiography Research and Core Laboratory, Co-inventor of the ReVISION method to assess RV mechanics by 3D Echocardiography – kovatti@gmail.com and others
- Mentoring EACVI HIT in the **EACVI Leader of Tomorrow program** with the topic “Social Media and Building Your Personal Brand”- 8 June 2023
- Directed and organized the **EACVI 3D Echo Tutorials on Valvular Heart Disease 2024**
- Participated as a presenter in the first **EACVI Tutorials on Transthoracic Echocardiography 2014**
- Proposed and implemented since 2020 the **EACVI Excellence in Education Awards**, project aimed to recognize outstanding educators in the field of cardiovascular imaging
- Proposed (as Chair of EAE Club 35) and obtained approval from the EAE Board for the introduction of **EACVI Training Grants** designing and implementing the project together with the Club 35 Committee

- Teaching echocardiography to cardiology trainees, MDs and international cardiology fellows in the echo lab since 2011
- Invited lecturer “3D Echocardiography: State-of-the-Art” for Prof. Dr. CC Iliescu (Bucharest, Romania) cardiology trainees (2022-2024)
- Member of PhD Teaching Faculty (Collegio Docenti) *PhD Research Course of Translational Specialized Medicine “G.B. Morgagni”*, University of Padua, Italy - since 2018
- Faculty member for Medical School-University of Milano-Bicocca and University of Padua
- Faculty and Scientific Secretary *Online Master Course on Basic and Advanced Echocardiography*, University of Padua (2016-2019)
- Lecturer of *Cardiology Intensive Care Master Course*, University of Padua, Italy (2019)
- Director of Teaching Courses for MDs *Applications of Three-Dimensional Technology to Cardiovascular Imaging and Basic Course of Two and Three-Dimensional Echocardiography with Practical Hands-On Training* (2017-2019, University of Padua)
- Co-Director of the International Course *3D Echo Intensive Course* 2012-2019 - 3 editions/year and 14 extramural courses (University of Padua, Italy)
- Co-Director of the *EACVI Teaching Course on 2D and 3D Transesophageal Echocardiography* (2017, 2018, 2019 - European Heart House, Sophia Antipolis, France)
- Member of the Organizing Committee and Faculty of the *Echocardiography for Trainees Teaching Course* (20 October 2018, Antalya, Turkey) organized by the EACVI Heart Imagers of Tomorrow and Turkish Society of Cardiology Cardiac Imaging Working Group
- Scientific Secretary of *My Echocardiolab* online free course (Spanish) organized by ECHOSIAC, Interamerican Society of Cardiology and University of Padua
- Member of Scientific Committee of *China-Europe Echocardiography CME Project: Interactive Webcast on Basic and Advanced Echocardiography* (October 2014-September 2016) organized by University of Padua
- Member of Scientific Committee of *3D Echo 360°* E-learning platform
- Invited Speaker at *Marcus Heart Valve Center online teaching conferences* (2014 - Piedmont Atlanta, US)
- Invited Speaker *ASE’s DVD: Utility of 3D Echocardiography: Promises and Perspectives* - web-based recording of the digital lecture “Assessment of LA Function” (2018)

Scientific Meetings and Invited Presentations (see [Annex 2](#)):

- Participated in the organization of **28 large international congresses, teaching courses and conferences** (EuroEcho 2024, EACVI 2023, ESC Congress 2019, EchoNice 2022, EchoLisbon 2023, etc)
- **337** invited presentations and chairperson roles (Invited Faculty at EuroEcho since 2009, ESC Congress since 2012)

Associate Editor:

- IMAGING (Senior Associate Editor)
- CASE (Subsection Editor for the Advanced Echo Tools & The Right Ventricle).

Editorial Board Member:

- J Am Soc Echocardiogr

- Eur Heart J Cardiovasc Imaging (Social Media Editor since 2020)
- Rom J Cardiol

Invited Co-Editor of Focus Issue:

- The Right Heart. European Heart Journal - Cardiovascular Imaging Vol 23, Issue 7, July 2022 (IF 9.130)

Reviewer: JACC, JACC Imaging, Eur Heart J, Eur J Heart Fail, JACC Cardiovascular Interventions, Circulation, EuroIntervention

Fellowships/honors (see [Annex 3](#)):

- Honorary Lecture PolEcho 2024 - the annual Congress of the Association of Echocardiography of the Polish Society of Cardiology, Cracow, 2024
- Keynote Lecture at the Annual Symposium of the Belgian Working Group on Non-Invasive Cardiac Imaging (BWGNICI) - 2022
- Fellow American Society of Echocardiography - 2019
- Fellow American College of Cardiology - 2019
- Fellow European Society of Cardiology - 2018
- Honorary Lecture "Gerhard Hoghenkerke" - German Society of Cardiology (DGK) Cardiology Congress, Leipzig 2019
- Honorary Member Romanian Society of Cardiology - 2018
- European Association of Echocardiography Research Grant Award Winner - 2011

Professional Societies Memberships and Positions within EACVI and ESC:

Since 2007	ESC/EACVI(EAE) member
2010-2012	Club 35 Committee member Club 35 Ambassador for Romania
2012-2014	Chair of Club 35 Committee - EACVI Board Member of Scientific Documents Committee Member of European Communities Committee
2014-2016	HIT Committee member (Past Chair) Member of Scientific Documents Committee Member of Web & Communication Committee
2016-2018	Elected Councillor - EACVI Board Education Committee (Chair) Member of Scientific Documents Committee Member of EACVI Task Force of Multi-Modality Imaging (MMI) Member of EACVI FoCUS Task Force
2018-2020	Elected Councillor (Echo Section) - EACVI Board Education Committee (Chair) Member of Scientific Documents Committee Member of Web & Communication Committee

Member of EACVI Excellence in Education Awards Task Force
Member of ESC Education Committee (EACVI representative)
Member of ESC Task Force of Live Events Endorsement (EACVI representative)
Member of ESC Congress Program Committee (EACVI representative)

2020-2022 **Elected Vice-President Elect (Echo Section) - EACVI Board**
Research and Innovation Committee (Chair)

Member of ESC Education Committee (EACVI representative)

Member of ESC Clinical Case Gallery Task Force

2022-2024 **Vice-President (Echo Section) - EACVI Board**
Web and Communication Committee (Deputy Chair)
EuroEcho Imaging 2024 Scientific Program Chair

Other memberships:

- HFA Silver Member
- EAPCI Regular Member
- ESC WG on Myocardial and Pericardial Diseases
- ESC Council on Hypertension
- Italian Society of Cardiology - Valvular Heart Disease WG, SIECVI

Languages:

- Romanian (mother tongue)
- English (proficient level)
- Italian (proficient level)
- French (intermediate level)

Milan, 13 August 2024

A handwritten signature in black ink, consisting of stylized, cursive letters that appear to be 'A. M.' or similar.

Publications

Peer-review papers indexed on PubMed/PubMed Central (PMC)

1. Dreyfus J, Juarez-Casso F, Sala A, Carnero-Alcazar M, Eixerés-Esteve A, Bohbot Y, Bazire B, Flagiello M, Riant E, Mbaki Y, Tomasi J, Senage T, Rahmouni El Idrissi K, Coisne A, Eyharts D, Doguet F, Viau F, Eggenspieler F, Heuts S, Sardari Nia P, Heitzinger G, Galloo X, Ajmone-Marsan N, Benfari G, Badano L, Muraru D, Maisano F, Topilsky Y, Michelena H, Enriquez-Sarano M, Bax JJ, Bartko P, Selton-Suty C, Habib G, Lavie-Badie Y, Modine T, Chan V, Le Tourneau T, Donal E, Lim P, Radu C, Bernick J, Wells GA, Tribouilloy C, Iung B, Obadia J, De Bonis M, Crestanello J, Messika-Zeitoun D for the TRIGISTRY investigators. Long-term benefit of isolated surgical tricuspid valve repair and replacement in patients with severe functional tricuspid regurgitation – Impact of the TRI-SCORE. *Eur Heart J*. 2024 (in press)
2. Zgheib A, De Backer O, Afilalo J, Quagliana A, Campens L, Asmar M, Al Ismaili A, Angiolillo D, Ajmone Marsan N, von Bardeleben RS, Buithieu J, Cavalcante J, Chetrit M, Choi C, Coisne A, Delgado V, Donal E, Duncan A, Dreyfus J, Fam N, Grapsa J, Granada J, Gackowski A, Hahn R, Ho E, Latib A, Medina de Chazal H, Martucci G, Maisano F, Messika-Zeitoun D, Modine T, Muraru D, Mousavi N, Praz F, Redwood S, Patterson T, Enriquez-Sarano M, Spaziano M, Swaans M, Sitges M, Zamorano Gómez JL, Van Mieghem N, Tchetché D, Tournoux F, Wunderlich N, Prendergast N, Piazza N. Tricuspid valve - S-curves and chamber views Implications for transcatheter tricuspid and pulmonary valve interventions. *JACC Cardiovasc Interv* 2024 (in press)
3. Gavazzoni M, Badano LP, Pugliesi GM, Penso M, Hădăreanu DR, Ciampi P, Fisicaro S, Oliverio G, Heilbron F, Tomaselli M, Muraru D. Assessing Right Atrial Size in Patients with Tricuspid Regurgitation: Importance of the Right Ventricular-Focused View. *Eur Heart J Cardiovasc Imaging*. 2024 Jul 25;jeae186. doi: 10.1093/ehjci/jeae186. Epub ahead of print. PMID: 39052930.
4. Westwood M, Almeida AG, Barbato E, Delgado V, Dellegrottaglie S, Fox KF, Gargani L, Huber K, Maurovich-Horvat P, Merino JL, Mindham R, Muraru D, Neubeck L, Nijveldt R, Papadakis M, Pontone G, Price S, Rosano GMC, Rossi A, Sade LE, Schulz-Menger J, Weidinger F, Achenbach S, Petersen SE. Competency-based cardiac imaging for patient-centred care. A statement of the European Society of Cardiology (ESC). With the contribution of the European Association of Cardiovascular Imaging (EACVI), and the support of the Association of Cardiovascular Nursing & Allied Professions (ACNAP), the Association for Acute CardioVascular Care (ACVC), the European Association of Preventive Cardiology (EAPC), the European Association of Percutaneous Cardiovascular Interventions (EAPCI), the European Heart Rhythm Association (EHRA), and the Heart Failure Association (HFA) of the ESC. *Eur Heart J Imaging Methods Pract*. 2023 Aug 25;1(2):qyad023. doi: 10.1093/ehjimp/qyad023. PMID: 39045068; PMID: PMC11195717.
5. Badano LP, Tomaselli M, Muraru D, Galloo X, Li CHP, Ajmone Marsan N. Advances in the Assessment of Patients with Tricuspid Regurgitation: A State-of-the-Art Review on the Echocardiographic Evaluation Before and After Tricuspid Valve Interventions. *J Am Soc Echocardiogr*. 2024 Jul 17:S0894-7317(24)00356-0. doi: 10.1016/j.echo.2024.07.008. Epub ahead of print. PMID: 39029717.
6. Muraru D, Badano LP. Impact of new-onset atrial fibrillation on the incidence of tricuspid regurgitation: a call to attention. *Eur Heart J*. 2024 Jul 8:ehae382. doi: 10.1093/eurheartj/ehae382. Epub ahead of print. PMID: 38973019.
7. Cameli M, Aboumarie HS, Pastore MC, Caliskan K, Cikes M, Garbi M, Lim HS, Muraru D, Mandoli GE, Pergola V, Plein S, Pontone G, Soliman OI, Maurovich-Horvat P, Donal E, Cosyns B, Petersen SE. Multimodality imaging for the evaluation and management of patients with long-term (durable) left ventricular assist devices A Clinical Consensus Statement of the European Association of Cardiovascular Imaging (EACVI) of the ESC. *Eur Heart J Cardiovasc Imaging*. 2024 Jul 5;jeae165. doi: 10.1093/ehjci/jeae165. Epub ahead of print. PMID: 38965039.
8. Akyea RK, Figliozzi S, Lopes PM, Bauer KB, Moura-Ferreira S, Tondi L, Mushtaq S, Censi S, Pavon AG, Bassi I, Galian-Gay L, Teske AJ, Biondi F, Filomena D, Stylianidis V, Torlasco C, Muraru D, Monney P, Quattrocchi G, Maestrini V, Agati L, Monti L, Pedrotti P, Vandenberg B, Squeri A, Lombardi M, Ferreira AM, Schwitter J, Aquaro GD, Pontone G, Chiribiri A, Rodríguez Palomares JF, Yilmaz A, Andreini D, Florian AR, Francone M, Leiner T, Abecasis J, Badano LP, Bogaert J, Georgiopoulos G, Masci PG. Arrhythmic Mitral Valve Prolapse Phenotype: An Unsupervised Machine Learning Analysis Using a

- Multicenter Cardiac MRI Registry. *Radiol Cardiothorac Imaging*. 2024 Jun;6(3):e230247. doi: 10.1148/ryct.230247. PMID: 38900026; PMCID: PMC11211946.
9. Badano LP, Tomaselli M, Gavazzoni M, Clement A, Muraru D. Management of Isolated Tricuspid Regurgitation: 2 Sides of the Same Coin. *JACC Cardiovasc Interv*. 2024 Jun 10;17(11):1408. doi: 10.1016/j.jcin.2024.04.033. PMID: 38866464.
 10. Tomaselli M, Badano LP, Muraru D. Letter by Tomaselli et al Regarding Article, "Left Atrial Strain Predicts Subclinical Atrial Fibrillation Detected by Long-Term Continuous Monitoring in Elderly High-Risk Individuals". *Circ Cardiovasc Imaging*. 2024 Jun;17(6):e016864. doi: 10.1161/CIRCIMAGING.124.016864. Epub 2024 May 22. PMID: 38775055.
 11. Dreyfus J, Taramasso M, Kresoja KP, Omran H, Iliadis C, Russo G, Weber M, Nombela-Franco L, Estevez Loureiro R, Hausleiter J, Latib A, Stolz L, Praz F, Windecker S, Zamorano JL, von Bardeleben RS, Tang GHL, Hahn R, Lubos E, Webb J, Schofer J, Fam N, Lauten A, Pedrazzini G, Rodés-Cabau J, Nejjari M, Badano L, Alessandrini H, Himbert D, Sievert H, Piayda K, Donal E, Modine T, Nickenig G, Pfister R, Rudolph V, Bernick J, Wells GA, Bax J, Lurz P, Enriquez-Sarano M, Maisano F, Messika-Zeitoun D; TRIGISTRY Investigators. Prognostic Implications of Residual Tricuspid Regurgitation Grading After Transcatheter Tricuspid Valve Repair. *JACC Cardiovasc Interv*. 2024 Jun 24;17(12):1485-1495. doi: 10.1016/j.jcin.2024.04.023. Epub 2024 May 16. PMID: 38752971.
 12. Schuurin MJ, Anwer S, Petersen SE, Moharem-Elgamal S, Muraru D. Social media for cardiac imagers: a review. *Eur Heart J Cardiovasc Imaging*. 2024 Apr 23;jeae109. doi: 10.1093/ehjci/jeae109. Epub ahead of print. PMID: 38650541.
 13. Tolvaj M, Kovács A, Radu N, Cascella A, Muraru D, Lakatos B, Fábíán A, Tokodi M, Tomaselli M, Gavazzoni M, Perelli F, Merkely B, Badano LP, Surkova E. Significant Disagreement Between Conventional Parameters and 3D Echocardiography-Derived Ejection Fraction in the Detection of Right Ventricular Systolic Dysfunction and Its Association With Outcomes. *J Am Soc Echocardiogr*. 2024 Jul;37(7):677-686. doi: 10.1016/j.echo.2024.04.005. Epub 2024 Apr 17. PMID: 38641069.
 14. Fisicaro S, Clement A, Tomaselli M, Penso M, Rota A, Menna A, Badano LP, Muraru D. Timing and Patient Position During Cuff Blood Pressure Measurement Affect Myocardial Work Parameters Measured by Echocardiography. *J Am Soc Echocardiogr*. 2024 Jul;37(7):690-697. doi: 10.1016/j.echo.2024.03.018. Epub 2024 Apr 7. PMID: 38593889.
 15. Hahn RT, Muraru D, Lindman BR, Delgado V, Dweck MR. Heart valve disease: at the threshold of a new era in patient management. *Lancet*. 2024 Apr 20;403(10436):1519-1522. doi: 10.1016/S0140-6736(24)00423-9. Epub 2024 Mar 27. PMID: 38554723.
 16. Badano LP, Muraru D. Make Right Heart Remodeling in Secondary Tricuspid Regurgitation as Simple as Possible, But Not Simpler. *JACC Cardiovasc Imaging*. 2024 Jun;17(6):607-609. doi: 10.1016/j.jcmg.2024.02.002. Epub 2024 Mar 20. PMID: 38520426.
 17. Springhetti P, Benfari G, Nistri S, Jannello EMS, Mandoli GE, Badano L, Ribichini FL, Muraru D. Diagnostic Contexts of Echocardiographic Nonapical Window. *JACC Case Rep*. 2024 Mar 11;29(9):102287. doi: 10.1016/j.jaccas.2024.102287. PMID: 38500538; PMCID: PMC10945174.
 18. Muraru D, Badano LP, Hahn RT, Lang RM, Delgado V, Wunderlich NC, Donal E, Taramasso M, Duncan A, Lurz P, De Potter T, Zamorano Gómez JL, Bax JJ, von Bardeleben RS, Enriquez-Sarano M, Maisano F, Praz F, Sitges M. Atrial secondary tricuspid regurgitation: pathophysiology, definition, diagnosis, and treatment. *Eur Heart J*. 2024 Mar 14;45(11):895-911. doi: 10.1093/eurheartj/ehae088. PMID: 38441886; PMCID: PMC11095052.
 19. Springhetti P, Tomaselli M, Benfari G, Milazzo S, Ciceri L, Penso M, Pilan M, Clement A, Rota A, Del Sole PA, Nistri S, Muraru D, Ribichini F, Badano L. Peak atrial longitudinal strain and risk stratification in moderate and severe aortic stenosis. *Eur Heart J Cardiovasc Imaging*. 2024 Jun 28;25(7):947-957. doi: 10.1093/ehjci/jeae040. PMID: 38319610.
 20. Badano LP, Benfari G, Muraru D. The conundrum of the reference values of left atrial size and function. *Eur Heart J Cardiovasc Imaging*. 2024 Apr 30;25(5):613-614. doi: 10.1093/ehjci/jeae039. PMID: 38309953.
 21. Muraru D, Badano LP. Leaflet Coaptation Gaps in Severe Tricuspid Regurgitation: Unraveling the Morphological Challenges in the Tricuspid Transcatheter Edge-to-Edge Repair Landscape. *J Am Soc Echocardiogr*. 2024 Apr;37(4):405-407. doi: 10.1016/j.echo.2024.01.011. Epub 2024 Feb 1. PMID: 38309592.
 22. Tomaselli M, Badano LP, Oliverio G, Curti E, Pece C, Springhetti P, Milazzo S, Clement A, Penso M, Gavazzoni M, Hădăreanu DR, Mihaila SB, Pugliesi GM, Delcea C, Muraru D. Clinical Impact of the Volumetric Quantification of Ventricular Secondary Mitral Regurgitation by Three-Dimensional Echocardiography. *J Am Soc Echocardiogr*. 2024 Apr;37(4):408-419. doi: 10.1016/j.echo.2024.01.004. Epub 2024 Jan 18. PMID: 38244817.

23. Tomaselli M, Radu DN, Badano LP, Perelli FP, Heilbron F, Cascella A, Gavazzoni M, Hădăreanu DR, Mihaila S, Oliverio G, Penso M, Caravita S, Baratto C, Fiscaro S, Parati G, Muraru D. Right Atrial Remodeling and Outcome in Patients with Secondary Tricuspid Regurgitation. *J Am Soc Echocardiogr*. 2024 May;37(5):495-505. doi: 10.1016/j.echo.2024.01.003. Epub 2024 Jan 11. PMID: 38218553.
24. Tomaselli M, Badano LP, Muraru D. Right atrial function, a mostly ignored but very valuable parameter in patients with secondary tricuspid regurgitation. *Heart*. 2024 Feb 23;110(6):389-390. doi: 10.1136/heartjnl-2023-323426. PMID: 37932022.
25. Stankovic I, Voigt JU, Burri H, Muraru D, Sade LE, Haugaa KH, Lumens J, Biffi M, Dacher JN, Marsan NA, Bakelants E, Manisty C, Dweck MR, Smiseth OA, Donal E; Reviewers: This document was reviewed by members of the 2020–2022 EACVI Scientific Documents Committee;; by the 2020–2022 EACVI President: Imaging in patients with cardiovascular implantable electronic devices: part 2-imaging after device implantation. A clinical consensus statement of the European Association of Cardiovascular Imaging (EACVI) and the European Heart Rhythm Association (EHRA) of the ESC. *Eur Heart J Cardiovasc Imaging*. 2023 Dec 21;25(1):e33-e54. doi: 10.1093/ehjci/jead273. PMID: 37861420.
26. Stankovic I, Voigt JU, Burri H, Muraru D, Sade LE, Haugaa KH, Lumens J, Biffi M, Dacher JN, Marsan NA, Bakelants E, Manisty C, Dweck MR, Smiseth OA, Donal E; Reviewers: This document was reviewed by members of the 2020-2022 EACVI Scientific Documents Committee;; by the 2020–2022 EACVI President: Imaging in patients with cardiovascular implantable electronic devices: part 1-imaging before and during device implantation. A clinical consensus statement of the European Association of Cardiovascular Imaging (EACVI) and the European Heart Rhythm Association (EHRA) of the ESC. *Eur Heart J Cardiovasc Imaging*. 2023 Dec 21;25(1):e1-e32. doi: 10.1093/ehjci/jead272. PMID: 37861372.
27. Ferkh A, Pathan F, Kizana E, Elhindi J, Singh A, Singulane CC, Miyoshi T, Asch FM, Lang RM, Thomas L; WASE Investigators. Variations in indexation of left atrial volume across different races. *Heliyon*. 2023 Sep 21;9(10):e20334. doi:10.1016/j.heliyon.2023.e20334. PMID: 37810843; PMCID: PMC10550615.
28. Petersen SE, Muraru D, Westwood M, Dweck MR, Di Salvo G, Delgado V, Cosyns B. The year 2022 in the European Heart Journal-Cardiovascular Imaging: Part I. *Eur Heart J Cardiovasc Imaging*. 2023 Nov 23;24(12):1593-1604. doi:10.1093/ehjci/jead237. PMID: 37738411.
29. Baratto C, Faini A, Gallone GP, Dewachter C, Perego GB, Bondue A, Muraru D, Senni M, Badano LP, Parati G, Vachiéry JL, Caravita S. Pulmonary artery wedge pressure and left ventricular end-diastolic pressure during exercise in patients with dyspnoea. *ERJ Open Res*. 2023 Sep 4;9(4):00750-2022. doi:10.1183/23120541.00750-2022. PMID: 37670852; PMCID: PMC10475984.
30. Dreyfus J, Galloo X, Taramasso M, Heitzinger G, Benfari G, Kresoja KP, Juarez-Casso F, Omran H, Bohbot Y, Iliadis C, Russo G, Topilsky Y, Weber M, Nombela-Franco L, Sala A, Eixerés-Esteve A, Iung B, Obadia JF, Estevez Loureiro R, Riant E, Donal E, Hausleiter J, Badano L, Le Tourneau T, Coisne A, Modine T, Latib A, Praz F, Windecker S, Zamorano JL, von Bardeleben RS, Tang GHL, Hahn R, Webb J, Muraru D, Nejjari M, Chan V, De Bonis M, Carnero-Alcazar M, Nickenig G, Pfister R, Tribouilloy C, Rudolph V, Crestanello J, Lurz P, Bartko P, Maisano F, Bax J, Enriquez-Sarano M, Messika-Zeitoun D; TRIGISTRY investigators. TRI-SCORE and benefit of intervention in patients with severe tricuspid regurgitation. *Eur Heart J*. 2024 Feb 21;45(8):586-597. doi: 10.1093/eurheartj/ehad585. PMID: 37624856.
31. Westwood M, Almeida AG, Barbato E, Delgado V, Dellegrottaglie S, Fox KF, Gargani L, Huber K, Maurovich-Horvat P, Merino JL, Mindham R, Muraru D, Neubeck L, Nijveldt R, Papadakis M, Pontone G, Price S, Rosano GMC, Rossi A, Sade LE, Schulz-Menger J, Weidinger F, Achenbach S, Petersen SE. Competency-based cardiac imaging for patient-centred care. A statement of the European Society of Cardiology (ESC). With the contribution of the European Association of Cardiovascular Imaging (EACVI), and the support of the Association of Cardiovascular Nursing & Allied Professions (ACNAP), the Association for Acute CardioVascular Care (ACVC), the European Association of Preventive Cardiology (EAPC), the European Association of Percutaneous Cardiovascular Interventions (EAPCI), the European Heart Rhythm Association (EHRA), and the Heart Failure Association (HFA) of the ESC. *Eur Heart J Cardiovasc Imaging*. 2023 Oct 27;24(11):1415-1424. doi: 10.1093/ehjci/jead216. PMID: 37622662; PMCID: PMC10610731.
32. Westwood M, Almeida AG, Barbato E, Delgado V, Dellegrottaglie S, Fox KF, Gargani L, Huber K, Maurovich-Horvat P, Merino JL, Mindham R, Muraru D, Neubeck L, Nijveldt R, Papadakis M, Pontone G, Price S, Rosano GMC, Rossi A, Sade LE, Schulz-Menger J, Weidinger F, Achenbach S, Petersen SE. Competency-based cardiac imaging for patient-centred care. A statement of the European Society of Cardiology (ESC). With the contribution of the European Association of Cardiovascular Imaging (EACVI), and the support of the Association of Cardiovascular Nursing & Allied Professions (ACNAP), the Association for Acute CardioVascular Care (ACVC), the European Association of Preventive Cardiology (EAPC), the European Association of Percutaneous Cardiovascular Interventions (EAPCI), the European Heart Rhythm Association (EHRA), and the Heart Failure Association (HFA) of the ESC. *Eur Heart J*. 2023 Dec 1;44(45):4771-4780. doi:10.1093/eurheartj/ehad578. PMID: 37622660; PMCID: PMC10691193.

33. Cotella JI, Kovacs A, Addetia K, Fabian A, Asch FM, Lang RM; WASE Investigators. Three-dimensional echocardiographic evaluation of longitudinal and non-longitudinal components of right ventricular contraction: results from the World Alliance of Societies of Echocardiography study. *Eur Heart J Cardiovasc Imaging*. 2024 Jan 29;25(2):152-160. doi: 10.1093/ehjci/jead213. PMID: 37602694.
34. Jani V, Li L, Craft M, Veronesi F, Khoo N, Danford D, Muraru D, Kutty S. Semi-automated quantification of tricuspid valve dynamics and structure in tetralogy of Fallot and hypoplastic left heart syndrome using three-dimensional echocardiography. *Echo Res Pract*. 2023 Jul 6;10(1):10. doi:10.1186/s44156-023-00023-y. PMID: 37408077; PMCID: PMC10324229.
35. Gavazzoni M, Badano LP, Cascella A, Heilbron F, Tomaselli M, Caravita S, Baratto C, Perelli F, Radu N, Perger E, Parati G, Muraru D. Clinical Value of a Novel Three-Dimensional Echocardiography-Derived Index of Right Ventricle-Pulmonary Artery Coupling in Tricuspid Regurgitation. *J Am Soc Echocardiogr*. 2023 Nov;36(11):1154-1166.e3. doi: 10.1016/j.echo.2023.06.014. Epub 2023 Jul 3. PMID: 37406715.
36. Lanzarone E, Baratto C, Vicenzi M, Villella F, Rota I, Dewachter C, Muraru D, Tomaselli M, Gavazzoni M, Badano LP, Senni M, Vachiéry JL, Parati G, Caravita S. Haemodynamic validation of the three-step HFA-PEFF algorithm to diagnose heart failure with preserved ejection fraction. *ESC Heart Fail*. 2023 Aug;10(4):2588-2595. doi: 10.1002/ehf2.14436. Epub 2023 Jun 15. PMID: 37321596; PMCID: PMC10375124.
37. Tomaselli M, Badano LP, Cannone V, Radu N, Curti E, Perelli F, Heilbron F, Gavazzoni M, Rella V, Oliverio G, Caravita S, Baratto C, Perego GB, Parati G, Brasca F, Muraru D. Incremental Value of Right Atrial Strain Analysis to Predict Atrial Fibrillation Recurrence After Electrical Cardioversion. *J Am Soc Echocardiogr*. 2023 Sep;36(9):945-955. doi: 10.1016/j.echo.2023.05.011. Epub 2023 Jun 9. PMID: 37302440.
38. Hahn RT, Lerakis S, Delgado V, Addetia K, Burkhoff D, Muraru D, Pinney S, Friedberg MK. Multimodality Imaging of Right Heart Function: JACC Scientific Statement. *J Am Coll Cardiol*. 2023 May 16;81(19):1954-1973. doi:10.1016/j.jacc.2023.03.392. PMID: 37164529.
39. Baratto C, Caravita S, Dewachter C, Faini A, Perego GB, Bondue A, Senni M, Muraru D, Badano LP, Parati G, Vachiéry JL. Right Heart Adaptation to Exercise in Pulmonary Hypertension: An Invasive Hemodynamic Study. *J Card Fail*. 2023 Sep;29(9):1261-1272. doi: 10.1016/j.cardfail.2023.04.009. Epub 2023 May 5. PMID:37150503.
40. Caravita S, Baratto C, Filippo A, Soranna D, Dewachter C, Zambon A, Perego GB, Muraru D, Senni M, Badano LP, Parati G, Vachiéry JL, Fudim M. Shedding Light on Latent Pulmonary Vascular Disease in Heart Failure With Preserved Ejection Fraction. *JACC Heart Fail*. 2023 Oct;11(10):1427-1438. doi: 10.1016/j.jchf.2023.03.003. Epub 2023 Apr 26. PMID: 37115127.
41. Addetia K, Miyoshi T, Amuthan V, Citro R, Daimon M, Gutierrez Fajardo P, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Zhang Y, Singulane CC, Hitschrich N, Blankenhagen M, Degel M, Schreckenber M, Mor-Avi V, Asch FM, Lang RM; WASE Investigators. Normal Values of Three-Dimensional Right Ventricular Size and Function Measurements: Results of the World Alliance Societies of Echocardiography Study. *J Am Soc Echocardiogr*. 2023 Aug;36(8):858-866.e1. doi: 10.1016/j.echo.2023.04.011. Epub 2023 Apr 20. PMID: 37085129.
42. Gavazzoni M, Heilbron F, Badano LP, Radu N, Cascella A, Tomaselli M, Perelli F, Caravita S, Baratto C, Parati G, Muraru D. Corrigendum: The atrial secondary tricuspid regurgitation is associated to more favorable outcome than the ventricular phenotype. *Front Cardiovasc Med*. 2023 Mar 13;10:1169907. doi: 10.3389/fcvm.2023.1169907. Erratum for: *Front Cardiovasc Med*. 2022 Nov 29;9:1022755. doi: 10.3389/fcvm.2022.1022755. PMID: 36993992; PMCID:PMC10041682.
43. Baratto C, Caravita S, Corbetta G, Soranna D, Zambon A, Dewachter C, Gavazzoni M, Heilbron F, Tomaselli M, Radu N, Perelli FP, Perego GB, Vachiéry JL, Parati G, Badano LP, Muraru D. Impact of severe secondary tricuspid regurgitation on rest and exercise hemodynamics of patients with heart failure and a preserved left ventricular ejection fraction. *Front Cardiovasc Med*. 2023 Mar 1;10:1061118. doi: 10.3389/fcvm.2023.1061118. PMID: 36937944; PMCID:PMC10014840.
44. Tondi L, Badano LP, Figliozzi S, Pica S, Torlasco C, Camporeale A, Florescu DR, Disabato G, Parati G, Lombardi M, Muraru D. The use of dedicated long-axis views focused on the left atrium improves the accuracy of left atrial volumes and emptying fraction measured by cardiovascular magnetic resonance. *J Cardiovasc Magn Reson*. 2023 Feb 16;25(1):10. doi: 10.1186/s12968-022-00905-w. PMID: 36793062; PMCID: PMC9933380.
45. Genovese D, Previtro M, Prete G, Carrer A, De Michieli L, Badano LP, Muraru D, Cernetti C, Mele D, Tarantini G, Iliceto S, Perazzolo Marra M. Non-invasive evaluation of pulmonary capillary wedge pressure using the left atrial expansion index in mitral valve stenosis, prosthesis and repair. *Int J Cardiovasc Imaging*. 2023 May;39(5):967-975. doi: 10.1007/s10554-023-02807-z. Epub 2023 Feb 10. PMID:36763208.

46. Tun HN, Almaghraby A, Kavalerchik V, Muraru D, Soliman-Aboumarie H, Abdelnabi M. Acute Right Ventricular Failure: Pathophysiology, Diagnostic Approach with Emphasis on the Role of Echocardiography. *Curr Cardiol Rev.* 2023;19(4):e060223213452. doi: 10.2174/1573403X19666230206115611. PMID: 36748814; PMCID: PMC10494269.
47. Cosyns B, Sade LE, Gerber BL, Gimelli A, Muraru D, Maurer G, Edvardsen T. The year 2021 in the European Heart Journal: Cardiovascular Imaging Part II. *Eur Heart J Cardiovasc Imaging.* 2023 Feb 17;24(3):276-284. doi: 10.1093/ehjci/jeac273. PMID: 36718129.
48. Ciampi P, Badano LP, Florescu DR, Villella F, Tomaselli M, Torlasco C, Gavazzoni M, Parati G, Muraru D. Comparison of RA Volumes Obtained Using the Standard Apical 4-Chamber and the RV-Focused Views. *JACC Cardiovasc Imaging.* 2023 Feb;16(2):248-250. doi: 10.1016/j.jcmg.2022.08.018. Epub 2022 Nov 16. PMID:36648037.
49. Muraru D, Baldea SM, Genovese D, Tomaselli M, Heilbron F, Gavazzoni M, Radu N, Sergio C, Baratto C, Perelli F, Curti E, Parati G, Badano LP. Association of outcome with left ventricular volumes and ejection fraction measured with two-and three-dimensional echocardiography in patients referred for routine, clinically indicated studies. *Front Cardiovasc Med.* 2022 Dec 22;9:1065131. doi:10.3389/fcvm.2022.1065131. PMID: 36620642; PMCID: PMC9815115.
50. Singulane CC, Miyoshi T, Mor-Avi V, Cotella JI, Schreckenber M, Blankenhagen M, Hitschrich N, Addetia K, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Zhang Y, Asch FM, Lang RM. Age-, Sex-, and Race- Based Normal Values for Left Ventricular Circumferential Strain from the World Alliance Societies of Echocardiography Study. *J Am Soc Echocardiogr.* 2023 Jun;36(6):581-590.e1. doi:10.1016/j.echo.2022.12.018. Epub 2022 Dec 30. PMID:36592875.
51. Lee L, Cotella JI, Miyoshi T, Addetia K, Schreckenber M, Hitschrich N, Blankenhagen M, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Zhang M, Mor-Avi V, Asch FM, Lang RM; WASE Study Investigators. Normal Values of Left Ventricular Mass by Two-Dimensional and Three-Dimensional Echocardiography: Results from the World Alliance Societies of Echocardiography Normal Values Study. *J Am Soc Echocardiogr.* 2023 May;36(5):533-542.e1. doi:10.1016/j.echo.2022.12.016. Epub 2022 Dec 28. PMID: 36584904.
52. Gavazzoni M, Heilbron F, Badano LP, Radu N, Cascella A, Tomaselli M, Perelli F, Caravita S, Baratto C, Parati G, Muraru D. The atrial secondary tricuspid regurgitation is associated to more favorable outcome than the ventricular phenotype. *Front Cardiovasc Med.* 2022 Nov 29;9:1022755. doi: 10.3389/fcvm.2022.1022755. Erratum in: *Front Cardiovasc Med.* 2023 Mar 13;10:1169907. doi: 10.3389/fcvm.2023.1169907. PMID: 36523369; PMCID: PMC9744784.
53. Benfari G, Mandoli GE, Magne J, Miglioranza MH, Ancona R, Luksic VR, Pastore MC, Santoro C, Michalski B, Malagoli A, Muraru D, Donal E, Cosyns B, Edvardsen T, Popescu BA, Cameli M; MASCOT investigators. Left atrial strain determinants and clinical features according to the heart failure stages. New insight from EACVI MASCOT registry. *Int J Cardiovasc Imaging.* 2022 Dec;38(12):2635-2644. doi:10.1007/s10554-022-02669-x. Epub 2022 Jul 1. PMID: 36445656; PMCID: PMC9708811.
54. Sorrell VL, Lindner JR, Pellikka PA, Kirkpatrick JN, Muraru D. Recognized and Unrecognized Value of Echocardiography in Guideline and Consensus Documents Regarding Patients With Chest Pain. *J Am Soc Echocardiogr.* 2023 Feb;36(2):146-153. doi: 10.1016/j.echo.2022.10.024. Epub 2022 Nov 11. PMID: 36375734.
55. Cotella JI, Miyoshi T, Mor-Avi V, Addetia K, Schreckenber M, Sun D, Slivnick JA, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Prado AD, Asch FM, Lang RM. Normative values of the aortic valve area and Doppler measurements using two-dimensional transthoracic echocardiography: results from the Multicentre World Alliance of Societies of Echocardiography Study. *Eur Heart J Cardiovasc Imaging.* 2023 Mar 21;24(4):415-423. doi: 10.1093/ehjci/jeac220. PMID: 36331816.
56. Edvardsen T, Donal E, Muraru D, Gimelli A, Fontes-Carvalho R, Maurer G, Petersen SE, Cosyns B. The year 2021 in the European Heart Journal-Cardiovascular Imaging: Part I. *Eur Heart J Cardiovasc Imaging.* 2022 Nov 17;23(12):1576-1583. doi: 10.1093/ehjci/jeac210. PMID: 36308337.
57. van Melle JP, Roos-Hesselink JW, Bansal M, Kamp O, Meshaal M, Pudich J, Luksic VR, Rodriguez-Alvarez R, Sadeghpour A, Hanzevacki JS, Sow R, Timóteo AT, Morgado MT, De Bonis M, Laroche C, Boersma E, Lancellotti P, Habib G; EURO-ENDO Investigators Group. Infective endocarditis in adult patients with congenital heart disease. *Int J Cardiol.* 2023 Jan 1;370:178-185. doi: 10.1016/j.ijcard.2022.10.136. Epub 2022 Oct 21. PMID: 36273665.

59. Muscogiuri G, Volpato V, Cau R, Chiesa M, Saba L, Guglielmo M, Senatieri A, Chierchia G, Pontone G, Dell'Aversana S, Schoepf UJ, Andrews MG, Basile P, Guaricci AI, Marra P, Muraru D, Badano LP, Sironi S. Application of AI in cardiovascular multimodality imaging. *Heliyon*. 2022 Oct 5;8(10):e10872. doi:10.1016/j.heliyon.2022.e10872. PMID: 36267381; PMCID: PMC9576885.
60. Muraru D, Gavazzoni M, Heilbron F, Mihalcea DJ, Guta AC, Radu N, Muscogiuri G, Tomaselli M, Sironi S, Parati G, Badano LP. Reference ranges of tricuspid annulus geometry in healthy adults using a dedicated three-dimensional echocardiography software package. *Front Cardiovasc Med*. 2022 Sep 13;9:1011931. doi: 10.3389/fcvm.2022.1011931. PMID: 36176994; PMCID: PMC9513148.
61. Pezel T, Coisne A, Michalski B, Soliman H, Ajmone N, Nijveldt R, Stankovic I, Donal E, van der Maaten J, Papadopoulos C, Edvardsen T, Muraru D, Petersen SE, Cosyns B, Bäck M, Bertrand PB, Haugaa KH, Keenan N, Donal E, Cosyns B. EACVI SIMULATOR-online study: evaluation of transoesophageal echocardiography knowledge and skills of young cardiologists. *Eur Heart J Cardiovasc Imaging*. 2023 Feb 17;24(3):285-292. doi: 10.1093/ehjci/jeac195. PMID: 36151868.
62. Figliozzi S, Georgiopoulos G, Lopes PM, Bauer KB, Moura-Ferreira S, Tondi L, Mushtaq S, Censi S, Pavon AG, Bassi I, Servato ML, Teske AJ, Biondi F, Filomena D, Pica S, Torlasco C, Muraru D, Monney P, Quattrocchi G, Maestrini V, Agati L, Monti L, Pedrotti P, Vandenberg B, Squeri A, Lombardi M, Ferreira AM, Schwitler J, Aquaro GD, Chiribiri A, Rodríguez Palomares JF, Yilmaz A, Andreini D, Florian A, Leiner T, Abecasis J, Badano LP, Bogaert J, Masci PG. Myocardial Fibrosis at Cardiac MRI Helps Predict Adverse Clinical Outcome in Patients with Mitral Valve Prolapse. *Radiology*. 2023 Jan;306(1):112-121. doi: 10.1148/radiol.220454. Epub 2022 Sep 13. PMID: 36098639.
63. Soliman-Aboumarie H, Joshi SS, Cameli M, Michalski B, Manka R, Haugaa K, Demirkiran A, Podlesnikar T, Jurcut R, Muraru D, Badano LP, Dweck MR. EACVI survey on the multi-modality imaging assessment of the right heart. *Eur Heart J Cardiovasc Imaging*. 2022 Oct 20;23(11):1417-1422. doi: 10.1093/ehjci/jeac183. PMID: 36093580.
64. Badano LP, Surkova E, Muraru D. Letter to the editor regarding 'Cardiac magnetic resonance for prophylactic implantable-cardioverter defibrillator therapy international study: prognostic value of cardiac magnetic resonance-derived right ventricular parameters substudy'. *Eur Heart J Cardiovasc Imaging*. 2022 Sep 10;23(10):e477-e478. doi: 10.1093/ehjci/jeac159. PMID: 35946058.
65. Pazdernik M, Iung B, Mutlu B, Alla F, Riezebos R, Kong W, Nunes MCP, Pierard L, Srdanovic I, Yamada H, De Martino A, Miglioranza MH, Magne J, Piper C, Laroche C, Maggioni AP, Lancellotti P, Habib G, Selton-Suty C; EURO-ENDO Investigators group. Correction to: Surgery and outcome of infective endocarditis in octogenarians: prospective data from the ESC EORP EURO-ENDO registry. *Infection*. 2022 Oct;50(5):1203-1204. doi: 10.1007/s15010-022-01883-y. Erratum for: *Infection*. 2022 Oct;50(5):1191-1202. doi:10.1007/s15010-022-01792-0. PMID: 35881318.
66. Tomaselli M, Badano LP, Menè R, Gavazzoni M, Heilbron F, Radu N, Caravita S, Baratto C, Oliverio G, Florescu DR, Parati G, Muraru D. Impact of correcting the 2D PISA method on the quantification of functional tricuspid regurgitation severity. *Eur Heart J Cardiovasc Imaging*. 2022 Oct 20;23(11):1459-1470. doi:10.1093/ehjci/jeac104. PMID: 35734964.
67. Volpato V, Ciampi P, Johnson R, Hipke K, Tomaselli M, Oliverio G, Muraru D, Badano LP, Lang RM. Feasibility and Time Analysis of Three-Dimensional and Myocardial Deformation versus Conventional Two-Dimensional Echocardiography to Assess Cardiac Chambers. *J Am Soc Echocardiogr*. 2022 Oct;35(10):1102-1105. doi:10.1016/j.echo.2022.05.017. Epub 2022 Jun 9. PMID: 35690298.
68. Muraru D. 22nd Annual Feigenbaum Lecture: Right Heart, Right Now: The Role of Three-Dimensional Echocardiography. *J Am Soc Echocardiogr*. 2022 Sep;35(9):893-909. doi: 10.1016/j.echo.2022.05.011. Epub 2022 May 26. PMID:35644303.
69. Muraru D, Badano LP. Shedding new light on the fascinating right heart. *Eur Heart J Cardiovasc Imaging*. 2022 Jun 21;23(7):863-866. doi:10.1093/ehjci/jeac085. PMID: 35613037.
70. Badano LP, Tomaselli M, Muraru D. Shedding light on the pathophysiology of non-valvular atrial fibrillation as a primary cause of the regurgitation of atrio-ventricular valves. *Eur Heart J Cardiovasc Imaging*. 2022 Jun 21;23(7):956-957. doi: 10.1093/ehjci/jeac080. PMID: 35511578.
71. Bohbot Y, Habib G, Laroche C, Stöhr E, Chirouze C, Hernandez-Meneses M, Melissopoulou M, Mutlu B, Scheggi V, Branco L, Olmos C, Reyes G, Pazdernik M, Iung B, Sow R, Mirocevic M, Lancellotti P, Tribouilloy C; EORP EURO-ENDO Registry Investigators Group. Characteristics, management, and outcomes of patients with left-sided infective endocarditis complicated by heart failure: a substudy of the ESC-EORP EURO-ENDO (European infective endocarditis) registry. *Eur J Heart Fail*. 2022 Jul;24(7):1253-1265. doi: 10.1002/ehf.2525. Epub 2022 May 16. PMID: 35508915; PMCID: PMC9543970.
72. Hahn RT, Muraru D, Lurz P, Hausleiter J, Maisano F, Praz F. Reply: The time has come to use attitudinally appropriate terminology when describing cardiac anatomy. *EuroIntervention*. 2022 Apr 22;17(18):1539-1540. doi:10.4244/EIJ-D-21-01077R. PMID: 35446255; PMCID: PMC9896388.

73. Pazdernik M, Iung B, Mutlu B, Alla F, Riezebos R, Kong W, Nunes MCP, Pierard L, Srdanovic I, Yamada H, De Martino A, Miglioranza MH, Magne J, Piper C, Laroche C, Maggioni AP, Lancellotti P, Habib G, Selton-Suty C; EURO-ENDO Investigators group. Surgery and outcome of infective endocarditis in octogenarians: prospective data from the ESC EORP EURO-ENDO registry. *Infection*. 2022 Oct;50(5):1191-1202. doi: 10.1007/s15010-022-01792-0. Epub 2022 Mar 15. Erratum in: *Infection*. 2022 Oct;50(5):1203-1204. doi:10.1007/s15010-022-01883-y. PMID: 35290614.
74. Henry MP, Cotella J, Mor-Avi V, Addetia K, Miyoshi T, Schreckenberg M, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Lang RM, Asch FM. Three-Dimensional Transthoracic Static and Dynamic Normative Values of the Mitral Valve Apparatus: Results from the Multicenter World Alliance Societies of Echocardiography Study. *J Am Soc Echocardiogr*. 2022 Jul;35(7):738-751.e1. doi: 10.1016/j.echo.2022.02.010. Epub 2022 Mar 1. PMID: 35245668; PMCID: PMC10257802.
75. Hahn RT, Badano LP, Bartko PE, Muraru D, Maisano F, Zamorano JL, Donal E. Tricuspid regurgitation: recent advances in understanding pathophysiology, severity grading and outcome. *Eur Heart J Cardiovasc Imaging*. 2022 Jun 21;23(7):913-929. doi: 10.1093/ehjci/jeac009. Erratum in: *Eur Heart J Cardiovasc Imaging*. 2022 Oct 13;jeac194. doi: 10.1093/ehjci/jeac194. PMID: 35157070.
76. Muraru D, Haugaa K, Donal E, Stankovic I, Voigt JU, Petersen SE, Popescu BA, Marwick T. Right ventricular longitudinal strain in the clinical routine: a state-of-the-art review. *Eur Heart J Cardiovasc Imaging*. 2022 Jun 21;23(7):898-912. doi: 10.1093/ehjci/jeac022. PMID: 35147667.
77. Sade LE, Muraru D, Marsan NA, Agricola E, Stankovic I, Donal E. How to assess severe tricuspid regurgitation by echocardiography? *Eur Heart J Cardiovasc Imaging*. 2022 Sep 10;23(10):1273-1276. doi: 10.1093/ehjci/jeac015. PMID: 35136997.
78. Florescu DR, Muraru D, Volpato V, Gavazzoni M, Caravita S, Tomaselli M, Ciampi P, Florescu C, Bălșeanu TA, Parati G, Badano LP. Atrial Functional Tricuspid Regurgitation as a Distinct Pathophysiological and Clinical Entity: No Idiopathic Tricuspid Regurgitation Anymore. *J Clin Med*. 2022 Jan 13;11(2):382. doi: 10.3390/jcm11020382. PMID: 35054074; PMCID: PMC8781398.
79. Addetia K, Miyoshi T, Amuthan V, Citro R, Daimon M, Gutierrez Fajardo P, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Zhang Y, Hitschrich N, Blankenhagen M, Degel M, Schreckenberg M, Mor-Avi V, Asch FM, Lang RM; WASE Investigators. Normal Values of Left Ventricular Size and Function on Three-Dimensional Echocardiography: Results of the World Alliance Societies of Echocardiography Study. *J Am Soc Echocardiogr*. 2022 May;35(5):449-459. doi: 10.1016/j.echo.2021.12.004. Epub 2021 Dec 14. PMID:34920112.
80. Russo G, Taramasso M, Pedicino D, Gennari M, Gavazzoni M, Pozzoli A, Muraru D, Badano LP, Metra M, Maisano F. Challenges and future perspectives of transcatheter tricuspid valve interventions: adopt old strategies or adapt to new opportunities? *Eur J Heart Fail*. 2022 Mar;24(3):442-454. doi:10.1002/ehj.2398. Epub 2021 Dec 21. PMID: 34894039.
81. Praz F, Muraru D, Kreidel F, Lurz P, Hahn RT, Delgado V, Senni M, von Bardeleben RS, Nickenig G, Hausleiter J, Mangieri A, Zamorano JL, Prendergast BD, Maisano F. Transcatheter treatment for tricuspid valve disease. *EuroIntervention*. 2021 Nov 19;17(10):791-808. doi: 10.4244/EIJ-D-21-00695. PMID: 34796878; PMCID: PMC9724890.
82. Florescu DR, Muraru D, Florescu C, Volpato V, Caravita S, Perger E, Bălșeanu TA, Parati G, Badano LP. Right heart chambers geometry and function in patients with the atrial and the ventricular phenotypes of functional tricuspid regurgitation. *Eur Heart J Cardiovasc Imaging*. 2022 Jun 21;23(7):930-940. doi:10.1093/ehjci/jeab211. PMID: 34747460.
83. Cosyns B, Sade LE, Gerber BL, Gimelli A, Muraru D, Maurer G, Edvardsen T. The year 2020 in the European Heart Journal-Cardiovascular Imaging: part II. *Eur Heart J Cardiovasc Imaging*. 2021 Oct 29;jeab225. doi: 10.1093/ehjci/jeab225. Epub ahead of print. PMID: 34718480.
84. Carvalho Singulane C, Singh A, Miyoshi T, Addetia K, Soulat-Dufour L, Schreckenberg M, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Zhang Y, Mor-Avi V, Asch FM, Lang RM. Sex-, Age-, and Race-Related Normal Values of Right Ventricular Diastolic Function Parameters: Data from the World Alliance Societies of Echocardiography Study. *J Am Soc Echocardiogr*. 2022 Apr;35(4):426-434. doi: 10.1016/j.echo.2021.10.006. Epub 2021 Oct 23. PMID: 34695547.
85. Patel HN, Miyoshi T, Addetia K, Citro R, Daimon M, Gutierrez Fajardo P, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Amuthan V, Zhang Y, Schreckenberg M, Blankenhagen M, Degel M, Hitschrich N, Mor-Avi V, Asch FM, Lang RM; WASE Investigators. Normal Values of Aortic Root Size

- According to Age, Sex, and Race: Results of the World Alliance of Societies of Echocardiography Study. *J Am Soc Echocardiogr.* 2022 Mar;35(3):267-274. doi: 10.1016/j.echo.2021.09.011. Epub 2021 Oct 4. Erratum in: *J Am Soc Echocardiogr.* 2023 Oct;36(10):1126. doi: 10.1016/j.echo.2023.07.009. PMID: 34619294; PMCID: PMC9111967.
86. Caravita S, Figliozzi S, Florescu DR, Volpato V, Oliverio G, Tomaselli M, Torlasco C, Muscogiuri G, Cernigliaro F, Parati G, Badano L, Muraru D. Recent advances in multimodality imaging of the tricuspid valve. *Expert Rev Med Devices.* 2021 Nov;18(11):1069-1081. doi: 10.1080/17434440.2021.1990753. Epub 2021 Oct 27. PMID: 34617481.
 87. Florescu DR, Badano LP, Tomaselli M, Torlasco C, Târtea GC, Bălşeanu TA, Volpato V, Parati G, Muraru D. Automated left atrial volume measurement by two-dimensional speckle-tracking echocardiography: feasibility, accuracy, and reproducibility. *Eur Heart J Cardiovasc Imaging.* 2021 Dec 18;23(1):85-94. doi:10.1093/ehjci/jeab199. PMID: 34606605.
 88. Surkova E, Kovács A, Tokodi M, Lakatos BK, Merkely B, Muraru D, Ruocco A, Parati G, Badano LP. Contraction Patterns of the Right Ventricle Associated with Different Degrees of Left Ventricular Systolic Dysfunction. *Circ Cardiovasc Imaging.* 2021 Oct;14(10):e012774. doi:10.1161/CIRCIMAGING.121.012774. Epub 2021 Sep 30. PMID: 34587749; PMCID: PMC8522626.
 89. Singh A, Carvalho Singulane C, Miyoshi T, Prado AD, Addetia K, Bellino M, Daimon M, Gutierrez Fajardo P, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Vivekanandan A, Zhang Y, Schreckenber M, Blankenhagen M, Degel M, Hitschrich N, Mor-Avi V, Asch FM, Lang RM; WASE Investigators. Normal Values of Left Atrial Size and Function and the Impact of Age: Results of the World Alliance Societies of Echocardiography Study. *J Am Soc Echocardiogr.* 2022 Feb;35(2):154-164.e3. doi: 10.1016/j.echo.2021.08.008. Epub 2021 Aug 18. PMID: 34416309.
 90. Badano LP, Parati G, Muraru D. Use of the three-dimensional technique to remove the looking glass through which the echocardiographers have imagined the pathophysiology of atrioventricular valve regurgitation. *Eur Heart J Cardiovasc Imaging.* 2021 Sep 20;22(10):1117-1118. doi:10.1093/ehjci/jeab155. PMID:34410359.
 91. Stankovic I, Muraru D, Fox K, Di Salvo G, Hasselberg NE, Breithardt OA, Hansen TB, Neskovic AN, Gargani L, Cosyns B, Edvardsen T; Reviewers: This document was reviewed by members of the 2020-2022 EACVI Scientific Documents Committee: Daniele Andreini, Magnus Báck, Philippe B. Bertrand, Marc Dweck, Niall Keenan, Julien Magne, Leyla Elif Sade; and by the Chair of the 2020-2022 EACVI Scientific Documents Committee: Erwan Donal. Level 1 of Entrustable Professional Activities in adult echocardiography: a position statement from the EACVI regarding the training and competence requirements for selecting and interpreting echocardiographic examinations. *Eur Heart J Cardiovasc Imaging.* 2021 Sep 20;22(10):1091-1097. doi: 10.1093/ehjci/jeab143. PMID: 34383895.
 92. Bidviene J, Muraru D, Kovacs A, Lakatos B, Ereminiene E, Liptai C, Vaskelyte JJ, Zaliunas R, Surkova E, Badano LP. Global and regional right ventricular mechanics in repaired tetralogy of Fallot with chronic severe pulmonary regurgitation: a three-dimensional echocardiography study. *Cardiovasc Ultrasound.* 2021 Aug 6;19(1):28. doi: 10.1186/s12947-021-00260-3. PMID: 34362392; PMCID: PMC8349004.
 93. Tona F, Zanatta E, Montisci R, Muraru D, Beccegato E, De Zorzi E, Benvenuti F, Civieri G, Cozzi F, Iliceto S, Doria A. Higher Ventricular-Arterial Coupling Derived from Three-Dimensional Echocardiography Is Associated with a Worse Clinical Outcome in Systemic Sclerosis. *Pharmaceuticals (Basel).* 2021 Jul 5;14(7):646. doi: 10.3390/ph14070646. PMID: 34358072; PMCID: PMC8308671.
 94. Genovese D, Muraru D, Marra MP, Carrer A, Previtero M, Palermo C, Tarantini G, Parati G, Iliceto S, Badano LP. Left Atrial Expansion Index for Noninvasive Estimation of Pulmonary Capillary Wedge Pressure: A Cardiac Catheterization Validation Study. *J Am Soc Echocardiogr.* 2021 Dec;34(12):1242-1252. doi: 10.1016/j.echo.2021.07.009. Epub 2021 Jul 24. PMID: 34311063.
 95. Volpato V, Badano LP, Figliozzi S, Florescu DR, Parati G, Muraru D. Multimodality cardiac imaging and new display options to broaden our understanding of the tricuspid valve. *Curr Opin Cardiol.* 2021 Sep 1;36(5):513-524. doi: 10.1097/HCO.0000000000000890. PMID: 34292179; PMCID:PMC9904443.
 96. Addetia K, Miyoshi T, Citro R, Daimon M, Gutierrez Fajardo P, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Vivekanandan A, Zhang Y, Schreckenber M, Mor-Avi V, Asch FM, Lang RM; WASE Investigators. Two-Dimensional Echocardiographic Right Ventricular Size and Systolic Function Measurements Stratified by Sex, Age, and Ethnicity: Results of the World Alliance of Societies of Echocardiography Study. *J Am Soc Echocardiogr.* 2021 Nov;34(11):1148-1157.e1. doi: 10.1016/j.echo.2021.06.013. Epub 2021 Jul 15. PMID: 34274451.
 97. Badano LP, Muraru D. Categorical Grading of the Severity of Tricuspid Regurgitation and its Association to Patients' Outcome. *JACC Cardiovasc Imaging.* 2021 Jun;14(6):1096-1098. doi: 10.1016/j.jcmg.2021.03.016. PMID: 34112379.

98. Almeida AG, Carpenter JP, Cameli M, Donal E, Dweck MR, Flachskampf FA, Maceira AM, Muraru D, Neglia D, Pasquet A, Plein S, Gerber BL; Reviewers: This document was reviewed by members of the 2018–2020 EACVI Scientific Documents Committee: chair of the 2018–2020 EACVI Scientific Documents Committee; 2018–2020 EACVI President. Multimodality imaging of myocardial viability: an expert consensus document from the European Association of Cardiovascular Imaging (EACVI). *Eur Heart J Cardiovasc Imaging*. 2021 Jul 20;22(8):e97-e125. doi: 10.1093/ehjci/jeab053. PMID: 34097006.
99. Patel HN, Miyoshi T, Addetia K, Henry MP, Citro R, Daimon M, Gutierrez Fajardo P, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Vivekanandan A, Zhang Y, Schreckenber M, Blankenhagen M, Degel M, Rossmanith A, Mor-Avi V, Asch FM, Lang RM; WASE Investigators. Normal Values of Cardiac Output and Stroke Volume According to Measurement Technique, Age, Sex, and Ethnicity: Results of the World Alliance of Societies of Echocardiography Study. *J Am Soc Echocardiogr*. 2021 Oct;34(10):1077-1085.e1. doi: 10.1016/j.echo.2021.05.012. Epub 2021 May 25. Erratum in: *J Am Soc Echocardiogr*. 2023 Oct;36(10):1126. doi: 10.1016/j.echo.2023.07.008. PMID: 34044105; PMCID: PMC9149664.
100. Muraru D, Figliozzi S. Unlocking the Mysteries of Arrhythmic Mitral Valve Prolapse by CMR Imaging: Is There a Tricuspid Annulus Disjunction? *JACC Cardiovasc Imaging*. 2021 Aug;14(8):1544-1547. doi: 10.1016/j.jcmg.2021.02.030. Epub 2021 Apr 14. PMID: 33865773.
101. Naser JA, Kucuk HO, Ciobanu AO, Jouni H, Oguz D, Thaden JJ, Pislaru C, Pellikka PA, Foley TA, Eleid MF, Muraru D, Nkomo VT, Pislaru SV. Atrial fibrillation is associated with large beat-to-beat variability in mitral and tricuspid annulus dimensions. *Eur Heart J Cardiovasc Imaging*. 2021 Mar 16;jeab033. doi: 10.1093/ehjci/jeab033. Epub ahead of print. PMID: 33724363.
102. Mihaila S, Velcea AE, Badano LP, Dragos V, Muraru D. Three-dimensional Echocardiography Reveals the True Enemy in a Young Male with ST-Elevation Myocardial Infarction and Severe Mitral Regurgitation: Posterior Mitral Valve "Pseudo-Cleft" and Prolapse. *Arq Bras Cardiol*. 2021 Feb;116(2 suppl 1):36-38. English, Portuguese. doi: 10.36660/abc.20190485. PMID: 33567002; PMCID: PMC8118632.
103. Guta AC, Badano LP, Tomaselli M, Mihalcea D, Bartos D, Parati G, Muraru D. The Pathophysiological Link between Right Atrial Remodeling and Functional Tricuspid Regurgitation in Patients with Atrial Fibrillation: A Three-Dimensional Echocardiography Study. *J Am Soc Echocardiogr*. 2021 Jun;34(6):585-594.e1. doi: 10.1016/j.echo.2021.01.004. Epub 2021 Jan 10. PMID:33440232.
104. Donal E, Muraru D, Badano L. Artificial intelligence and the promise of uplifting echocardiography. *Heart*. 2021 Jan 12;heartjnl-2020-318718. doi:10.1136/heartjnl-2020-318718. Epub ahead of print. PMID: 33436492.
105. Bidviene J, Muraru D, Maffessanti F, Ereminiene E, Kovács A, Lakatos B, Vaskelyte JJ, Zaliunas R, Surkova E, Parati G, Badano LP. Regional shape, global function and mechanics in right ventricular volume and pressure overload conditions: a three-dimensional echocardiography study. *Int J Cardiovasc Imaging*. 2021 Apr;37(4):1289-1299. doi: 10.1007/s10554-020-02117-8. Epub 2021 Jan 3. PMID: 33389362; PMCID: PMC8026459.
106. Muraru D, Addetia K, Guta AC, Ochoa-Jimenez RC, Genovese D, Veronesi F, Basso C, Iliceto S, Badano LP, Lang RM. Right atrial volume is a major determinant of tricuspid annulus area in functional tricuspid regurgitation: a three-dimensional echocardiographic study. *Eur Heart J Cardiovasc Imaging*. 2021 May 10;22(6):660-669. doi: 10.1093/ehjci/jeaa286. Erratum in: *Eur Heart J Cardiovasc Imaging*. 2021 May 10;22(6):669. doi: 10.1093/ehjci/jeaa353. PMID: 33387441.
107. Baldea SM, Velcea AE, Rimbas RC, Andronic A, Matei L, Calin SI, Muraru D, Badano LP, Vinereanu D. 3-D Echocardiography Is Feasible and More Reproducible than 2-D Echocardiography for In-Training Echocardiographers in Follow-up of Patients with Heart Failure with Reduced Ejection Fraction. *Ultrasound Med Biol*. 2021 Mar;47(3):499-510. doi: 10.1016/j.ultrasmedbio.2020.10.022. Epub 2020 Nov 29. PMID: 33267962.
108. Muraru D, Previtero M, Ochoa-Jimenez RC, Guta AC, Figliozzi S, Gregori D, Bottigliengo D, Parati G, Badano LP. Prognostic validation of partition values for quantitative parameters to grade functional tricuspid regurgitation severity by conventional echocardiography. *Eur Heart J Cardiovasc Imaging*. 2021 Jan 22;22(2):155-165. doi: 10.1093/ehjci/jeaa282. PMID: 33247930.
109. Popescu BA, Stefanidis A, Fox KF, Cosyns B, Delgado V, Di Salvo GD, Donal E, Flachskampf FA, Galderisi M, Lancellotti P, Muraru D, Sade LE, Edvardsen T; Reviewers: This document was reviewed by members of the 2018–2020 EACVI Scientific Documents Committee: Philippe Bertrand, Marc Dweck, Bernhard Gerber, Ivan Stankovic. Training, competence, and quality improvement in echocardiography: the European Association of Cardiovascular Imaging Recommendations: update 2020. *Eur Heart J Cardiovasc Imaging*. 2020 Dec 1;21(12):1305-1319. doi: 10.1093/ehjci/jeaa266. Erratum in: *Eur Heart J Cardiovasc Imaging*. 2021 Jan 22;22(2):187. doi: 10.1093/ehjci/jeaa347. PMID: 33245758.

110. Muraru D, Badano L. Disease Staging and Outcome in Pulmonary Hypertension: Deciphering the Right Pattern. *JACC Cardiovasc Imaging*. 2021 Jan;14(1):173-175. doi: 10.1016/j.jcmg.2020.10.002. Epub 2020 Nov 18. PMID: 33221206.
111. Soulat-Dufour L, Addetia K, Miyoshi T, Citro R, Daimon M, Fajardo PG, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Vivekanandan A, Zhang Y, Diehl M, Schreckenber M, Mor-Avi V, Asch FM, Lang RM; WASE Investigators. Normal Values of Right Atrial Size and Function According to Age, Sex, and Ethnicity: Results of the World Alliance Societies of Echocardiography Study. *J Am Soc Echocardiogr*. 2021 Mar;34(3):286-300. doi:10.1016/j.echo.2020.11.004. Epub 2020 Nov 17. PMID: 33212183.
112. Cameli M, Miglioranza MH, Magne J, Mandoli GE, Benfari G, Ancona R, Sibilio G, Reskovic Luksic V, Dejan D, Griseli L, Van De Heyning CM, Mortelmans P, Michalski B, Kupczynska K, Di Giannuario G, Devito F, Dulgheru R, Iardi F, Salustri A, Abushahba G, Morrone D, Fabiani I, Penicka M, Katbeh A, Sammarco G, Esposito R, Santoro C, Pastore MC, Comenale Pinto S, Kalinin A, Pičkure Ž, Ažman Juvan K, Zupan Mežnar A, Coisne A, Coppin A, Opris MM, Nistor DO, Paakkanen R, Biering-Sørensen T, Olsen FJ, Lapinskas T, Vaškelyté JJ, Galian-Gay L, Casas G, Motoc AI, Papadopoulos CH, Loizos S, Ágoston G, Szabó I, Hristova K, Tsonev SN, Galli E, Vinereanu D, Mihaila Baldea S, Muraru D, Mondillo S, Donal E, Galderisi M, Cosyns B, Edvardsen T, Popescu BA. Multicentric Atrial Strain Comparison between Two Different Modalities: MASCOT HIT Study. *Diagnostics (Basel)*. 2020 Nov 13;10(11):946. doi: 10.3390/diagnostics10110946. PMID: 33202837; PMCID: PMC7696899.
113. Muraru D, Caravita S, Guta AC, Mihalcea D, Branzi G, Parati G, Badano LP. Functional Tricuspid Regurgitation and Atrial Fibrillation: Which Comes First, the Chicken or the Egg? *CASE (Phila)*. 2020 Jun 6;4(5):458-463. doi: 10.1016/j.case.2020.04.011. PMID: 33117949; PMCID: PMC7581628.
114. Badano LP, Keller DM, Muraru D, Torlasco C, Parati G. Artificial intelligence and cardiovascular imaging: A win-win combination. *Anatol J Cardiol*. 2020 Oct;24(4):214-223. doi: 10.14744/AnatolJCardiol.2020.94491. PMID: 33001058; PMCID: PMC7585956.
115. Muraru D, Parati G, Badano LP. The tale of functional tricuspid regurgitation: when atrial fibrillation is the villain. *Eur Heart J Cardiovasc Imaging*. 2020 Oct 1;21(10):1079-1081. doi: 10.1093/ehjci/jeaa223. PMID:32918084.
116. Thomas L, Muraru D, Popescu BA, Sitges M, Rosca M, Pedrizzetti G, Henein MY, Donal E, Badano LP. Evaluation of Left Atrial Size and Function: Relevance for Clinical Practice. *J Am Soc Echocardiogr*. 2020 Aug;33(8):934-952. doi:10.1016/j.echo.2020.03.021. PMID: 32762920.
117. Miyoshi T, Addetia K, Citro R, Daimon M, Desale S, Fajardo PG, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Vivekanandan A, Zhang Y, Blitz A, Lang RM, Asch FM; WASE Investigators. Left Ventricular Diastolic Function in Healthy Adult Individuals: Results of the World Alliance Societies of Echocardiography Normal Values Study. *J Am Soc Echocardiogr*. 2020 Oct;33(10):1223-1233. doi: 10.1016/j.echo.2020.06.008. Epub 2020 Jul 31. PMID: 32741597.
118. Mihaila Baldea S, Muraru D, Miglioranza MH, Iliceto S, Vinereanu D, Badano LP. Relation of Mitral Annulus and Left Atrial Dysfunction to the Severity of Functional Mitral Regurgitation in Patients with Dilated Cardiomyopathy. *Cardiol Res Pract*. 2020 Jul 9;2020:3261714. doi: 10.1155/2020/3261714. PMID: 32695502; PMCID: PMC7368231.
119. Badano LP, Caravita S, Rella V, Guida V, Parati G, Muraru D. The Added Value of 3-Dimensional Echocardiography to Understand the Pathophysiology of Functional Tricuspid Regurgitation. *JACC Cardiovasc Imaging*. 2021 Mar;14(3):683-689. doi: 10.1016/j.jcmg.2020.04.029. Epub 2020 Jul 15. PMID:32682722.
120. Badano LP, Addetia K, Pontone G, Torlasco C, Lang RM, Parati G, Muraru D. Advanced imaging of right ventricular anatomy and function. *Heart*. 2020 Oct;106(19):1469-1476. doi: 10.1136/heartjnl-2019-315178. Epub 2020 Jul 3. PMID: 32620556.
121. Badano LP, Muraru D, Ciambellotti F, Caravita S, Guida V, Tomaselli M, Parati G. Assessment of left ventricular diastolic function by three-dimensional transthoracic echocardiography. *Echocardiography*. 2020 Nov;37(11):1951-1956. doi: 10.1111/echo.14782. Epub 2020 Jun 28. PMID: 32596833.
122. Badano LP, Muraru D, Parati G, Haugaa K, Voigt JU. How to do right ventricular strain. *Eur Heart J Cardiovasc Imaging*. 2020 Aug 1;21(8):825-827. doi: 10.1093/ehjci/jeaa126. PMID: 32504092.
123. Muraru D, Parati G, Badano LP. Does atrial fibrillation affect the tricuspid annulus 3D geometry in patients without severe valve regurgitation? *Eur Heart J Cardiovasc Imaging*. 2020 Jul 1;21(7):756-758. doi:10.1093/ehjci/jeaa082. PMID: 32402062.
124. Muraru D, Parati G, Badano L. The Importance and the Challenges of Predicting the Progression of Functional Tricuspid Regurgitation. *JACC Cardiovasc Imaging*. 2020 Aug;13(8):1652-1654. doi: 10.1016/j.jcmg.2020.02.016. Epub 2020 Apr 15. PMID: 32305465.

125. Skulstad H, Cosyns B, Popescu BA, Galderisi M, Salvo GD, Donal E, Petersen S, Gimelli A, Haugaa KH, Muraru D, Almeida AG, Schulz-Menger J, Dweck MR, Pontone G, Sade LE, Gerber B, Maurovich-Horvat P, Bharucha T, Cameli M, Magne J, Westwood M, Maurer G, Edvardsen T. COVID-19 pandemic and cardiac imaging: EACVI recommendations on precautions, indications, prioritization, and protection for patients and healthcare personnel. *Eur Heart J Cardiovasc Imaging*. 2020 Jun 1;21(6):592-598. doi: 10.1093/ehjci/jeaa072. PMID: 32242891; PMCID: PMC7184341.
126. Badano LP, Muraru D, Parati G. Do we need different threshold values to define normal left atrial size in different age groups? Another piece of the puzzle of left atrial remodelling with physiological ageing. *Eur Heart J Cardiovasc Imaging*. 2020 May 1;21(5):508-510. doi: 10.1093/ehjci/jeaa024. PMID: 32107547.
127. Olgun Kucuk H, Jouni H, Oguz D, Thaden JJ, Nkomo VT, Pislaru C, Foley TA, Muraru D, Pellikka PA, Pislaru SV. Large, Unpredictable Beat-To-Beat Variability of Mitral Annulus Size in Atrial Fibrillation: Implications for Percutaneous Interventions. *JACC Cardiovasc Interv*. 2020 Jun 8;13(11):1387-1389. doi: 10.1016/j.jcin.2019.12.025. Epub 2020 Feb 12. PMID: 32061605.
128. Surkova E, Badano LP, Muraru D. Author's Reply. *J Am Soc Echocardiogr*. 2020 Apr;33(4):518-519. doi: 10.1016/j.echo.2019.11.011. Epub 2020 Jan 17. PMID: 31959527.
129. Rimbaş RC, Mihăilă-Baldea S, Magda LŞ, Vişoiu SI, Muraru D, Vinereanu D. New Myocardial Deformation by 2D Multi-layer Speckle-Tracking Analysis in Healthy Patients: Normal Reference Values and Their Physiologic Determinants. *Ultrasound Med Biol*. 2020 Mar;46(3):818-827. doi: 10.1016/j.ultrasmedbio.2019.12.001. Epub 2020 Jan 7. PMID: 31918859.
130. Badano LP, Aruta P, Nguyen K, Palermo C, Baritussio A, Cecchetto A, Previtero M, Figliozzi S, Genovese D, Guta AC, Ochoa-Jimenez RC, Parati G, Muraru D. Principali applicazioni dell'ecocardiografia tridimensionale nell'attuale pratica clinica [Current clinical applications of three-dimensional echocardiography]. *G Ital Cardiol (Rome)*. 2019 Dec;20(12):722-735. Italian. doi: 10.1714/3271.32381. PMID: 31834296.
131. Guta AC, Badano LP, Ochoa-Jimenez RC, Genovese D, Previtero M, Civera S, Ruocco A, Bettella N, Parati G, Muraru D. Three-dimensional echocardiography to assess left ventricular geometry and function. *Expert Rev Cardiovasc Ther*. 2019 Nov;17(11):801-815. doi: 10.1080/14779072.2019.1697234. PMID: 31770493.
132. Muraru D, Guta AC, Ochoa-Jimenez RC, Bartos D, Aruta P, Mihaila S, Popescu BA, Iliceto S, Basso C, Badano LP. Functional Regurgitation of Atrioventricular Valves and Atrial Fibrillation: An Elusive Pathophysiological Link Deserving Further Attention. *J Am Soc Echocardiogr*. 2020 Jan;33(1):42-53. doi: 10.1016/j.echo.2019.08.016. Epub 2019 Nov 1. PMID: 31685293.
133. Asch FM, Miyoshi T, Addetia K, Citro R, Daimon M, Desale S, Fajardo PG, Kasliwal RR, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Ronderos RE, Sadeghpour A, Scalia GM, Takeuchi M, Tsang W, Tucay ES, Tude Rodrigues AC, Vivekanandan A, Zhang Y, Blitz A, Lang RM; WASE Investigators. Similarities and Differences in Left Ventricular Size and Function among Races and Nationalities: Results of the World Alliance Societies of Echocardiography Normal Values Study. *J Am Soc Echocardiogr*. 2019 Nov;32(11):1396-1406.e2. doi: 10.1016/j.echo.2019.08.012. PMID: 31679581.
134. Gavazzoni M, Badano LP, Vizzardi E, Raddino R, Genovese D, Taramasso M, Sciatti E, Palermo C, Metra M, Muraru D. Prognostic value of right ventricular free wall longitudinal strain in a large cohort of outpatients with left-side heart disease. *Eur Heart J Cardiovasc Imaging*. 2020 Sep 1;21(9):1013-1021. doi: 10.1093/ehjci/jez246. PMID: 31596464.
135. Muraru D, Badano LP, Nagata Y, Surkova E, Nabeshima Y, Genovese D, Otsuji Y, Guida V, Azzolina D, Palermo C, Takeuchi M. Development and prognostic validation of partition values to grade right ventricular dysfunction severity using 3D echocardiography. *Eur Heart J Cardiovasc Imaging*. 2020 Jan 1;21(1):10-21. doi: 10.1093/ehjci/jez233. PMID: 31539046.
136. Habib G, Erba PA, Iung B, Donal E, Cosyns B, Laroche C, Popescu BA, Prendergast B, Tornos P, Sadeghpour A, Oliver L, Vaskelyte JJ, Sow R, Axler O, Maggioni AP, Lancellotti P; EURO-ENDO Investigators. Clinical presentation, aetiology and outcome of infective endocarditis. Results of the ESC-EORP EURO-ENDO (European infective endocarditis) registry: a prospective cohort study. *Eur Heart J*. 2019 Oct 14;40(39):3222-3232. doi: 10.1093/eurheartj/ehz620. PMID: 31504413.
137. Donal E, Delgado V, Bucciarelli-Ducci C, Galli E, Haugaa KH, Charron P, Voigt JU, Cardim N, Masci PG, Galderisi M, Gaemperli O, Gimelli A, Pinto YM, Lancellotti P, Habib G, Elliott P, Edvardsen T, Cosyns B, Popescu BA; 2016-18 EACVI Scientific Documents Committee. Multimodality imaging in the diagnosis, risk stratification, and management of patients with dilated cardiomyopathies: an expert consensus document from the European Association of Cardiovascular Imaging. *Eur Heart J Cardiovasc Imaging*. 2019 Oct 1;20(10):1075-1093. doi: 10.1093/ehjci/jez178. PMID: 31504368.
138. D'Elia N, Caselli S, Kosmala W, Lancellotti P, Morris D, Muraru D, Takeuchi M, van den Bosch A, van Grootel RWJ, Villarraga H, Marwick TH. Normal Global Longitudinal Strain: An Individual Patient Meta-

- Analysis. *JACC Cardiovasc Imaging*. 2020 Jan;13(1 Pt 1):167-169. doi: 10.1016/j.jcmg.2019.07.020. Epub 2019 Aug 31. PMID: 31481298.
139. Surkova E, Muraru D, Genovese D, Aruta P, Palermo C, Badano LP. Relative Prognostic Importance of Left and Right Ventricular Ejection Fraction in Patients With Cardiac Diseases. *J Am Soc Echocardiogr*. 2019 Nov;32(11):1407-1415.e3. doi: 10.1016/j.echo.2019.06.009. Epub 2019 Aug 7. PMID: 31400846.
 140. Addetia K, Muraru D, Badano LP, Lang RM. New Directions in Right Ventricular Assessment Using 3-Dimensional Echocardiography. *JAMA Cardiol*. 2019 Sep 1;4(9):936-944. doi: 10.1001/jamacardio.2019.2424. PMID: 31339508.
 141. Magne J, Bharucha T, Bucciarelli-Ducci C, Dahl JS, Gimelli A, Haugaa KH, Muraru D, Donal E, Edvardsen T, Popescu BA. EuroEcho-Imaging 2018: Highlights. *Eur Heart J Cardiovasc Imaging* 2019;20, 489–497. doi:10.1093/ehjci/jez042
 142. Muraru D, Hahn RT, Soliman OI, Faletra FF, Basso C, Badano LP. 3-Dimensional Echocardiography in Imaging the Tricuspid Valve. *JACC Cardiovasc Imaging* 2019 Mar;12(3):500-515. doi: 10.1016/j.jcmg.2018.10.035. PubMed PMID:30846124.
 143. Moharem-Elgamal S, Cameli M, Muraru D, Brassart V, Esperou-Surrel A, Mahmoud-Elsayed H, Bucciarelli-Ducci C, Popescu BA, Cosyns B, Edvardsen T. HIT communication paper: strategies and tips to increase your chances of winning an EACVI grant. *Eur Heart J Cardiovasc Imaging* 2019 May 22. pii: jez088. doi:10.1093/ehjci/jez088. [Epub ahead of print] PubMed PMID: 31119264.
 144. Badano LP, Nagueh SF, Muraru D. Left atrial function: an overlooked metrics in clinical routine echocardiography. *Eur J Heart Fail* 2019 May 8. doi: 10.1002/ehjhf.1475. [Epub ahead of print] PubMed PMID: 31069915.
 145. Badano LP, Muraru D. Twist Mechanics of the Left Ventricle. *Circ Cardiovasc Imaging* 2019 Apr;12(4):e009085. doi: 10.1161/CIRCIMAGING.119.009085. PubMed PMID: 31002264.
 146. Habib G, Lancellotti P, Erba PA, Sadeghpour A, Meshaal M, Sambola A, Furnaz S, Citro R, Ternacle J, Donal E, Cosyns B, Popescu B, Iung B, Prendergast B, Laroche C, Tornos P, Pazdernik M, Maggioni A, Gale CP; EURO-ENDO Investigators. The ESC-EORP EURO-ENDO (European Infective Endocarditis) registry. *Eur Heart J Qual Care Clin Outcomes*. 2019 Jul 1;5(3):202-207. doi: 10.1093/ehjqcco/qcz018. Erratum in: *Eur Heart J Qual Care Clin Outcomes*. 2020 Jan 1;6(1):91. PMID: 30957862.
 147. Khaliq OK, Cavalcante JL, Shah D, Guta AC, Zhan Y, Piazza N, Muraru D. Multimodality Imaging of the Tricuspid Valve and Right Heart Anatomy. *JACC Cardiovasc Imaging* 2019 Mar;12(3):516-531. doi: 10.1016/j.jcmg.2019.01.006. PubMed PMID: 30846125.
 148. Badano LP, Hahn RH, Rodríguez-Zanella H, Araiza Garaygordobil D, Ochoa-Jimenez RC, Muraru D. Morphological assessment of the tricuspid apparatus and grading regurgitation severity in patients with functional tricuspid regurgitation. Thinking outside the box. *JACC Cardiovasc Imaging* 2019;12(4):652-664. doi:10.1016/j.jcmg.2018.09.029. PubMed PMID: 30947907.
 149. Muraru D, Mihaila-Baldea S, Badano LP. Transcatheter Tricuspid Valve Replacement: Taking It One Step Further. *J Am Coll Cardiol* 2019;73(2):158-160. doi: 10.1016/j.jacc.2018.09.087. PMID: 30654887
 150. Fox K, Achenbach S, Bax JJ, Cosyns B, Delgado V, Dweck MR, Edvardsen T, Flachskampf F, Habib G, Lancellotti P, Muraru D, Neglia D, Pontone G, Schwammenthal E, Sechtem U, Westwood M, Popescu BA. Multimodality Imaging in Cardiology. A statement on behalf of the Task Force on Multimodality Imaging of the European Association of Cardiovascular Imaging. *Eur Heart J* 2018; Oct 30. doi: 10.1093/eurheartj/ehy669. PMID:30380037
 151. Genovese D, Addetia K, Kebed K, Kruse E, Yamat M, Narang A, Patel AR, Badano LP, Muraru D, Gonçalves A, Mor-Avi V, Lang RM. First Clinical Experience With 3-Dimensional Echocardiographic Transillumination Rendering. *JACC Cardiovasc Imaging*. 2019 Sep;12(9):1868-1871. doi: 10.1016/j.jcmg.2018.12.012. Epub 2019 Feb 13. PMID: 30772235; PMCID: PMC7538076.
 152. Genovese D, Mor-Avi V, Palermo C, Muraru D, Volpato V, Kruse E, Yamat M, Aruta P, Addetia K, Badano LP, Lang RM. Comparison Between Four-Chamber and Right Ventricular-Focused Views for the Quantitative Evaluation of Right Ventricular Size and Function. *J Am Soc Echocardiogr*. 2019 Apr;32(4):484-494. doi: 10.1016/j.echo.2018.11.014. Epub 2019 Jan 25. PMID: 30686498.
 153. Velcea AE, Baldea SM, Muraru D, Badano LP, Vinereanu D. An atypical case of pulmonary embolism from a jugular vein. *Echo Res Pract*. 2018 Dec 1;5(4):K67-K72. doi: 10.1530/ERP-18-0029. PMID: 30496123; PMCID: PMC6280251
 154. Badano LP, Sammarco G, Muraru D. Measure the right parameters, set the right targets. *Int J Cardiol*. 2019 Jun 1;284:63-64. doi: 10.1016/j.ijcard.2018.10.043. Epub 2018 Oct 14. PMID: 30340852.
 155. Aruta P, Muraru D, Guta AC, Mihaila S, Ruozi N, Palermo C, Elnagar B, Iliceto S, Badano LP. Comparison of mitral annulus geometry between patients with ischemic and non-ischemic functional mitral regurgitation: implications for transcatheter mitral valve implantation. *Cardiovasc Ultrasound*. 2018 Oct 12;16(1):27. doi: 10.1186/s12947-018-0145-8. PubMed PMID: 30314517

156. Sprynger M, Rigo F, Moonen M, Aboyans V, Edvardsen T, de Alcantara ML, Brodmann M, Naka KK, Kownator S, Simova I, Vlachopoulos C, Wautrecht JC, Lancellotti P; EACVI Scientific Documents Committee. Focus on echovascular imaging assessment of arterial disease: complement to the ESC guidelines (PARTIM 1) in collaboration with the Working Group on Aorta and Peripheral Vascular Diseases. *Eur Heart J Cardiovasc Imaging*. 2018 Nov 1;19(11):1195-1221. doi: 10.1093/ehjci/jey103. PMID: 30239635.
157. Rodríguez-Zanella H, Muraru D, Secco E, Boccalini F, Azzolina D, Aruta P, Surkova E, Genovese D, Cavalli G, Sammarco G, Ruozi N, Tenaglia RM, Calvillo-Argüelles O, Palermo C, Iliceto S, Badano LP. Added Value of 3- Versus 2-Dimensional Echocardiography Left Ventricular Ejection Fraction to Predict Arrhythmic Risk in Patients With Left Ventricular Dysfunction. *JACC Cardiovasc Imaging*. 2019 Oct;12(10):1917-1926. doi: 10.1016/j.jcmg.2018.07.011. Epub 2018 Sep 12. PMID: 30219408.
158. Di Salvo G, Miller O, Babu Narayan S, Li W, Budts W, Valsangiacomo Buechel ER, Frigiola A, van den Bosch AE, Bonello B, Mertens L, Hussain T, Parish V, Habib G, Edvardsen T, Geva T, Baumgartner H, Gatzoulis MA; 2016–2018 EACVI Scientific Documents Committee. Collaborators: Delgado V, Haugaa KH, Lancellotti P, Flachskampf F, Cardim N, Gerber B, Masci PG, Donal E, Gimelli A, Muraru D, Cosyns B. Imaging the adult with congenital heart disease: a multimodality imaging approach-position paper from the EACVI. *Eur Heart J Cardiovasc Imaging*. 2018 Oct 1;19(10):1077-1098. doi:10.1093/ehjci/jey102. PMID: 30084968
159. Delgado V, Cardim N, Cosyns B, Donal E, Flachskampf F, Galderisi M, Gerber B, Gimelli A, Haugaa KH, Kaufmann PA, Lancellotti P, Magne J, Masci PG, Muraru D, Habib G, Edvardsen T, Popescu BA. Criteria for recommendation, expert consensus, and appropriateness criteria papers: update from the European Association of Cardiovascular Imaging Scientific Documents Committee. *Eur Heart J Cardiovasc Imaging*. 2018 Aug 1;19(8):835-837. doi:10.1093/ehjci/jey079. PMID: 29905776
160. Zorzi A, De Lazzari M, Mastella G, Niero A, Trovato D, Cipriani A, Peruzza F, Portolan L, Berton G, Sciacca F, Tollot S, Palermo C, Bellu R, D'ascenzi F, Muraru D, Badano LP, Iliceto S, Schiavon M, Perazzolo Marra M, Corrado D. Ventricular Arrhythmias in Young Competitive Athletes: Prevalence, Determinants, and Underlying Substrate. *J Am Heart Assoc*. 2018 Jun 9;7(12). pii: e009171. doi: 10.1161/JAHA.118.009171. PubMed PMID: 29886418.
161. Badano LP, Koliass TJ, Muraru D, Abraham TP, Aurigemma G, Edvardsen T, D'Hooge J, Donal E, Fraser AG, Marwick T, Mertens L, Popescu BA, Sengupta PP, Lancellotti P, Thomas JD, Voigt JU; Industry representatives; Reviewers: This document was reviewed by members of the 2016–2018 EACVI Scientific Documents Committee. Standardization of left atrial, right ventricular, and right atrial deformation imaging using two-dimensional speckle tracking echocardiography: a consensus document of the EACVI/ASE/Industry Task Force to standardize deformation imaging. *Eur Heart J Cardiovasc Imaging*. 2018 Jun 1;19(6):591-600. doi: 10.1093/ehjci/jey042. PubMed PMID: 29596561.
162. Addetia K, Maffessanti F, Muraru D, Singh A, Surkova E, Mor-Avi V, Badano LP, Lang RM. Morphological Analysis of the Normal Right Ventricle Using 3D-Echocardiography-Derived Curvature Indices. *J Am Soc Echocardiogr*. 2018 May;31(5):614-623. doi: 10.1016/j.echo.2017.12.009. Epub 2018 Feb 21. PubMed PMID: 29402505; PubMed Central PMCID: PMC5936650.
163. Magne J, Bucciarelli-Ducci C, Dahl J, Gimelli A, Haugaa K, Miller O, Muraru D, Edvardsen T, Popescu BA. EuroEcho-Imaging 2017: Highlights. *Eur Heart J Cardiovasc Imaging* 2018; May 1;19(5):482-489. doi: 10.1093/ehjci/jey037. PubMed PMID: 29548013.
164. Neskovic AN, Skinner H, Price S, Via G, De Hert S, Stankovic I, Galderisi M, Donal E, Muraru D, Sloth E, Gargani L, Cardim N, Stefanidis A, Cameli M, Habib G, Cosyns B, Lancellotti P, Edvardsen T, Popescu BA. Focus Cardiac Ultrasound Core Curriculum and Core Syllabus of the European Association of Cardiovascular Imaging. *Eur Heart J Cardiovasc Imaging* 2018 May 1;19(5):475-481. doi: 10.1093/ehjci/jey006. PubMed PMID: 29529170.
165. Muraru D, Niero A, Rodriguez-Zanella H, Cherata D, Badano L. Three-dimensional speckle-tracking echocardiography: benefits and limitations of integrating myocardial mechanics with three-dimensional imaging. *Cardiovasc Diagn Ther Cardiovasc Diagn Ther*. 2018 Feb;8(1):101-117. doi: 10.21037/cdt.2017.06.01. PubMed PMID: 29541615; PubMed Central PMCID: PMC5835646.
166. Cucchini U, Muraru D, Badano LP. Cardioembolic Stroke in Patient With Transcatheter Occluded Left Atrial Appendage. *J Invasive Cardiol*. 2018 Jan;30(1):E7-E8. PubMed PMID: 29289951
167. Muraru D, Cecchetto A, Cucchini U, Zhou X, Lang RM, Romeo G, Vannan M, Mihaila S, Miglioranza MH, Iliceto S, Badano LP. Intervendor Consistency and Accuracy of Left Ventricular Volume Measurements Using Three-Dimensional Echocardiography. *J Am Soc Echocardiogr*. 2018 Feb;31(2):158-168.e1. doi: 10.1016/j.echo.2017.10.010. Epub 2017 Dec 8. PubMed PMID: 29229493.
168. Addetia K, Muraru D, Veronesi F, Jenei C, Cavalli G, Besser SA, Mor-Avi V, Lang RM, Badano LP. 3-Dimensional Echocardiographic Analysis of the Tricuspid Annulus Provides New Insights Into Tricuspid

- Valve Geometry and Dynamics. *JACC Cardiovasc Imaging*. 2017 Nov 10. pii: S1936-878X(17)30902-6. doi:10.1016/j.jcmg.2017.08.022. PubMed PMID: 29153573
169. Rodríguez-Zanella H, Haugaa K, Boccacini F, Secco E, Edvardsen T, Badano LP, Muraru D. Physiological Determinants of Left Ventricular Mechanical Dispersion: A 2-Dimensional Speckle Tracking Echocardiographic Study in Healthy Volunteers. *JACC Cardiovasc Imaging*. 2018 Apr;11(4):650-651. doi: 10.1016/j.jcmg.2017.06.015. Epub 2017 Oct 5. PubMed PMID: 28917676.
 170. Visentin S, Palermo C, Camerin M, Daliento L, Muraru D, Cosmi E, Badano LP. Echocardiographic Techniques of Deformation Imaging in the Evaluation of Maternal Cardiovascular System in Patients with Complicated Pregnancies. *Biomed Res Int*. 2017; 4139635. doi: 10.1155/2017/4139635. PubMed PMID: 28904957
 171. Surkova E, Badano LP, Genovese D, Cavalli G, Lanera C, Bidviene J, Aruta P, Palermo C, Iliceto S, Muraru D. Clinical and Prognostic Implications of Methods and Partition Values Used to Assess Left Atrial Volume by Two-Dimensional Echocardiography. *J Am Soc Echocardiogr*. 2017 Nov;30(11):1119-1129. doi:10.1016/j.echo.2017.07.015. PubMed PMID: 28867513
 172. Badano LP, Muraru D. The Good, the Bad, and the Ugly of Using Left Ventricular Longitudinal Myocardial Deformation by Speckle-Tracking Echocardiography to Assess Patients After an Acute Myocardial Infarction. *Circ Cardiovasc Imaging*. 2017 Jul;10(7). pii: e006693. doi:10.1161/CIRCIMAGING.117.006693. PubMed PMID: 28701530
 173. Chambers JB, Garbi M, Nieman K, Myerson S, Pierard LA, Habib G, Zamorano JL, Edvardsen T, Lancellotti P; This document was reviewed by members of the 2014—16 EACVI Scientific Documents Committee; Delgado V, Cosyns B, Donal E, Dulgheru R, Galderisi M, Lombardi M, Muraru D, Kauffmann P, Cardim N, Haugaa K, Rosenhek R. Appropriateness criteria for the use of cardiovascular imaging in heart valve disease in adults: a European Association of Cardiovascular Imaging report of literature review and current practice. *Eur Heart J Cardiovasc Imaging*. 2017 May 1;18(5):489-498. doi:10.1093/ehjci/jew309. PubMed PMID: 28586420
 174. Surkova E, Badano LP, Bellu R, Aruta P, Sambugaro F, Romeo G, Migliore F, Muraru D. Left bundle branch block: from cardiac mechanics to clinical and diagnostic challenges. *Europace* Aug 1;19(8):1251-1271; doi: 10.1093/europace/eux061. PubMed PMID: 28444180
 175. Muraru D, Migliore F, Cipriani A, Iliceto S, Bertaglia E. Transthoracic 3D echocardiography imaging of transcatheter pacing system. *Eur Heart J Cardiovasc Imaging*. 2017 May 1;18(8):937. doi: 10.1093/ehjci/jex065. PubMed PMID: 28383712.
 176. Lakatos B, Tóser Z, Tokodi M, Doronina A, Kosztin A, Muraru D, Badano LP, Kovács A, Merkely B. Quantification of the relative contribution of the different right ventricular wall motion components to right ventricular ejection fraction: the ReVISION method. *Cardiovasc Ultrasound*. 2017 Mar 27;15(1):8. doi: 10.1186/s12947-017-0100-0. PubMed PMID: 28347344
 177. Steeds RP, Garbi M, Cardim N, Kasprzak JD, Sade E, Nihoyannopoulos P, Popescu BA, Stefanidis A, Cosyns B, Monaghan M, Aakhus S, Edvardsen T, Flachskampf F, Galiuto L, Athanassopoulos G, Lancellotti P; 2014–2016 EACVI Scientific Documents Committee; 2014–2016 EACVI Scientific Documents Committee. EACVI appropriateness criteria for the use of transthoracic echocardiography in adults: a report of literature and current practice review. *Eur Heart J Cardiovasc Imaging*. 2017 Nov 1;18(11):1191-1204. doi: 10.1093/ehjci/jew333. PubMed PMID: 28329307.
 178. Donal E, Delgado V, Magne J, Bucciarelli-Ducci C, Leclercq C, Cosyns B, Sitges M, Edvardsen T, Sade E, Stankovic I, Agricola E, Galderisi M, Lancellotti P, Hernandez A, Plein S, Muraru D, Schwammenthal E, Hindricks G, Popescu BA, Habib G. Rational and design of EuroCRT: an international observational study on multi-modality imaging and cardiac resynchronization therapy. *Eur Heart J Cardiovasc Imaging*. 2017 Oct 1;18(10):1120-1127. doi: 10.1093/ehjci/jex021. PubMed PMID: 28329299.
 179. Haugaa KH, Basso C, Badano LP, Bucciarelli-Ducci C, Cardim N, Gaemperli O, Galderisi M, Habib G, Knuuti J, Lancellotti P, McKenna W, Neglia D, Popescu BA, Edvardsen T; EACVI Scientific Documents Committee, EACVI Board members and external reviewers. Collaborators: Delgado V, Cosyns B, Donal E, Lombardi M, Muraru D, Kauffmann P, Jurcut R, Klein JB, Sade LE; Comprehensive multi-modality imaging approach in arrhythmogenic cardiomyopathy-an expert consensus document of the European Association of Cardiovascular Imaging. *Eur Heart J Cardiovasc Imaging*. 2017 Mar 1;18(3):237-253. doi: 10.1093/ehjci/jew229. Review. PubMed PMID: 28069601.
 180. Sokalskis V, Muraru D, Fraccaro C, Napodano M, D'Onofrio A, Tarantini G, Badano LP. Echocardiographic follow-up after transcatheter aortic valve replacement. *Echocardiography*. 2017 Feb;34(2):267-278. doi: 10.1111/echo.13443. Epub 2017 Jan 3. Review. PubMed PMID: 28052455.
 181. Muraru D, Veronesi F, Maddalozzo A, Dequal D, Frajhof L, Rabichowsky A, Iliceto S, Badano LP. Three-dimensional printing of normal and pathologic tricuspid valves from transthoracic three-dimensional echocardiography data sets. *Eur Heart J Cardiovasc Imaging*. 2017 Jul 1;18(7):802-808. doi: 10.1093/ehjci/jew215. PubMed PMID: 28025262.

182. Siciliano M, Migliore F, Badano LP, Bertaglia E, Pedrizzetti G, Cavedon S, Zorzi A, Corrado D, Iliceto S, Muraru D. Cardiac Resynchronization Therapy by Multipoint Pacing Improves Response of Left Ventricular Mechanics and Fluid Dynamics: a Three-Dimensional and Particle Image Velocimetry Echo Study. *Europace* 2017 Nov 1;19(11):1833-1840. doi: 10.1093/europace/euw331. PubMed PMID:28025231.
183. Miglioranza MH, Badano LP, Mihăilă S, Peluso D, Cucchini U, Soriani N, Iliceto S, Muraru D. Physiologic determinants of left atrial longitudinal strain: a two-dimensional speckle-tracking and three-dimensional echocardiographic study in healthy volunteers. *J Am Soc Echocardiogr* 2016 Nov;29(11):1023-1034.e3. doi:10.1016/j.echo.2016.07.011. Epub 2016 Sep 13. PubMed PMID: 27638238
184. Muraru D, Bidviene J, Cavalli G, Cavaliere A, Badano LP. Tricuspid regurgitation in a patient with ascending aorta aneurysm. *Eur Heart J Cardiovasc Imaging*. 2016 Dec;17(12):1435. Epub 2016 Sep 1. PubMed PMID:27585713
185. Edvardsen T, Cardim N, Cosyns B, Delgado V, Donal E, Dulgheru R, Galderisi M, Haugaa KH, Kaufmann PA, Lancellotti P, Lombardi M, Muraru D, Plein S, Maurer G, Popescu BA, Habib G; EACVI Scientific Documents Committee. Criteria for recommendation and expert consensus papers: from the European Association of Cardiovascular Imaging Scientific Documents Committee. *Eur Heart J Cardiovasc Imaging*. 2016 Aug 3. pii: jew157. PubMed PMID: 27491437
186. Muraru D, Surkova E, Badano LP. Revisit of functional tricuspid regurgitation; Current trends in the diagnosis and management. *Korean Circulation Journal* 2016; Jul;46(4):443-55. PubMed PMID:27482252
187. Surkova E, Muraru D, Aruta P, Romeo G, Bidviene J, Cherata D, Badano LP. Current Clinical Applications of Three-Dimensional Echocardiography: When the Technique Makes the Difference. *Curr Cardiol Rep*. 2016 Nov;18(11):109. doi:10.1007/s11886-016-0787-9. Review. PubMed PMID: 27628295.
188. Badano LP, Miglioranza MH, Mihaila S, Peluso D, Xhaxho J, Marra MP, Cucchini U, Soriani N, Iliceto S, Muraru D. Left atrial volumes and function by three-dimensional echocardiography: reference values, accuracy, reproducibility and comparison with two-dimensional echocardiographic measurements. *Circ Cardiovasc Imaging* 2016 Jul;9(7).pii: e004229. doi: 10.1161/CIRCIMAGING.115.004229. PubMed PMID: 27412658
189. Zamorano J, Goncalves A, Lancellotti P, Andersen KA, Gonzalez-Gomez A, Monaghan M, Brochet E, Wunderlich N, Gafoor S, Gillam LD, La Canna G. EACVI reviewers: Cosyns B, Delgado V, Donal E, Filardi PP, Galderisi M, Garbi M, Habib G, Hagendorff A, Haugaa KH, Muraru D, Edvardsen T. The use of imaging in new transcatheter interventions: an EACVI review paper. *Eur Heart J Cardiovasc Imaging*. 2016 Aug;17(8):835-835. doi: 10.1093/ehjci/jew043. PubMed PMID: 27311822
190. Badano LP, Muraru D. Subclinical right ventricular dysfunction by strain analysis: refining the targets of echocardiographic imaging in systemic sclerosis. *Circ Cardiovasc Img* 2016 Jun;9(6). pii: e005009. doi: 10.1161/CIRCIMAGING.116.005009. PubMed PMID: 27266600
191. Surkova E, Muraru D, Badano LP. The use of multimodality cardiovascular imaging to assess right ventricular size and function. *Int J Cardiol* 2016 Jul 1;214:54-69. doi: 10.1016/j.ijcard.2016.03.074. PubMed PMID: 27057977
192. Donal E, Lip GY, Galderisi M, Goette A, Shah D, Marwan M, Lederlin M, Mondillo S, Edvardsen T, Sitges M, Grapsa J, Garbi M, Senior R, Gimelli A, Potpara TS, Van Gelder IC, Gorenek B, Mabo P, Lancellotti P, Kuck KH, Popescu BA, Hindricks G, Habib G, Cosyns B, Delgado V, Haugaa KH, Muraru D, Nieman K, Cohen A. EACVI/EHRA Expert Consensus Document on the role of multi-modality imaging for the evaluation of patients with atrial fibrillation. *Eur Heart J Cardiovasc Imaging*. 2016 Apr;17(4):355-83. doi: 10.1093/ehjci/jev354. PubMed PMID: 26864186
193. Muraru D, Onciul S, Peluso D, Soriani N, Cucchini U, Aruta P, Romeo G, Cavalli G, Iliceto S, Badano LP. Sex- and Method-Specific Reference Values for Right Ventricular Strain by Two-Dimensional Speckle-Tracking Echocardiography. *Circ Cardiovasc Img* 2016;Feb 9(2): e003866. doi: 10.1161/CIRCIMAGING.115.003866. PubMed PMID:26860970
194. Mihaila S, Muraru D, Miglioranza MH, Piasentini E, Aruta P, Cucchini U, Iliceto S, Vinereanu D, Badano LP. Relationship between mitral annulus function and mitral regurgitation severity and left atrial remodeling in patients with primary mitral regurgitation. *Eur Heart J Cardiovasc Imaging* 2016 Aug;17(8):918-29. doi: 10.1093/ehjci/jev301. PubMed PMID:26758410
195. Grapsa J, Cameli M, Granier C, Muraru D, Ernande L, Popescu BA, Lancellotti P, Habib G. Young community of EACVI: the transition from EACVI Club 35 to Heart Imagers of Tomorrow: a promising yet challenging step. *Eur Heart J Cardiovasc Imaging*. 2016 Feb;17(2):117-9. doi: 10.1093/ehjci/jev316. Epub 2015 Dec 20. PubMed PMID:26690950
196. Muraru D, Napodano M, Beltrame V, Badano LP. Left Ventricular Pseudoaneurysm after Transapical Aortic Valve-in-Valve Implantation: Use of Transthoracic 3D Echocardiography for Guiding Therapeutic

- Approach. *Eur Heart J* 2016 Apr 14;37(15):1255. doi: 10.1093/eurheartj/ehv382 PubMed PMID: 26286260
197. Muraru D, Spadotto V, Cecchetto A, Romeo G, Aruta P, Ermacora D, Jenei C, Cucchini U, Iliceto S, Badano LP. New speckle-tracking algorithm for right ventricular volume analysis from three-dimensional echocardiographic data sets: validation with cardiac magnetic resonance and comparison with the previous analysis tool. *Eur Heart J Cardiovasc Imaging* 2016 Nov;17(11):1279-1289. Epub 2015 Dec 8. PubMed PMID: 26647080.
 198. Knackstedt C, Bekkers S, Schummers G, Schreckenber M, Muraru D, Badano LP, Franke A, Bavishi C, Omar A, Sengupta PP. Fully automated versus standard tracking of left ventricular ejection fraction and longitudinal strain: the (FAST-EFs) multi-center study. *J Am Coll Cardiol* 2015;66(13):1456-66. doi: 10.1016/j.jacc.2015.07.052. PubMed PMID:26403342
 199. Surkova E, Muraru D, Grapsa E, Donal E, Lancellotti P, Habib G, Badano LP. Eight years of the EACVI's Grant programme: Existing developments, impact and steps forward. *Eur Heart J Cardiovasc Imaging* 2015 Nov;16(11):1178-9. doi: 10.1093/ehjci/jev213. PubMed PMID 26351401
 200. Badano LP, Miglioranza MH, Edvardsen T, Siciliano Colafranceschi A, Muraru D, Bacal F, Nieman K, Zoppellaro G, Marcondes Braga FG, Binder T, Habib G, Lancellotti P. European Association of Cardiovascular Imaging/Cardiovascular Imaging Department of the Brazilian Society of Cardiology recommendations for the use of cardiac imaging to assess and follow patients after heart transplantation. *Eur Heart J Cardiovasc Imaging* 2015; Jul 2. pii: jev139; doi 10.1093/ehjci/jev139; PubMed PMID: 26139361.
 201. Miglioranza MH, Muraru D, Mihaila S, Haertel JC, Iliceto S, Badano LP. Isolated anterior mitral valve leaflet cleft: 3D transthoracic echocardiography-guided surgical strategy. *Arq Bras Cardiol.* 2015;104(5):e49-52; doi 10.5935/abc.20140191; PubMed PMID: 26083781
 202. Enache R, Popescu BA, Piazza R, Muraru D, Călin A, Beladan CC, Roșca M, Nicolosi GL, Ginghină C. Left ventricular shape and mass impact torsional dynamics in asymptomatic patients with chronic aortic regurgitation and normal left ventricular ejection fraction. *Int J Cardiovasc Imaging* 2015; May 21. Doi 10.1007/s10554-015-0684-0; PubMed PMID: 25994762
 203. EchoNoRMAL (Echocardiographic Normal Ranges Meta-Analysis of the Left Heart) Collaboration; Ethnic-Specific Normative Reference Values for Echocardiographic LA and LV Size, LV Mass, and Systolic Function: The EchoNoRMAL Study. *JACC Cardiovasc Imaging.* 2015 Jun;8(6):656-65. doi: 10.1016/j.jcmg.2015.02.014. PubMed PMID: 25981507
 204. Ermacora D, Muraru D, Cecchetto A, Cucchini U, Badano LP. Transthoracic three-dimensional echocardiography visualization of functional anatomy of double-orifice mitral valve. *Eur Heart J Cardiovasc Imaging* 2015; pii: jev098; doi 10.1093/ehjci/jev098; PubMed PMID: 25908794
 205. Lang RM, Badano LP, Mor-Avi V, Afalalo J, Armstrong A, Ernande L, Flachskampf FA, Foster E, Goldstein SA, Kuznetsova T, Lancellotti P, Muraru D, Picard MH, Rietzschel ER, Rudski L, Spencer KT, Tsang W, Voigt JU. Recommendations for cardiac chamber quantification by echocardiography in adults: an update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging. *Eur Heart J Cardiovasc Imaging.* 2015;16(3):233-70. doi: 10.1093/ehjci/jev014. PubMed PMID: 25712077.
 206. Cardim N, Galderisi M, Edvardsen T, Plein S, Popescu BA, D'Andrea A, Bruder O, Cosyns B, Davin L, Donal E, Freitas A, Habib G, Kitsiou A, Petersen SE, Schroeder S, Lancellotti P, Camici P, Dulgheru R, Hagendorff A, Lombardi M, Muraru D, Sicari R. Role of multimodality cardiac imaging in the management of patients with hypertrophic cardiomyopathy: an expert consensus of the European Association of Cardiovascular Imaging Endorsed by the Saudi Heart Association. *Eur Heart J Cardiovasc Imaging.* 2015;16(3):280. doi: 10.1093/ehjci/jev291. PubMed PMID: 25650407.
 207. Lang RM, Badano LP, Mor-Avi V, Afalalo J, Armstrong A, Ernande L, Flachskampf FA, Foster E, Goldstein SA, Kuznetsova T, Lancellotti P, Muraru D, Picard MH, Rietzschel ER, Rudski L, Spencer KT, Tsang W, Voigt JU. Recommendations for cardiac chamber quantification by echocardiography in adults: an update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging. *J Am Soc Echocardiogr.* 2015 Jan;28(1):1-39.e14. doi: 10.1016/j.echo.2014.10.003. PubMed PMID: 25559473.
 208. Mihăilă S, Muraru D, Miglioranza MH, Piasentini E, Peluso D, Cucchini U, Iliceto S, Vinereanu D, Badano LP. Normal mitral annulus dynamics and its relationship with left ventricular and left atrial function. *Int J Cardiovasc Imaging* 2015;31(2):279-90. doi: 10.1007/s10554-014-0547-0. PubMed PMID: 25319092
 209. Miglioranza MH, Mihăilă S, Muraru D, Cucchini U, Iliceto S, Badano LP. Variability of Tricuspid Annulus Diameter Measurement in Healthy Volunteers. *JACC Cardiovasc Imaging.* 2014 Nov 12. pii: S1936-878X(14)00832-8. doi: 10.1016/j.jcmg.2014.09.010. PubMed PMID: 25459303.
 210. Miglioranza MH, Mihăilă S, Muraru D, Cucchini U, Iliceto S, Badano LP. Dynamic changes in tricuspid annular diameter measurement in relation to the echocardiographic view and timing during the cardiac

- cycle. *J Am Soc Echocardiogr*. 2015 Feb;28(2):226-35. doi 10.1016/j.echo.2014.09.017. PubMed PMID: 25450013
211. Muraru D, Cucchini U, Padayattil-Josè S, Mihăilă S, Miglioranza MH, Cecchetto A, Naso P, Peluso P, Iliceto S, Badano LP. Left ventricular myocardial strain by three-dimensional speckle-tracking echocardiography in healthy subjects: reference values and analysis of their physiologic and technical determinants. *J Am Soc Echocardiogr* 2014; 2014 Aug;27(8):858-871.e1. doi: 10.1016/j.echo.2014.05.010. PubMed PMID: 24975996
 212. Kocabay G, Muraru D, Peluso D, Cucchini U, Mihăilă S, Padayattil-Josè S, Denas G, Iliceto S, Vinereanu D, Badano LP. Normal left ventricular mechanics by two-dimensional speckle-tracking echocardiography: reference values in healthy adults. *Rev Esp Cardiol* 2014;67(8):651-8. doi: 10.1016/j.rec.2013.12.009. PubMed PMID: 25037544
 213. Mihăilă S, Muraru D, Piasentini E, Miglioranza MH, Peluso D, Cucchini U, Iliceto S, Vinereanu D, Badano LP. Quantitative analysis of the mitral annulus geometry and function in healthy volunteers using transthoracic three-dimensional echocardiography. *J Am Soc Echocardiogr* 2014;27(8):846-57. doi: 10.1016/j.echo.2014.04.017. PubMed PMID: 24891260
 214. Agoston G, Gargani L, Miglioranza MH, Caputo M, Badano LP, Moreo A, Muraru D, Mondillo S, Pignone AM, Cerinic MM, Sicari R, Picano E, Varga A. Left atrial dysfunction detected by speckle tracking in patients with systemic sclerosis. *Cardiovascular Ultrasound* 2014;12:30. doi: 10.1186/1476-7120-12-30. PubMed PMID 25090937
 215. Ermacora D, Muraru D, Pontarollo S, Casablanca S, Livi U, Iliceto S, Badano LP. Role of three-dimensional echocardiography in structural complications after acute myocardial infarction. *Echocardiography* 2014;31(6):E169-73. doi: 10.1111/echo.12585. PubMed PMID: 24661074
 216. Muraru D, Maffessanti F, Kocabay G, Peluso D, Bianco LD, Piasentini E, Jose SP, Iliceto S, Badano LP. Ascending aorta diameters measured by echocardiography using both leading edge-to-leading edge and inner edge-to-inner edge conventions in healthy volunteers. *Eur Heart J Cardiovasc Imaging* 2014;15(4):415-22. doi: 10.1093/ehjci/jet173. PubMed PMID: 24096712
 217. Muraru D, Badano LP. Quantitative analysis of the left ventricle by echocardiography in daily practice: as simple as possible, but not simpler. *J Am Soc Echocardiogr* 2014; 27(10):1025-8. doi: 10.1016/j.echo.2014.08.007. PubMed PMID: 25249509
 218. Muraru D, Badano LP, Peluso D, Dal Bianco L, Casablanca S, Kocabay G, Zoppellaro G, Iliceto S. Comprehensive analysis of left ventricular geometry and function by three-dimensional echocardiography in healthy adults. *J Am Soc Echocardiogr* 2013; 26(6):618-28. doi: 10.1016/j.echo.2013.03.014. Epub 2013 Apr 20. PubMed PMID: 23611056
 219. Badano LP, Cucchini U, Muraru D, Al Nono O, Sarais C, Iliceto S. Use of three-dimensional speckle tracking to assess left ventricular myocardial function: intervendor consistency and reproducibility of strain measurements. *Eur Heart J Cardiovasc Imaging* 2013;14(3):285-93. doi: 10.1093/ehjci/jes184. PubMed PMID: 22968525
 220. Maffessanti F, Muraru D, Esposito R, Gripari P, Ermacora D, Santoro C, Tamborini G, Galderisi M, Pepi M, Badano LP. Age-, body size-, and sex-specific reference values for right ventricular volumes and ejection fraction by three-dimensional echocardiography: a multicenter echocardiographic study in 507 healthy volunteers. *Circ Cardiovasc Imaging* 2013;6(5):700-10. doi: 10.1161/CIRCIMAGING.113.000706. PubMed PMID: 23811752
 221. Lancellotti P, Tribouilloy C, Hagendorff A, Popescu BA, Edvardsen T, Pierard LA, Badano L, Zamorano JL; Scientific Document Committee of the European Association of Cardiovascular Imaging. Collaborators: Edvardsen T, Nieman K, Muraru D, Bruder O, Cosyns B, Donal E, Dulgheru R, Galderisi M, Lancellotti P, Sicari R. Recommendations for the echocardiographic assessment of native valvular regurgitation: an executive summary from the European Association of Cardiovascular Imaging. *Eur Heart J Cardiovasc Imaging* 2013; 14(7):611-44. doi: 10.1093/ehjci/jet105. PubMed PMID: 23733442
 222. Badano LP, Muraru D. The unbearable futility of deriving the left atrial size from a single-linear dimension. *Eur Heart J Cardiovasc Imaging* 2013;14(7):711-3. doi: 10.1093/ehjci/jet033.
 223. Badano LP, Nour A, Muraru D. Left atrium as a dynamic three-dimensional entity: implications for echocardiographic assessment. *Rev Esp Cardiol* 2013;66(1):1-4. doi: 10.1016/j.recesp.2012.07.020. PubMed PMID: 23092828
 224. Peluso D, Badano LP, Muraru D, Dal Bianco L, Cucchini U, Kocabay G, Kovàcs A, Casablanca S, Iliceto S. Right atrial size and function assessed with three-dimensional and speckle-tracking echocardiography in 200 healthy volunteers. *Eur Heart J Cardiovasc Imaging* 2013 Nov;14(11):1106-14. doi: 10.1093/ehjci/jet024. PubMed PMID: 23423966
 225. Gargani L, Pignone A, Agoston G, Moreo A, Capati E, Badano LP, Doveri M, Bazzichi L, Costantino MF, Pavellini A, Pieri F, Musca F, Muraru D, Epis O, Bruschi E, De Chiara B, Perfetto F, Mori F, Parodi O, Sicari R, Bombardieri S, Varga A, Cerinic MM, Bossone E, Picano E. Clinical and echocardiographic correlations

- of exercise-induced pulmonary hypertension in systemic sclerosis: a multicenter study. *Am Heart J* 2013;165(2):200-7. doi: 10.1016/j.ahj.2012.10.020. Epub 2012 Nov 28. PubMed PMID: 23351823
226. Badano LP, Muraru D, Enriquez-Sarano M. Assessment of functional tricuspid regurgitation. *Eur Heart J* 2013;34(25):1875-85. doi: 10.1093/eurheartj/ehs474. PubMed PMID: 23303656
 227. Muraru D, Cattarina M, Boccalini F, Dal Lin C, Peluso D, Zoppellaro G, Bellu R, Sarais C, Iliceto S, Badano LP. Mitral valve anatomy and function - new insights from three-dimensional echocardiography. *J Cardiovasc Med (Hagerstown)* 2013 Feb;14(2):91-9. doi: 10.2459/JCM.0b013e328356a577. PubMed PMID: 23275024
 228. Kocabay G, Peluso D, Muraru D, Iliceto S, Badano LP. Diastolic mitral regurgitation in 2:1 atrioventricular block: insight of the diastolic pressure. *Echocardiography* 2013; 30(2):E51-2. doi: 10.1111/echo.12047. PubMed PMID: 23134364
 229. Muraru D, Badano LP, Ermacora D, Piccoli G, Iliceto S. Sources of variation and bias in assessing left ventricular volumes and dyssynchrony using three-dimensional echocardiography. *Int J Cardiovasc Imaging*. 2012 Aug;28(6):1357-68. doi: 10.1007/s10554-011-9985-0. PubMed PMID: 22120046
 230. Badano LP, Boccalini F, Muraru D, Bianco LD, Peluso D, Bellu R, Zoppellaro G, Iliceto S. Current clinical applications of transthoracic three-dimensional echocardiography. *J Cardiovasc Ultrasound* 2012;20(1):1-22. doi: 10.4250/jcu.2012.20.1.1. PubMed PMID: 22509433
 231. Muraru D, Badano LP, Vannan M, Iliceto S. Assessment of aortic valve complex by three-dimensional echocardiography: a framework for its effective application in clinical practice. *Eur Heart J Cardiovasc Imaging* 2012;13(7):541-55; doi: 10.1093/ehjci/jes075. PMID: 22518051
 232. Muraru D, Tuveri MF, Marra MP, Badano LP, Iliceto S. Carcinoid tricuspid valve disease: incremental value of three-dimensional echocardiography. *Eur Heart J Cardiovasc Imaging*. 2012 Apr;13(4):329. 2012;13(4):329. doi: 10.1093/ejehoccard/jer258. PubMed PMID: 22113204
 233. Badano LP, Muraru D. Towards an integrated echocardiographic assessment of valvular mechanics by three-dimensional volumetric imaging. *J Am Soc Echocardiogr* 2012; 25(5):532-4 doi: 10.1016/j.echo.2012.03.015. PubMed PMID: 22526053
 234. Kocabay G, Muraru D, Peluso D, Iliceto S, Badano LP. Three-Dimensional Transesophageal Echocardiography of Aortic Atherosclerosis. *Echocardiography*. 2012;29(10):E273-4. doi: 10.1111/j.1540-8175.2012.01815. PubMed PMID 22957900
 235. Gargani L, Muraru D, Badano LP, Lancellotti P, Sicari R; European Association of Echocardiography. European Association of Echocardiography: Research Grant Programme. *Eur Heart J Cardiovasc Imaging*. 2012;13(1):47-50; doi: 10.1093/ejehoccard/jer266. PubMed PMID 22130007
 236. Mondillo S, Galderisi M, Mele D, Cameli M, Lomoriello VS, Ballo PC, D'Andrea A, Muraru D, Losi A, Agricola E, D'Errico A, Buralli S, Nistri S, Badano LP. Speckle tracking echocardiography: a new technology to assess myocardial function. *J Ultrasound Med* 2011;30:71-83. PubMed PMID 21193707
 237. Muraru D, Badano LP, Sarais C, Soldà E, Iliceto S. Evaluation of the tricuspid valve morphology and function by transthoracic three-dimensional echocardiography. *Curr Cardiol Rep* 2011;13(3):242-9; 13(3):242-9. doi: 10.1007/s11886-011-0176-3. PubMed PMID: 21365261
 238. Badano LP, Muraru D, Onut R, Lestuzzi C, Toso F. Three-dimensional imaging of anomalous origin of the right coronary artery in a young athlete. *Eur Heart J Cardiovasc Img* 2011;12(6):481; doi: 10.1093/ejehoccard/jer047. PubMed PMID: 21546374
 239. Onut R, Badano LP, Muraru D, Toso F. A large penetrating atherosclerotic ulcer of the ascending aorta. *Eur Heart J Cardiovasc Img* 2011;12(6):481; 12(6):479. doi: 10.1093/ejehoccard/jer041. PubMed PMID: 21508000
 240. Popescu BA, Muraru D, Beladan CC, Lăcău IS, Ginghină C. Images in cardiology. Atrioventricular block in the elderly: does echocardiography hold the key? *J Am Coll Cardiol*. 2011;57(2):219. doi: 10.1016/j.jacc.2010.05.062. PMID: 21211694
 241. Galderisi M, Nistri S, Mondillo S, Losi MA, Innelli P, Mele D, Muraru D, D'Andrea A, Ballo P, Sgalambro A, Esposito R, Marti G, Santoro A, Agricola E, Badano LP, Marchioli R, Filardi PP, Mercuro G and Marino PN on behalf of the Working Group of Echocardiography, Italian Society of Cardiology. Methodological Approach for the Assessment of Ultrasound Reproducibility of Cardiac Structure and Function: A proposal of the Study Group of Echocardiography of The Italian Society of Cardiology (Ultra Cardia SIC) Part I. *Cardiovascular Ultrasound* 2011;9:26. doi: 10.1186/1476-7120-9-26. PubMed PMID: 21943283
 242. Rosca M, Popescu BA, Beladan CC, Calin A, Muraru D, Popa EC, Lancellotti P, Enache R, Coman IM, Jurcut R, Ghionea M, Ginghina C. Left atrial dysfunction as a determinant of heart failure symptoms in hypertrophic cardiomyopathy. *J Am Soc Echocardiogr* 2010;23(10):1090-8; doi: 10.1016/j.echo.2010.07.016. PubMed PMID: 20739145
 243. Muraru D, Cardillo M, Livi U, Badano LP. 3-dimensional transesophageal echocardiographic assessment of papillary muscle rupture complicating acute myocardial infarction. *J Am Coll Cardiol* 2010;56(23):e45; doi: 10.1016/j.jacc.2010.02.080. PubMed PMID: 21109111

244. Badano LP, Muraru D, Rigo F, Del Mestre L, Ermacora D, Gianfagna P, Proclemer A. High volume rate three-dimensional stress echocardiography to assess inducible myocardial ischemia: a feasibility study. *J Am Soc Echocardiogr* 2010;23(6):628-635; doi: 10.1016/j.echo.2010.03.020. PubMed PMID: 20434877
245. Badano LP, Ghingina C, Easaw J, Muraru D, Grillo MT, Lancelotti P, Pinamonti B, Coghlan G, Perazzolo-Marra M, Popescu BA. Right ventricle in pulmonary arterial hypertension. Hemodynamics, structural changes, imaging and proposal of a study protocol aimed to assess remodelling and treatment effects. *Eur J Echocardiogr* 2010;11(1):27-37; doi: 10.1093/ejechocard/jep152. PubMed PMID: 19815539
246. Muraru D, Badano LP, Piccoli G, Gianfagna P, Del Mestre L, Ermacora D, Proclemer A. Validation of a novel automated border detection algorithm for rapid and accurate quantitation of left ventricular volumes based on three-dimensional echocardiography. *Eur J Echocardiogr* 2010;11(4):359-68; doi: 10.1093/ejechocard/jep217. PubMed PMID: 20042421
247. Muraru D, Badano LP, Del Mestre L, Gianfagna P, Livi U. Real-time threedimensional echocardiography in the postoperative follow-up of type-A aortic dissection - a case report. *J Am Soc Echocardiogr* 2010;23(6):682.e1-4; doi: 10.1016/j.echo.2009.10.007. PubMed PMID:19962274
248. Popescu BA, Calin A, Beladan CC, Muraru D, Rosca M, Deleanu D, Lancellotti P, Antonini-Canterin F, Nicolosi GL, Ghingina C. Left ventricular torsional dynamics in aortic stenosis: relationship between left ventricular untwisting and filling pressures. A two-dimensional speckle tracking study. *Eur J Echocardiogr* 2010;11(5):406-13; doi: 10.1093/ejechocard/jep224. Epub 2010 Jan 6. PubMed PMID: 20053657
249. Esposito R, Badano LP, Muraru D, Agricola E, Mele D, Sciomer S, Nistri S, Galderisi M, Mondillo S, per il Gruppo di Studio di Ecocardiografia della Società Italiana di Cardiologia. Valutazione della morfologia e della funzione della valvola tricuspide con ecocardiografia transtoracica tridimensionale real-time. *G Ital Cardiol* 2010; 11(7-8);549-557. PubMed PMID: 21033331
250. Crăciunescu I, Serban M, Iancu M, Revnic C, Muraru D, Alexandru D, Rogoz D, Popescu BA, Ghingina C. Changes in plasma levels of MMP-9, MMP-7 and their inhibitors in patients with coronary artery disease. *Rom J Intern Med* 2010;48(2):141-9. PubMed PMID: 21428178
251. Badano LP, Muraru D. In patients with asymptomatic aortic stenosis, a low incidence of perioperative mortality does not represent the only criterion driving the cautious use of medical therapy. *G Ital Cardiol (Rome)*. 2010 May;11(5):426-31; discussion 431. PubMed PMID: 20860164
252. Popescu BA, Beladan CC, Calin A, Muraru D, Deleanu D, Rosca M, Ghingina C. Left ventricular remodeling and torsional dynamics in dilated cardiomyopathy: reversed apical rotation as a marker of disease severity. *Eur J Heart Fail* 2009; 11:945-951; doi: 10.1093/eurjhf/hfp124. PubMed PMID: 19789397
253. Ghingina C, Muraru D, Vladaia A, Jurcut R, Popescu BA, Calin A, Giusca S. Doppler flow patterns in the evaluation of pulmonary hypertension. *Rom J Intern Med* 2009; 47 (2):109-21; PubMed PMID: 20067161
254. Ghingina C, Muraru D, Chreih R, Popescu BA, Coman IM, Zarma L, Deleanu D. Myocardial infarction in young patients. *Rom J Intern Med* 2006; 44 (4):365-376. PubMed PMID: 18386613
255. Muraru D, Boccalini F, Cattarina M, Peluso D, Dal Bianco L, Zoppellaro G, Segafredo B, Nour A, Sarais C, Badano LP. Quantitation of cardiac chamber geometry and function using transthoracic three-dimensional echocardiography. *J Cardiovasc Echography* 2012;20(1);1-22. PMID: PMC3324722

Scientific papers in peer-review journals not indexed on PubMed/PMC

256. Cherata DA, Badano LP, Carstea D, Muraru D. Role of new echocardiographic techniques in the detection of cancer treatment-related cardiac dysfunction. Current status and further perspectives. *Rom Cardiol* 2016, Vol. 26 Issue 4, 411-422.
257. Galderisi M, Cardim N, D'Andrea A, Bruder O, Cosyns B, Davin L, Donal E, Edvardsen T, Freitas A, Habib G, Kitsiou A, Plein S, Petersen SE, Popescu BA, Schroeder S, Burgstahler C, Lancellotti P. Document Reviewers: Sicari R, Muraru D, Lombardi M, Dulgheru R, La Gerche A. The multi-modality cardiac imaging approach to the athlete's heart: an expert consensus of the European Association of Cardiovascular Imaging. *Eur Heart J Cardiovasc Imaging* 2015; 16(4):353; doi:10.1093/ehjci/jeu323
258. Peluso D, Tona F, Muraru D, Romeo G, Cucchini U, Marra MP, Iliceto S, Badano LP. Right ventricular geometry and function in pulmonary hypertension: non-invasive evaluation. *Diseases* 2014; 2(3), 274-295;doi 10.3390/diseases2030274.
259. Popescu BA, Muraru D, Ghingina C. Differential atrial stunning after spontaneous conversion of atrial flutter to sinus rhythm. *Rom J Cardiol* 2008; Vol XXIII, Nr 1:29-32. ISSN: 1583-2996. Cod CNCIS 379 (B+)
260. Popescu BA, Ciudin R, Muraru D, Ghingina C. A rare cause of pulmonary embolism. *Rom J Cardiol* 2007; Vol. XXII, Nr. 3:222-223. ISSN: 1583-2996. Cod CNCIS 379 (B+)

Scientific papers not peer-review

1. Muraru D, Badano LP. 4D Strain - A Clinical Viewpoint. GE White Paper 2014
<http://www.vividechoclub.net/emea/whitepapers>

Books

1. Badano LP, Lang RM, Muraru D. "Textbook of Three-Dimensional Echocardiography: 2nd Edition". Springer 2019 (*English*)
2. Badano LP, Galderisi M, Muraru D, Mondillo S. "Speckle Tracking Echocardiography", MB&Care, Livorno 2012; 120 pg; ISBN 9788890238420 (*Italian*)
3. Badano LP, Galderisi M, Muraru D, Mondillo S. "Ecocardiografia multi planare e tridimensionale real-time", MB&Care, Livorno 2011; 104 pg; ISBN 9788890238413 (*Italian*)

Chapters

1. Badano L, Pardo A, Muraru D, Zamorano JL. Acquired Tricuspid Valve Diseases. In Fuster and Hurst's the Heart 15th Edition. McGraw Hill 2022
2. Miglioranza MH, Badano LP, Muraru D. Ecocardiografia tridimensional para avaliacao da valva tricuspide. In: Hotta VT, Vieira MLC. Tecnicas avancadas em ecocardiografia. 2nd edition, Editora Guanabara Koogan Ltd, Rio de Janeiro, 2021 ISBN: 978-85-9516-7293
3. Badano LP, Muraru D. Valvular prostheses. In: Zamorano JL, Bax, J, Knuuti J, Sechtem U, Lancellotti P, Popescu B, Pinto F. The ESC textbook of cardiovascular imaging. 3rd edition, Oxford University Press, Oxford, UK, 2021 ISBN: 9780198849353
4. Badano LP, Muraru D. Tricuspid regurgitation. In: Shiota T. 3D Echocardiography. 3rd edition. CRC Press, Taylor & Francis Group, Los Angeles, 2021 ISBN: 978-0-367-25288-5
5. Badano LP, Muraru D. Left ventricle. In: Shiota T. 3D Echocardiography. 3rd edition. CRC Press, Taylor & Francis Group, Los Angeles, 2021 ISBN: 978-0-367-25288-5
6. Rehfeldt KH, Badano LP, Muraru D, Mark JB. Assessment of the Tricuspid and Pulmonic Valves. In: Skubas, Nicoara, Savage. Comprehensive Textbook of Intraoperative Transesophageal Echocardiography 3rd Ed. Wolters Kluwer 2021
7. Muraru D. Tricuspid regurgitation. In Shiota T. 3D Echocardiography 3rd Ed. CRC Press 2020
8. Badano LP, Muraru D. Evaluation of Right Ventricular Function and Pulmonary Hypertension. In Marwick T, Abraham TP. ASE's Comprehensive Strain Imaging. Saunders Elsevier, St Louis, 2020
9. Badano LP, Muraru D. Three-dimensional echocardiography. In: Lang RM, Goldstein SA, Kronzon I, Khandheria BK, Mor-Avi V. ASE's comprehensive echocardiography, 3rd edition. Saunders Elsevier, St Louis, 2020 ISBN 978-0-323-69830-6
10. Muraru D, Surkova E. Heart Valve Disease in Pregnancy. In: Zamorano JL, Lancellotti P. Heart Valve Disease - State of the Art. Springer International Publishing AG 2019
11. Muraru D, Sade EL. Tricuspid and pulmonary valve disease. In: Zamorano JL, Bax JJ, Knuuti J, Sechtem U, Lancellotti P, Popescu B, Pinto F. The ESC Textbook of Cardiovascular Imaging 3rd Edition. Oxford University Press 2019
12. Muraru D, Badano LP. Technical Principles of Three-Dimensional Echocardiography. In: Badano LP, Lang RM, Muraru D. Textbook of three-dimensional echocardiography. 2nd edition. Springer Nature Switzerland 2019
13. Muraru D, Badano LP. How to Implement Three-Dimensional Echocardiography in the Routine of the Echocardiography Laboratory. In: Badano LP, Lang RM, Muraru D. Textbook of three-dimensional echocardiography. 2nd edition. Springer Nature Switzerland 2019
14. Muraru D, Mahmoud H. Mitral valve congenital abnormalities and stenosis. In: Badano LP, Lang RM, Muraru D. Textbook of three-dimensional echocardiography. 2nd edition. Springer Nature Switzerland 2019
15. Muraru D, de Alcantara ML, Surkova E, Elnagar B. Assessment of the Right ventricle. In: Badano LP, Lang RM, Muraru D. Textbook of three-dimensional echocardiography. 2nd edition. Springer Nature Switzerland 2019
16. Addetia K, Muraru D, Guta AC, Badano LP, Lang RM. The Normal Tricuspid Valve. In: Badano LP, Lang RM, Muraru D. Textbook of three-dimensional echocardiography. 2nd edition. Springer Nature Switzerland 2019
17. Addetia K, Muraru D, Lang RM, Badano LP. Organic Tricuspid Regurgitation. In: Badano LP, Lang RM, Muraru D. Textbook of three-dimensional echocardiography. 2nd edition. Springer Nature Switzerland 2019
18. Song JK, Muraru D, Guta AC, Badano LP. Functional Tricuspid Regurgitation. In: Badano LP, Lang RM, Muraru D. Textbook of three-dimensional echocardiography. 2nd edition. Springer Nature Switzerland

2019

19. Faletra FF, Murzilli R, Leo LA, Muraru D. The Role of 3D TEE in the Evaluation of Cardiac Masses. In: Badano LP, Lang RM, Muraru D. Textbook of three-dimensional echocardiography. 2nd edition. Springer Nature Switzerland 2019
20. Goncalves A, Muraru D. Principles of 3-Dimensional Ultrasound. In Scott Solomon, Justina Wu, and Linda Gillam Eds.: Essential Echocardiography: A Companion to Braunwald's Heart Disease 2019, Elsevier Philadelphia. ISBN 978-0323392266
21. Muraru D, Palermo C, Aruta P, Cucchini U, Badano LP. Ecocardiografia. Iliceto S, Razzolini R. Manuale di cardiologia. PICCIN editore, Padova, Italia, 2019
22. Tenaglia RM, Muraru D, Badano LP. Stenosi della valvola tricuspide. Iliceto S, Razzolini R. Manuale di cardiologia. PICCIN editore, Padova, Italia, 2019
23. Prevedello F, Muraru D, Badano LP. Insufficienza della valvola tricuspide. In: Iliceto S, Razzolini R. Manuale di cardiologia. PICCIN editore, Padova, Italia, 2019
24. Muraru D, Badano LP. Tricuspid annulus measurements – dynamic changes in health and disease. In Soliman O, Ten Cate FJ. A practical manual of tricuspid valve disease. Springer International Publishing AG 2018; 2015-221. ISBN 978-3-319-58228-3
25. Badano LP, Muraru D. Functional anatomy of the heart. In Luscher TF, Camm AJ, Maurer G, Serruys PW. The ESC Textbook of Cardiovascular Medicine 3rd edition, Oxford University Press, Oxford, UK, 2017 ISBN: 9780199566990
26. Badano LP, Muraru D. The added value of three-dimensional echocardiography to assess the etiology of tricuspid regurgitation and address its management. In Lancellotti P, García Fernández MA. Atlas de Imagen Cardiaca, CTO Editorial, Madrid, 2017 ISBN 978-8416527694
27. Muraru D. Tricuspid stenosis. In Lancellotti P, García Fernández MA. Atlas de Imagen Cardiaca, CTO Editorial, Madrid, 2017 ISBN 978-8416527694
28. Muraru D, Badano LP. Physical and technical aspects and overview of 3D echocardiography. In Casas Rojo E, Fernandez-Golfin C, Zamorano JL. Manual of 3D Echocardiography, Springer International Publishing, London, 2017 ISBN 978-3-319-50335-6
29. Badano LP, Muraru D. Severe tricuspid regurgitation in a patient with diabetes and liver insufficiency. In Lancellotti P, García Fernández MA. Atlas de Imagen Cardiaca, CTO Editorial, Madrid, 2017 ISBN 978-8416527694
30. Muraru D, Bidviene J, Cavalli G, Veronesi F, Surkova E, Cavaliere A, Aruta P, Romeo G, Badano LP. An unusual case of functional tricuspid regurgitation in a patient with aortic root and ascending aorta aneurysm. In Lancellotti P, García Fernández MA. Atlas de Imagen Cardiaca, CTO Editorial, Madrid, 2017 ISBN 978-8416527694
31. Badano LP, Muraru D. Funksionit sistolik te ventrikulit te majte (Left ventricular systolic function). In Qirko S. Ekokardiografia klinike (Clinical Echocardiography). Publishing House: Pegi, 2017 ISBN: 978 9928 175 908
32. Rodríguez-Zanella H, Muraru D, Badano LP. The Role of Novel Echocardiographic Techniques for Primary Prevention of Sudden Cardiac Death. In: Vranic I. Sudden cardiac death: predictors, prevalence and clinical perspectives. Nova Science Publishers, Inc: New York 2017. ISBN: 978-1-53612-006-6
33. Surkova E, Muraru D, Aruta P, Palermo C, Badano LP. Echocardiography. In: Khavandi A, Augustine D. Core Curriculum for the European Exam In General Cardiology. Oxford University Press, Oxford, UK, 2017
34. Surkova E, Muraru D, Aruta P, Palermo C, Badano LP. Echocardiography. In: Khavandi A, Augustine D. MCQs for the European Exam In General Cardiology. Oxford University Press, Oxford, UK, 2017
35. Badano LP, Muraru D. Evaluacion de la valvula tricuspide. Morfologia y funcion con ecocardiografia tridimensional transtoracica In Rondero R. Ecocardiografia tridimensional. Como entenderla, Como utilizarla. Como realizarla. Ediciones Journal S.A, Buenos Aires, 2016: 177-90
36. Badano LP, Muraru D. La ecocardiografia en la valoracion de la funcion sistolica del ventriculo izquierdo. In Garcia Fernandez MA. Cardio imagen en la insuficiencia cardiaca. CTO Editorial SL, Madrid, 2016 ISBN: 978-8416153909
37. Surkova E, Muraru D, Badano LP. The imaging of right ventricular dysfunction in heart failure. In Dorobantu M, Ruschitzka F, Metra M. Current approach to heart failure. Springer International Publishing Switzerland 2016: 63-93 DOI: 10.1007/978-3-319-45237-1_22 ISBN: 978-3-319-45237-1_4
38. Muraru D, Badano LP. Valvula tricuspide. In Citro R et al. Manuale di Ecocardiografia 3D SIEC. 2016
39. Muraru D, Anwar AM, Song JK. Tricuspid valve disease. In Lancellotti P et al. eds. EACVI Textbook of Echocardiography 2016 2nd edition.
40. Muraru D. Tricuspid regurgitation. In Lancellotti P, Cosyns B eds. The EACVI Echo Handbook 2015 ISBN 978-0-19-871362-3
41. Muraru D. Pulmonary regurgitation. In Lancellotti P, Cosyns B eds. The EACVI Echo Handbook 2015 ISBN 978-0-19-871362-3

42. Badano LP, Cucchini U, Muraru D, Iliceto S. Il laboratorio digitale di ecocardiografia. In Nicolosi GL, Antonini Canterin F, Pavan D, Piazza R "Manuale di ecocardiografia clinica" 2° edizione, Piccin Editore, Padova, 2015 (Italian)
43. Muraru D, Marra MP, Badano LP. Tricuspid Valve. In Niemann K, Gaemperli O, Lancellotti P, Plein S eds. *Advanced Cardiac Imaging 1st Edition 2015*: 526-633. Woodhead Publishing. ISBN 9781782422822
44. Muraru D, Marra MP, Badano LP. Pulmonary Valve. In Niemann K, Gaemperli O, Lancellotti P, Plein S Eds. *Advanced Cardiac Imaging 1st Edition 2015*: 533-540. Woodhead Publishing. ISBN 9781782422822
45. Badano LP, Muraru D. Three-dimensional echocardiography. In Lang RM, Goldstein SA, Kronzon I, Khandheria BK, Mor-Avi V eds. *ASE's Comprehensive Echocardiography 2nd Edition 2015*:3-11. Saunders Elsevier, Philadelphia, PA. ISBN 978-0-323-26011-4
46. Rudski LG, Muraru D, Afilalo J, Lester SJ. Assessment of RV systolic and diastolic function. In Lang RM, Goldstein SA, Kronzon I, Khandheria BK, Mor-Avi V eds. *ASE's Comprehensive Echocardiography 2nd Edition 2015*:151-8. Saunders Elsevier, Philadelphia, PA. ISBN 978-0-323-26011-4
47. Badano LP, Addetia K, Muraru D. Epidemiology, etiology and natural history of tricuspid regurgitation. In Lang RM, Goldstein SA, Kronzon I, Khandheria BK, Mor-Avi V eds. *ASE's Comprehensive Echocardiography 2nd Edition 2015*:511-7. Saunders Elsevier, Philadelphia, PA. ISBN 978-0-323-26011-4
48. Badano LP, Addetia K, Muraru D. Quantification of tricuspid regurgitation. In Lang RM, Goldstein SA, Kronzon I, Khandheria BK, Mor-Avi V eds. *ASE's Comprehensive Echocardiography 2nd Edition 2015*:517-23. Saunders Elsevier, Philadelphia, PA. ISBN 978-0-323-26011-4
49. Badano LP, Muraru D. Heart valve prostheses. In Zamorano JL, Bax JJ, Knuuti J, Lancellotti P, Badano LP, Sechtem U: *The ESC Textbook of Cardiovascular Imaging 2nd Edition*. Oxford University Press, Oxford. 2015: 185-205; doi 10.1093/med/9780198703341.003.0015; ISBN 9780198703341
50. Badano LP, Mihaila S, Muraru D, Vinereanu D, Iliceto S. Functional classification of secondary mitral valve regurgitation. In: Fattouch K, Lancellotti P, Angelini GD. *Secondary mitral valve regurgitation 2015*: 19-28. Springer-Verlag London; doi 10.1007/978-1-4471-6488-3; ISBN 978-1-4471-6487-6
51. Badano LP, Muraru D. Tricuspid valve morphology and function. In Shiota T: "3D Echocardiography, 2nd edition" CRC Press, Taylor and Francis Group, 2013:127-141; ISBN 978-1-84-184-994-2
52. Basso C, Muraru D, Badano L, Thiene G. Anatomy and pathology of right-sided atrio-ventricular and semilunar valves. In Rajamannan N. *Cardiac Valvular Medicine*. Springer-Verlag, London 2013: 211-222
53. Badano L, Muraru D. Natural history of tricuspid regurgitation and timing of intervention. in Rajamannan N. *Cardiac Valvular Medicine*. Springer-Verlag, London 2013: 223-248
54. Badano L, Muraru D, Iliceto S. Echocardiography of cardiac masses: from two- to three-dimensional imaging in Basso C, Valente M, Thiene G eds. *Cardiac tumor pathology*. Humana press, New York, 2013: 101-114
55. Badano L, Muraru D, Da Lin C, Iliceto S. Instrumentation and Data Acquisition in Shernan S, Lang R, Mor-Avi V and Shirali G. in *Atlas of Three-Dimensional Echocardiography*. Lippincott Williams & Wilkins 2012: 13-28
56. Muraru D, Enache R, Popescu BA, Ghingina C, Badano LP. The role of three-dimensional echocardiography in the assessment of valvular heart diseases. On behalf of Romanian Working Group of Echocardiography, in *Progrese in Cardiologie 2012 (Romanian)*
57. Muraru D, Sarais C. La valvola mitrale: La visione chirurgica fornita dall'ecocardiografia tridimensionale. in Badano LP, Galderisi M, Muraru D, Mondillo S. *Ecocardiografia multiplanare e tridimensionale real-time*. MB&Care Livorno 2011:59-70 (Italian)
58. Muraru D, Sarais C. La valvola aortica: Il valore aggiunto dell'ecocardiografia tridimensionale. in Badano LP, Galderisi M, Muraru D, Mondillo S. *Ecocardiografia multiplanare e tridimensionale real-time*. MB&Care Livorno 2011:71-84 (Italian)
59. Muraru D, Sarais C. Lo studio tridimensionale della struttura e della funzione del ventricolo destro: La riscoperta della camera dimenticata. in Badano LP, Galderisi M, Muraru D, Mondillo S. *Ecocardiografia multiplanare e tridimensionale real-time*. MB&Care Livorno 2011:41-50 (Italian)
60. Muraru D, Marra MP. Strain del ventricolo destro ed ipertensione arteriosa polmonare. in Badano LP, Galderisi M, Muraru D, Mondillo S. *Speckle Tracking Echocardiography*. MB&Care Livorno 2011:50-61 (Italian)
61. Muraru D. Doppler tissutale e metodologie derivate con tecnica Doppler nello studio della funzione miocardica. in Badano LP, Galderisi M, Muraru D, Mondillo S. *Speckle Tracking Echocardiography*. MB&Care Livorno 2011:5-18 (Italian)
62. Badano LP, Muraru D. Three-dimensional echocardiography in clinical practice. In Badano LP, Lang RM, Zamorano JL "Textbook of Real-Time Three-Dimensional Echocardiography" Springer-Verlag London Ltd, London, 2011:33-44

63. Muraru D, Badano LP. Assessment of tricuspid valve morphology and function. In Badano P, Lang RM, Zamorano JL "Textbook of Real-Time Three-Dimensional Echocardiography" Springer-Verlag London Ltd, London, 2011:173-182
64. Rigo F, Galderisi M, Muraru D, Badano LP. Role of three-dimensional echocardiography in drug trials. In Badano LP, Lang RM, Zamorano JL "Textbook of Real-Time Three-Dimensional Echocardiography" Springer-Verlag London Ltd, London, 2011:183-192
65. Muraru D, Popa E, Ghingina C. „Tipuri de examinare ecocardiografica Doppler”. In Popescu BA, Ghingina C „Ecocardiografia Doppler” Ed. Medicala, Bucharest 2011: 13-22. (Romanian)
66. Ghingina C, Muraru D, Popescu BA. „Hipertensiunea pulmonara si functia ventriculului drept”. In Popescu BA, Ghingina C „Ecocardiografia Doppler” Ed. Medicala, Bucharest 2011: 273-298. (Romanian)
67. Muraru D, Popescu BA, Ghingina C. „Ecocardiografia Doppler in tulburarile de ritm si de conducere”. In Popescu BA, Ghingina C „Ecocardiografia Doppler” Ed. Medicala, Bucharest 2011: 349-368. (Romanian)
68. Badano LP, Muraru D. „Assessment of right heart function and hemodynamics”. In Galiuto L, Badano LP, Fox K, Sicari R, Zamorano JL „EAE Textbook of Echocardiography” Oxford University Press, London, 2011: 165-181
69. Muraru D, Popescu BA. „Dislipidemiile”. In Ghingina C. „Mic Tratat de Cardiologie”, Ed. Academiei Romane, Bucharest 2010:169-183 (Romanian)
70. Ghingina C, Muraru D. „Ateroscleroza”. In Ghingina C. „Mic Tratat de Cardiologie”, Ed. Academiei Romane, Bucharest 2010:189-201 (Romanian)
71. Muraru D, Badano LP, Gianfagna P, Livi U, Popescu BA, Ghingina C. Tromboza non-obstructiva paucisimptomatica a protezei metalice in pozitie mitrala - particularitati diagnostice si dificultati terapeutice in „Imagistica la bolnavii cardiaci - din pagina cartii la ecranul computerului” vol 4, sub redactia Carmen Ghingina, Ed. Medicala, Bucharest, 2010:60-61. (Romanian)
72. Muraru D, Badano LP. „New Developments in Echocardiography: Myocardial deformation imaging: from tissue Doppler to 2D speckle tracking” in Zamorano JL, Bax JJ, Rademakers F, Knuuti J “ESC Textbook of Cardiovascular Imaging”, Springer-Verlag London Ltd, London, 2009: 55-70.
73. Muraru D, Ghiorghiu I, Andrei O, Platon P, Fotiade B, Ghingina C. „Hipertensiunea pulmonara severa din evolutia defectului septal ventricular operat: sunt restant sau interventie tardiva?” in „Imagistica la bolnavii cardiaci – din pagina cartii la ecranul computerului” vol 3, sub redactia Carmen Ghingina, Ed. Medicala, Bucharest, 2009: 72-73 (Romanian)

Abstracts presented at international meetings:

1. Cotella JI, Kovacs A, Muraru D, Fabian A, Szijarto A, Yamat M, Addetia K, Slivnick JA, Mor-Avi V, Badano LP, Lang RM: 3D analysis of right ventricular curvature provides new insights into differential remodeling between atrial and ventricular secondary tricuspid regurgitation. J Am Soc Echocardiogr 2024
2. Denisa Muraru, Tatsuya Miyoshi, Karima Addetia, Rodolfo Citro, Masao Daimon, Sameer Desale, Pedro Gutierrez-Fajardo, Ravi R. Kasliwal, James Kirkpatrick, Mark J. Monaghan, Kofo O. Ogunyankin, Seung Woo Park, Ricardo E. Ronderos, Anita Sadeghpour, Gregory M. Scalia, Masaaki Takeuchi, Wendy Tsang, Edwin S. Tucay, Ana Clara Tude Rodrigues, Amuthan Vivekanandan, Yun Zhang, Alexandra Blitz, Roberto M. Lang, Federico M. Asch, Luigi P. Badano. Age- and Ethnicity-Specific Normative Values of TAPSE/PASP ratio from the World Alliance of Societies of Echocardiography (WASE) Study. J Am Soc Echocardiogr.2021; 34(6):EP-226
3. Addetia K, Miyoshi T, Schreckenber M, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Mor-Avi V, Asch FM, Lang RM: Normal Values for Right Ventricular Systolic Function Derived from an International, Multiethnic Cohort: Data from the WASE Study. J Am Soc Echocardiogr 2021
4. Singh A, Miyoshi T, Addetia K, Schreckenber M, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Mor-Avi V, Asch FM, Lang RM: Right Ventricular Diastolic Parameters Relate to Gender, Age and Ethnic Groups: Data from the World Alliance of Societies of Echocardiography Study. J Am Soc Echocardiogr 2021
5. Singh A, Singulane C, Miyoshi T, Prado A, Addetia K, Schreckenber M, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Mor-Avi V, Asch FM, Lang RM: Normal Values of 3D Left Atrial Volumes

- and Function: Data from the World Alliance of the Societies of Echocardiography Normal Values Study. *J Am Soc Echocardiogr* 2021
6. Patel H, Miyoshi T, Addetia K, Schreckenberg M, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Mor-Avi V, Asch FM, Lang RM: Normal Values of Aortic Size According to Age and Sex: Results of the World Alliance Societies of Echocardiography Study. *J Am Soc Echocardiogr* 2021
 7. Patel H, Miyoshi T, Addetia K, Schreckenberg M, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Mor-Avi V, Asch FM, Lang RM: Normal Values of Cardiac Output and Stroke Volume According to Method, Age, Sex and Ethnicity: Results of the World Alliance of Societies of Echocardiography Study. *J Am Soc Echocardiogr* 2021
 8. Addetia K, Miyoshi T, Schreckenberg M, Blankenhagen M, Hitschrich N, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Mor-Avi V, Asch FM, Lang RM: 3D Echocardiography-Based Assessment of Left Ventricular Diastolic Function: A Report from World Alliance of Societies of Echocardiography (WASE) study. *J Am Soc Echocardiogr* 2021
 9. Singh A, Addetia K, Miyoshi T, Schreckenberg M, Blankenhagen M, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Soulat-Dufour L, Asch FM, Lang RM: Differences in left atrial dimensions by 3D analysis: Insights from a subset of the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2020
 10. Singh A, Addetia K, Miyoshi T, Schreckenberg M, Blankenhagen M, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Soulat-Dufour L, Asch FM, Lang RM: the evolving relationship of age and 3D left atrial phasic function using data from a subset of the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2020
 11. Soulat-Dufour L, Addetia K, Miyoshi T, Schreckenberg M, Blankenhagen M, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Asch FM, Lang RM: 2D/3D right atrial size according to age and gender: Results of the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2020
 12. Soulat-Dufour L, Lang RM, Miyoshi T, Schreckenberg M, Blankenhagen M, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Asch FM, Addetia K: Are there geographic differences in 2D/3D right atrial size? Results of the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2020
 13. Soulat-Dufour L, Lang RM, Miyoshi T, Schreckenberg M, Blankenhagen M, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Tude Rodrigues AC, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Asch FM, Addetia K: Impact of age on right atrial function: Results of the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2020
 14. Ochoa-Jimenez RC, Guta AC, Previtiero M, Figliozzi S, Palermo C, Aruta P, Badano LP, Muraru D. Right ventricular global longitudinal strain predicts cardiovascular mortality and heart failure hospitalizations in patients with functional tricuspid regurgitation. *Eur Heart J* 2019 (in press)
 15. Addetia K, Miyoshi T, Kebed K, Schreckenberg M, Blitz A, Wiebel H, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Rodrigues ACT, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Asch FM, Lang RM. Application of Machine Learning to Two-Dimensional Echocardiographic Chamber Dimension and Function Measurements. *J Am Soc Echocardiogr* 2019; 32(6):P2-106
 16. Addetia K, Miyoshi T, Blitz A, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Prado A, Rodrigues ACT, Sadeghpour A, Scalia G, Stapf D, Takeuchi M, Tsang W, Tucay ES, Zhang M, Asch FM, Lang RM. Worldwide Normal Values for Left and Right Ventricular Size and Function Using 3D Echocardiography: First Report from the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2019; 32(6):P2-028

17. Addetia K, Miyoshi T, Blitz A, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Prado A, Rodrigues ACT, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Asch FM, Lang RM. Are There Differences in 3D LV and RV Size and Function Parameters Between Populations Around the World? First Report from the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2019; 32(6):P2-031
18. Miyoshi T, Addetia K, Blitz A, Amuthan V, Blankenhagen M, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Medvedofsky D, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Rodrigues ACT, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Lang RM, Asch FM. Applicability of Current Reference Values in Different Countries: Results from the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2019; 32(6):P1-190
19. Miyoshi T, Addetia K, Blitz A, Amuthan V, Citro R, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Prado A, Rodrigues ACT, Rossmanith A, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Lang RM, Asch FM. Echocardiographic Diastolic Function by Age Decades: Results from the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2019; 32(6):P1-155
20. Miyoshi T, Addetia K, Blitz A, Amuthan V, Bossone E, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Rodrigues ACT, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Lang RM, Asch FM. World-wide Comparison of Echocardiographic Normal Values of Left Ventricular Size and Function in Healthy Adults: Results from the World Alliance of Societies of Echocardiography (WASE) Normal Values Study. *J Am Soc Echocardiogr* 2019; 32(6):P1-189
21. Kebed K, Genovese D, Miyoshi T, Addetia K, Schreckenber M, Blitz A, Zornak S, Amuthan V, Daimon M, Gutiérrez-Fajardo P, Kasliwal R, Kirkpatrick JN, Monaghan MJ, Muraru D, Ogunyankin KO, Park SW, Rodrigues ACT, Ronderos R, Sadeghpour A, Scalia G, Takeuchi M, Tsang W, Tucay ES, Zhang M, Asch FM, Lang RM. Computer Identification of Standard Echocardiographic Views Using a Convolutional Neural Network. *J Am Soc Echocardiogr* 2019; 32(6):P2-100
22. Previtiero M, Azzolina D, Palermo C, Tenaglia RM, Sammarco G, Ruozi N, Aruta P, Iliceto S, Muraru D, Badano L. Improving arrhythmic risk stratification and implantable cardioverter defibrillator patient selection: a prospective study comparing old and new echocardiography parameters. *J Am Coll Cardiol* 2019;73 (9) Suppl 1
23. Previtiero M, Azzolina D, Palermo C, Tenaglia RM, Sammarco G, Ruozi N, Aruta P, Iliceto S, Muraru D, Badano L. Role of non-invasive left ventricular pressure-strain loop to predict cardiac death and arrhythmic risk in patient with organic heart disease and reduced left ventricular ejection fraction. *J Am Coll Cardiol* 2019; 73 (9) Suppl 1
24. Ruozi N, Sammarco G, Tenaglia R, Secco E, Boccacini F, Rodriguez-Zanella H, Azzolina D, Barrella T, Cavalli G, Aruta P, Muraru D, Iliceto S, Badano LP. Definition of the cut-off values for left ventricular mechanical dispersion and three-dimensional ejection fraction to stratify the arrhythmic risk. A prospective study in patients with reduced two-dimensional left ventricular ejection fraction. *Eur Heart J Cardiovasc Imaging* 2018; 19 (Suppl 3)
25. Sammarco G, Ruozi N, Tenaglia R, Rodriguez-Zanella H, Boccacini F, Secco E, Palermo C, Barrella T, Azzolina D, Guta AC, Aruta P, Muraru D, Iliceto S, Badano LP. Added Value of the Combined Use of Left Ventricular Mechanical Dispersion and Three-dimensional Echocardiography Ejection Fraction in the Arrhythmic Risk Stratification of Patients with Left Ventricular Systolic Dysfunction. *Eur Heart J Cardiovasc Imaging* 2018; 19 (Suppl 3)
26. Ruozi N, Sammarco G, Tenaglia R, Secco E, Rodriguez-Zanella H, Azzolina D, Barrella T, Palermo C, Previtiero M, Nguyen K, Gianstefani S, Aruta P, Muraru D, Iliceto S, Badano LP. In Patients with Left Ventricular Dysfunction, Regional Mechanical Dispersion is Closely Related to Residual Left Ventricular Ejection fraction measured by Three-dimensional Echocardiography. *Eur Heart J Cardiovasc Imaging* 2018; 19 (Suppl 3)
27. Guta AC, Muraru D, Badano LP, Nagata Y, Aruta P, Ochoa Jimenez RC, Surkova E, Otani K, Genovese D, Otsuji Y, Azzolina D, Takeuchi M. Development and prognostic validation of partition values to grade right ventricular dysfunction severity with three-dimensional echocardiography. *Eur Heart J Cardiovasc Imaging* 2018; 19 (Suppl 3)
28. Previtiero M, Muraru D, Iliceto S, Badano LP. Added value of three-dimensional echocardiography in the evaluation of grown-up congenital heart disease patients after congenital heart surgery. *Eur Heart J Cardiovasc Imaging* 2018; 19 (Suppl 3)
29. Guta AC, Ochoa Jimenez RC, Guida V, Aruta P, Tenaglia R, Perazzolo-Marra M, De Lazzari M, Iliceto S, Badano LP, Muraru D. Heterogeneity of segmental left ventricular deformation in patients with mitral

- valve prolapse as potential substrate of ventricular arrhythmias. *Eur Heart J Cardiovasc Imaging* 2018; 19 (Suppl 3)
30. Ochoa-Jimenez RC, Guta AC, Civera S, Guida V, Aruta P, Palermo C, Previato M, Shehata H, De Lazzari M, Cipriani A, Iliceto S, Badano LP, Muraru D. Left ventricular and mitral valve geometry in patients with mitral valve prolapse and mild regurgitation: a three-dimensional echocardiographic study. *Eur Heart J Cardiovasc Imaging* 2018; 19 (Suppl 3)
 31. Surkova E, Genovese D, Muraru D, Aruta P, Iliceto S, Badano LP. Relative importance of reduced left and right ventricular ejection fraction to predict prognosis in a large cohort of unselected patients with cardiac diseases: a 3D echocardiographic study. *Eur Heart J Cardiovasc Imaging* 2018; 19 (Suppl 3)
 32. Muraru D, Badano LP, Nagata Y, Surkova E, Otani K, Genovese D, Otsuji Y, Azzolina D, Takeuchi M. Development and prognostic validation of partition values to grade right ventricular dysfunction severity with three-dimensional echocardiography. *J Am Soc Echocardiogr* 2018; 31: B64
 33. Muraru D, Addetia K, Guta AC, Ochoa-Jimenez R, Genovese D, Aruta P, Mihaila S, Bidviene J, Mor-Avi V, Prado A, Iliceto S, Lang RM, Badano LP. Different etiologies of functional tricuspid regurgitation are associated with significant heterogeneity in right chamber size and tricuspid valve geometry. *Eur Heart J* 2018; 389 (Issue suppl 1); ehy563.P4666 DOI: 10.1093/eurheartj/ehy563.P4666
 34. Rodriguez-Zanella H, Balderas-Munoz K, Jordan-Rios A, Arias Godinez JA, Ruiz Esparza ME, Badano LP, Edvardsen T, Muraru D, Surkova E, Gaxiola-macias BA, Bucio-Reta E, Baranda-Tovar F, Fritche-Salazar JF. Right ventricular free wall strain predicts low cardiac output syndrome in patients left ventricular ejection fraction > 35% undergoing open aortic valve replacement. *Eur Heart J* 2018; 389 (Issue suppl 1); ehy566.P5472 DOI: 10.1093/eurheartj/ehy566.P5472
 35. Zorzi A, Mastella G, De Lazzari M, Niero A, Muraru D, BadanoLP, Bellu R, Perazzolo-Marra M, Schiavon M, Iliceto S, Corrado D. Correlation between morphology of premature ventricular beats and underlying myocardial substrate in young competitive athletes. *Eur Heart J* 2018; 389 (Issue suppl 1); ehy564.476 DOI: 10.1093/eurheartj/ehy564.476
 36. Muraru D, Guta AC, Addetia K, Genovese D, Ochoa-Jimenez R, Veronesi F, Aruta P, Palermo C, Prado A, Sammarco G, Tenaglia R, Iliceto S, Lang RM, Badano LP. Accuracy of conventional and 3D echo-derived indices of right chamber and tricuspid annulus size to predict severe functional tricuspid regurgitation. *Eur Heart J* 2018; 389 (Issue suppl 1); ehy565.P1586 DOI:10.1093/eurheartj/ehy565.P1586
 37. Muraru D, Addetia K, Genovese D, Guta AC, Ochoa-Jimenez R, Aruta P, Veronesi F, Mor-Avi V, Previtro M, Guida V, Nguyen K, Iliceto S, Lang RM, Badano LP. Right atrial volume is the major determinant of tricuspid annulus area in healthy subjects and in patients with functional tricuspid regurgitation due to various etiologies. *Eur Heart J* 2018; 389 (Issue suppl 1); ehy565.P1589 DOI: 10.1093/eurheartj/ehy565.P1589
 38. Rodriguez Zanella H, Boccalini F, Secco E, Muraru D, Aruta P, Tenaglia R, Ruozi N, Sammarco G, Genovese D, Arias Godinez JA, Alexanderson E, Bertaglia E, Iliceto S, Badano LP. Left ventricular mechanical dispersion measured with two-dimensional speckle tracking echocardiography predicts severe arrhythmic events in patients with ischemic and non-ischemic cardiomyopathy. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 39. Prevedello F, Nese A, Elnagar B, Genovese D, Surkova E, Cavalli G, Aruta P, Palermo C, Rodriguez Zanella H, Iliceto S, Badano LP, Muraru D. Right ventricular ejection fraction measured by three-dimensional echocardiography predicts survival better than FAC and TAPSE in patients with various cardiac diseases. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 40. Aruta P, Lorena V, Ruozi N, Mihaila S, Muraru D, Palermo C, Cucchini U, Rigato I, Rodriguez Zanella H, Surkova E, Bidviene J, Iliceto S, Badano LP. Different contribution of left ventricular and atrial remodeling to the geometry of the mitral annulus in patients with more than moderate ischemic and non-ischemic functional mitral regurgitation. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 41. Aruta P, Lorena V, Ruozi N, Mihaila S, Muraru D, Palermo C, Cucchini U, Rigato I, Rodriguez Zanella H, Surkova E, Bidviene J, Iliceto S, Badano LP. In patients with functional mitral regurgitation the extend of displacement of papillary muscle is dependent on the etiology of left ventricular dysfunction. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 42. Bidviene J, Maffessanti F, Rodriguez-Zanella H, Cavalli G, Surkova E, Peluso D, Prevedello F, Aruta P, Ereminiene E, Vaskelyte EE, Perazzolo-Marra M, Iliceto S, Badano LP, Muraru D. Different adaptations of global and regional right ventricular shape to pressure and volume overload. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 43. Muraru D, Mihaila S, Aruta P, Marotta C, Calore C, Prevedello F, Niero A, Genovese D, Cavalli G, Iliceto S, Badano LP. Mitral leaflet sizing in hypertrophic cardiomyopathy impact of method and timing. *J Am Soc Echocardiogr* 2017; 30: B41
 44. Shehata H, Gawad A, Muraru D, Ayman Abdel-Hay M, Ashour S, Shehata M, Cucchini U, Previato M,

- Iliceto S, Badano LP. In patients with left ventricular volume overload, left ventricular size and shape, more than pulmonary artery systolic pressure, may affect right ventricular geometry and function. *J Am Soc Echocardiogr* 2017; 30: B58
45. Muraru D, Bidviene J, Prevedello F, Surkova E, Veronesi F, Cavalli G, Genovese D, Aruta P, Previato M, Iliceto S, Badano LP. Right atrial volume and body size are the most consistent determinants of tricuspid annulus size in patients with functional tricuspid regurgitation due to various mechanisms. *J Am Soc Echocardiogr* 2017; 30: B59
 46. Muraru D, Rodriguez Zanella H, Boccalini F, Secco E, Aruta P, Cucchini U, Arias-Godinez JA, Alexanderson E, Sammarco G, Previtero M, Badano LP. Age-related Increase of left ventricular mechanical dispersion measured with two-dimensional speckle-tracking echocardiography in 254 healthy adults. *J Am Soc Echocardiogr* 2017; 30: B66
 47. Muraru D, Genovese D, Cavalli G, Ermacora D, Aruta P, Palermo C, Rodriguez Zanella H, Surkova E, Iliceto S, Badano LP. Incremental Prognostic Value of Left Ventricular Ejection Fraction Measured with Three-Dimensional Echocardiography in a Large Cohort of Patients with Various Cardiac Diseases. *J Am Soc Echocardiogr* 2017; 30: B41
 48. Muraru D, Surkova E, Genovese D, Cavalli G, Bidviene J, Aruta P, Rodriguez Zanella H, Niero A, Palermo C, Iliceto S, Badano LP. Three-Dimensional Echocardiography Right Ventricular Volumes and Ejection Fraction Predict Mortality in Unselected Patients with Various Cardiac Diseases. *J Am Soc Echocardiogr* 2017; 30: B43
 49. Genovese D, Ermacora D, Cavalli G, Aruta P, Palermo C, Surkova E, Rodriguez-Zanella H, Iliceto S, Badano LP, Muraru D. Incremental prognostic value of left ventricular ejection fraction measured with three-dimensional echocardiography in a large cohort of patients with various heart diseases. *Eur Heart J* 2017 ;38 (suppl_1) ehx501.P154 <https://doi.org/10.1093/eurheartj/ehx501.P154>
 50. Surkova E, Bidviene J, Genovese D, Cavalli G, Aruta P, Palermo C, Rodriguez-Zanella H, Iliceto S, Badano LP, Muraru D. Three-dimensional echocardiography right ventricular volumes and ejection fraction predict mortality in unselected patients with various cardiac diseases. *Eur Heart J* 2017 ;38 (suppl_1) ehx504.P3336 (attachment #3) <https://doi.org/10.1093/eurheartj/ehx504.P3336>
 51. Rodriguez Zanella H, Boccalini F, Secco E, Muraru D, Aruta P, Bertaglia E, Arias-Godinez JA, Alexanderson E, Marroquin Donday LA, Iliceto S, Badano LP. The use of three-dimensional echocardiography to measure left ventricular ejection fraction would increase the number of patients with indication to receive implantable cardioverter defibrillators. *Eur Heart J* 2017 ;38 (suppl_1):ehx493.P5509 <https://doi.org/10.1093/eurheartj/ehx493.P5509>
 52. Cherata DA, Rodriguez-Zanella H, Riccoboni D, Palermo C, Muraru D, Aruta P, Surkova E, Carstea D, Zaharie M, Glodeanu AD, Carstea AP, Binotto G, Semenzato G, Iliceto S. Three-dimensional left ventricular global longitudinal strain is as feasible and accurate as two-dimensional global longitudinal strain for subclinical cardiotoxicity surveillance *Eur Heart J* 2017 ;38 (suppl_1) ehx501.P160 <https://doi.org/10.1093/eurheartj/ehx501.P160>
 53. Bidviene J, Kovacs A, Lakatos B, Tokodi M, Surkova E, Cavalli G, Prevedello F, Ereminiene E, Vaskelyte JJ, Perazzolo-Marra M, Iliceto S, Badano LP, Muraru D. Right ventricular mechanics adapts differently to distinct loading conditions. A 3-dimensional echocardiography study. *Eur Heart J* 2017; 38 (suppl_1) ehx501.P156, <https://doi.org/10.1093/eurheartj/ehx501.P156>
 54. Mihaila S, Cucchini U, Marzaro A, Muraru D, Andras K, Altiok E, Vinereanu D, Sadeghpour A, Alizadehasl A, Badano LP, Becker M. Fully automated measurements of left atrial volume are highly feasible and accurate compared to expert manual measurements: a comparative multi-center study using a novel automated analysis algorithm. *Eur Heart J* 2017; 38 (suppl_1)ehx502.P1324 <https://doi.org/10.1093/eurheartj/ehx502.P1324>
 55. Aruta P, Valente L, Ruozi N, Mihaila S, Muraru D, Palermo C, Cucchini U, Rigato I, Rodriguez Zanella H, Surkova E, Bidviene J, Cherata DA, Shehatat H, Iliceto S, Badano LP. In patients with end stage functional mitral regurgitation, mitral annulus geometry is independent on the ischemic or non-ischemic etiology of left ventricular dysfunction. *Eur Heart J* 2017; 38 (suppl_1): ehx502.P1362 <https://doi.org/10.1093/eurheartj/ehx502.P1362>
 56. Bidviene J, Surkova E, Kovacs A, Lakatos B, Tokodi M, Aruta P, Rodriguez-Zanella H, Cherata DA, Cucchini U, Ereminiene E, Vaskelyte JJ, Iliceto S, Badano LP, Muraru D. In healthy volunteers, the relative contribution of the radial component of right ventricular wall motion to global right ventricular ejection fraction is as important as its longitudinal shortening *Eur Heart J* 2017; 38 (suppl_1): ehx502.P1433 <https://doi.org/10.1093/eurheartj/ehx502.P1433>
 57. Cherata DA, Rodriguez-Zanella H, Muraru D, Palermo C, Cucchini U, Aruta P, Carstea D, Zaharie M, Glodeanu AD, Carstea AP, Bidviene J, Riccoboni D, Semenzato G, Iliceto S, Badano LP. Free wall strain analysis allows identification of subclinical right ventricular dysfunction among patients with early

- cardiotoxicity. *Eur Heart J* 2017; 38 (suppl_1): ehx502.P1438
<https://doi.org/10.1093/eurheartj/ehx502.P1438>
58. Rodriguez Zanella H, Secco E, Boccalini F, Muraru D, Aruta P, Surkova E, Sammarco G, Genovese D, Cavalli G, Palermo C, Nese A, Iliceto S, Badano LP. Age-related increase of left ventricular mechanical dispersion measured with two-dimensional speckle-tracking echocardiography in 254 healthy adults. *Eur Heart J* 2017; 38 (suppl_1): ehx502.P1442 <https://doi.org/10.1093/eurheartj/ehx502.P1442>
 59. Prevedello F, Previato M, Niero A, Bracco A, Cucchini U, Perazzolo Marra M, Iliceto S, Badano LP, Muraru D. A peculiar mechanism of right ventricular failure in a patient with diabetes and liver insufficiency: the role of multimodality imaging to identify the mechanism and address management. *Eur Heart J* 2017; 38 (suppl_1): ehx495.30, <https://doi.org/10.1093/eurheartj/ehx495.30>
 60. Surkova E, Bidviene J, Niero A, Cherata D, Aruta P, Secco E, Rodriguez-Zanella H Iliceto S, Badano LP, Muraru D. Clinical and prognostic impact of different methods and abnormality thresholds used for the quantification of left atrial volume by two-dimensional echocardiography. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 61. Rodriguez Zanella H, Secco E, Boccalini F, Muraru D, Aruta P, Surkova E, Bertaglia E, Cavalli G, Sammarco G, Tenaglia R, Ruozi N, Arias-Godinez JA, Alexanderson E, Iliceto S, Badano LP. Three-dimensional echocardiography left ventricular ejection fraction provides better patient selection for an implantable cardioverter defibrillator compared to two-dimensional echocardiography. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 62. Shehata H, Surkova E, Bellu R, Sambugaro F, Migliore F, Shehata H, Abo Elhoda A, El Sharkawy E, Nawar M, Iliceto S, Badano LP. Left ventricular mechanics is more impaired in patients with Strauss than those with conventional criteria for left bundle branch block despite preserved left ventricular ejection fraction. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 63. Surkova E, Bellu R, Sambugaro F, Aruta P, Shehata M, Rodriguez-Zanella H, Migliore F, Iliceto S, Badano LP. Prevalence of obstructive coronary atherosclerosis is low in patients with incidental finding of complete left bundle branch block. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 64. Prevedello F, Nese A, Elnagar B, Genovese D, Surkova E, Cavalli G, Aruta P, Palermo C, Rodriguez Zanella H, Iliceto S, Badano LP, Muraru D. Right ventricular ejection fraction measured by three-dimensional echocardiography predicts survival better than FAC and TAPSE in patients with various cardiac diseases. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 65. Aruta P, Lorena V, Ruozi N, Mihaila S, Muraru D, Palermo C, Cucchini U, Rigato I, Rodriguez Zanella H, Surkova E, Bidviene J, Iliceto S, Badano LP. Different contribution of left ventricular and atrial remodeling to the geometry of the mitral annulus in patients with more than moderate ischemic and non-ischemic functional mitral regurgitation. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 66. Aruta P, Lorena V, Ruozi N, Mihaila S, Muraru D, Palermo C, Cucchini U, Rigato I, Rodriguez Zanella H, Surkova E, Bidviene J, Iliceto S, Badano LP. In patients with functional mitral regurgitation the extent of displacement of papillary muscle is dependent on the etiology of left ventricular dysfunction. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 67. Bidviene J, Maffessanti F, Rodriguez-Zanella H, Cavalli G, Surkova E, Peluso D, Prevedello F, Aruta P, Ereminiene E, Vaskelyte EE, Perazzolo-Marra M, Iliceto S, Badano LP, Muraru D. Different adaptations of global and regional right ventricular shape to pressure and volume overload. *Eur Heart J Cardiovasc Imaging* 2017; 18 (Suppl 3)
 68. Opitz B, Stelzmueller ME, Wisser W, Reichenfeller W, Marotta C, Muraru D, Badano LP, Mohl W. Mitral butterfly first in vitro tests-one step ahead in percutaneous mitral interventions. *Cardiology* 2016; 134 (2):190-191
 69. Sokalskis V, Peluso D, Spadotto V, Aruta P, Muraru D, Badano LP. Early systolic anterior motion of interventricular septum due to increased right ventricular dyssynchrony predicts accurately impaired right ventricular ejection fraction *Eur J Heart Fail* 2016
 70. Volpi C, Altman M, Annabi MS, Abouchakra L, Cucchini U, Muraru D, Badano LP, Ernande L, Derumeaux G. Left ventricular remodeling after a first myocardial infarction in patients with preserved ejection fraction at discharge. *European Heart Journal Cardiovasc Imaging* 2016; 17 (Supplement 2): ii127
 71. Sokalskis V, Aruta P, Cherata D, Muraru D, Badano LP. Use of fully automated software to quantify left ventricular ejection fraction and left ventricular global longitudinal strain. *Eur Heart J Cardiovasc Imaging* 2016; 17 (Supplement 2): ii144
 72. Muraru D, Marotta C, Mihaila S, Calore C, Bidviene J, Surkova E, Romeo G, Aruta P, Palermo C, Badano LP. In patients with hypertrophic cardiomyopathy, left ventricular mass and shape by three-dimensional echocardiography are related with dynamic obstruction and functional capacity. *Eur Heart J Cardiovasc Imaging* 2016; 17 (Supplement 2): ii77
 73. Muraru D, Marotta C, Mihaila S, Calore C, Aruta P, Romeo G, Surkova E, Bidviene J, Iliceto S, Badano LP. Mitral leaflet sizing in hypertrophic cardiomyopathy: impact of method and timing. *Eur Heart J*

- Cardiovasc Imaging 2016; 17 (Supplement 2): ii77
74. J. Bidviene, G. Cavalli, A. Cavaliere, D. Genovese, G. Romeo, P. Aruta, U. Cucchini, S. Iliceto, LP. Badano, D. Muraru. An unrecognized mechanism of functional tricuspid regurgitation revealed by transthoracic three-dimensional echocardiography. *Eur Heart J Cardiovasc Img* 2016; 17 (Supplement 2): ii246
 75. D. Peluso, A. Kovács, E. Surkova, D. Muraru, MP Marra, S. Iliceto S, LP Badano. Importance of radial dysfunction to determine the impairment of right ventricular ejection fraction in patients with pulmonary hypertension. *Eur Heart J Cardiovasc Imaging* 2016; 17 (Supplement 2): ii162
 76. E. Surkova, J. Bidviene, G. Brunello, F. Veronesi, G. Cavalli, V. Sokalskis, P. Aruta, LP Badano, D Muraru. Tricuspid annulus area correlates more with right atrial than right ventricular volumes in patients with different mechanisms of functional tricuspid regurgitation. A 3-dimensional echocardiography study. *Eur Heart J Cardiovasc Img* 2016; 17 (Supplement 2): ii16
 77. E. Surkova, J. Bidviene, G. Brunello, F. Veronesi, G. Cavalli, DA Cherata, G. Romeo, LP Badano, D Muraru. Tricuspid annulus remodeling in patients with permanent atrial fibrillation and functional tricuspid regurgitation. *Eur Heart J Cardiovasc Imaging* 2016; 17 (Supplement 2): ii174
 78. Surkova E, Aalen J, Samset E, Bidviene J, Aruta P, Romeo G, Sambugaro F, Badano LP, Muraru D. Noninvasively measured global wasted myocardial work allows for quantitative assessment of typical left ventricular mechanical dyssynchrony pattern in patients with left bundle branch block. *Eur Heart J Cardiovasc Imaging* 2016; 17 (Supplement 2): ii75
 79. DA. Cherata, D. Muraru, C. Palermo, G. Romeo, P. Aruta, G. Binotto, G. Semenzato, D. Carstea, S. Iliceto, LP. Badano. Longitudinal strain analysis allows the identification of subclinical deterioration of right ventricular myocardial function in patients with cancer therapy-related left ventricular dysfunction. *Eur Heart J Cardiovasc Img* 2016; 17 (Supplement 2): ii16
 80. Kovacs A, Muraru D, Lakatos BK, Surkova E, Peluso, Toser Z, Tokodi M, Merkely B, Badano LP Relative contribution of right ventricular longitudinal shortening and radial displacement to global pump function in healthy volunteers. *Eur Heart J Cardiovasc Imaging* 2016; 17 (Supplement 2): ii221
 81. RC Rimbas, S Mihaila, SI Calin, M Florescu, LS Magda, D Muraru, LP Badano, D Vinereanu. New multi-layer approach of left and right ventricular myocardial deformation by 2D speckle tracking imaging in a large group of normal subjects. *Eur Heart J* 2016; 37 (Abstract Supplement): 857-858
 82. S Mihaila, A Velcea, A Andronic, LL Matei, D Muraru, U Cucchini, S Marcu, LP Badano, D Vinereanu. Two-dimensional assessment of left atrial volume might be inaccurate, mainly at higher volumes and in complex left atrial shapes. *Eur Heart J* 2016; 37 (Abstract Supplement): 469
 83. D. Muraru, F. Veronesi, G. Romeo, P. Aruta, D. Dequal, S. Iliceto, L. Badano. Feasibility and Relative Accuracy of Three-Dimensional Printing of Normal and Pathologic Tricuspid Valves From Transthoracic Three-Dimensional Echocardiographic Data Sets. *J Am Coll Cardiol* 2016;67(13):1658
 84. D. Muraru, P. Aruta, C. Jenei, M.H. Miglioranza, G. Cavalli, G. Romeo, S. Iliceto, L. Badano. Three-Dimensional Echocardiography Assessment of the Systolic Variation of Effective Regurgitant Orifice Area in Patients With Functional Tricuspid Regurgitation: Implications for Quantification. *J Am Coll Cardiol* 2016; 67(13):1725
 85. K. Addetia, F. Maffessanti, D. Muraru, A. Singh, M. Yamat, L. Weinert, V. Mor-Avi, LP. Badano, RM. Lang. Dynamic right ventricular shape analysis in the normal heart using 3D echocardiography-derived curvature indices. *J Am Coll Cardiol* 2016; 67(13):1808
 86. D. Muraru, A. Maddalozzo, C. Jenei, D. Dequal, F. Veronesi, P. Aruta, G. Romeo, S. Iliceto, L. Badano. Three-dimensional printing of normal and pathologic tricuspid valves from transthoracic three-dimensional echocardiographic data sets: feasibility and relative accuracy. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P1029.
 87. D. Muraru, M. Siciliano, F. Migliore, S. Cavedon, F. Folino, G. Pedrizzetti, M. Bertaglia, D. Corrado, S. Iliceto, LP. Badano. Cardiac resynchronization therapy by multipoint pacing improves the acute response of left ventricular mechanics and fluid dynamics: a three-dimensional and particle image velocimetry echo study. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P698
 88. S. Mihaila, A. Velcea, L. Matei, A. Andronic, S. Calin, R. Rimbas, D. Muraru, LP. Badano, D. Vinereanu. 3D echocardiography is a fast-learning and a more reliable method compared to 2D echocardiography for the assessment of left ventricular volumes and ejection fraction in patients with heart failure. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P494
 89. S. Onciul, U. Cucchini, MH. Miglioranza, M. Dorobantu, S. Iliceto, LP. Badano, D. Muraru. The importance of early left atrial functional changes in predicting long term left ventricular remodelling in patients surviving a ST elevation myocardial infarction. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015:P512
 90. L. Badano, D. Muraru, G. Romeo, D. Ermacora, C. Marotta, P. Aruta, U. Cucchini, S. Iliceto. Implementation of proprietary plugins in the DICOM-based computerized echo reporting system fuels

- the use of 3D echo and deformation imaging in the clinical routine of a multivendor laboratory. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P537.
91. EA. Surkova, D. Muraru, J. Grapsa, E. Donal, P. Lancellotti, G. Habib, LP. Badano. Impact of EACVI grant programme on career progression of grant winners. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015:P491
 92. C. Jenei, D. Muraru, P. Aruta, MH. Miglioranza, G. Cavalli, G. Romeo, D. Peluso, U. Cucchini, S. Iliceto, LP. Badano. The 3D PISA and regurgitant volume are the most useful indices to discriminate the severity of functional tricuspid regurgitation. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P1312
 93. P. Aruta, D. Muraru, C. Jenei, M. Haertel Miglioranza, G. Cavalli, G. Romeo, D. Peluso, U. Cucchini, S. Iliceto, L. Badano. 3D echocardiography allows more effective quantitative assessment of the severity of functional tricuspid regurgitation than conventional 2D/Doppler echocardiography. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P1139
 94. P. Aruta, D. Muraru, C. Jenei, M. Haertel Miglioranza, G. Cavalli, G. Romeo, D. Peluso, U. Cucchini, S. Iliceto, L. Badano. Three-dimensional echocardiography assessment of the systolic variation of effective regurgitant orifice area in patients with functional tricuspid regurgitation: implications for quantification. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P146
 95. D. Peluso, E. Pigatto, G. Romeo, D. Muraru, F. Cozzi, S. Iliceto, LP. Badano. Left atrial remodeling and dysfunction occur early in patients with systemic sclerosis and normal left ventricular function. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P1162
 96. D. Peluso, E. Pigatto, G. Romeo, D. Muraru, F. Cozzi, L. Punzi, S. Iliceto, LP. Badano. Incidence of subclinical myocardial dysfunction in patients with systemic sclerosis and normal left ventricular systolic and diastolic function. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P1161
 97. D. Peluso, E. Pigatto, G. Romeo, U. Cucchini, D. Muraru, P. Aruta, F. Cozzi, L. Punzi, S. Iliceto, LP. Badano. Left ventricular subclinical dysfunction by 2D-speckle tracking in systemic sclerosis patients according to autoantibody pattern. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P1337
 98. S. Onciul, D. Muraru, MH. Miglioranza, U. Cucchini, M. Dorobantu, S. Iliceto, LP. Badano. Relationship between left atrial volumes and emptying fractions and parameters of infarct size and left ventricular filling pressures in survivors of ST elevation myocardial infarction. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P148.
 99. S. Onciul, D. Muraru, MH. Miglioranza, U. Cucchini, M. Dorobantu, S. Iliceto, LP. Badano. Left atrial morphological and functional remodelling early after ST elevation myocardial infarction insights from three-dimensional echocardiography. *Eur Heart J Cardiovasc Imaging*; 16 (Abstracts Supplement Issue 2), 1 December 2015: P150.
 100. S. Mihaila, D. Muraru, P. Aruta, MH. Miglioranza, S. Iliceto, D. Vinereanu, L. Badano. The Severity of Functional Mitral Regurgitation Assessed by Three-Dimensional Echocardiography: New Cut-Offs Are Needed. *J Am Coll Cardiol* 2015; 65 (10S): A2023
 101. Addetia K, Muraru D, Veronesi F, Mor-Avi V, Yamat M, Weinert L, Lang RM, Badano LP. Analysis of the Tricuspid Annulus from Transthoracic 3D Echocardiographic Datasets Provides Insight into Normal Tricuspid Valve Dynamics. *J Am Soc Echocardiogr* 2015; 28(6)
 102. LP Badano, MH Miglioranza, D Muraru, S Mihaila, P Aruta, G Romeo, A Cecchetto, D Peluso, U Cucchini, S Iliceto. Left Atrium Longitudinal Strain by Two-dimensional Speckle-tracking Echocardiography in Healthy Volunteers: Reference Values and Analysis of Their Physiologic Determinants. *J Am Soc Echocardiogr* 2015; 28(6)
 103. MH Miglioranza, LP Badano, D Muraru, S Mihaila, U Cucchini, D Peluso, D Ermacora, C Marotta, AA Arcidiaconu, A Nalmpantis, S Iliceto. Normative Study of Left Atrium Phasic Volumetric Changes by Three-Dimensional Echocardiography in 225 Healthy Volunteers. *J Am Soc Echocardiogr* 2015; 28(6)
 104. D. Muraru, K. Addetia, C. Jenei, F. Veronesi, V. Mor-Avi, M. Yamat, L. Weinert, RM. Lang, S. Iliceto, LP. Badano. Why do we need dedicated tools to quantitate the tricuspid annulus by 3D transthoracic echocardiography? *Eur Heart J* 2015 (suppl); P89343
 105. D. Muraru, MH. Miglioranza, D. Ermacora, S. Mihaila, U. Cucchini, D. Peluso, P. Aruta, G. Romeo, S. Iliceto, LP. Badano Left atrial volumes are larger when measured with 3D than 2D echocardiography: implications for the definition of normality *Eur Heart J* 2015 (suppl); P89717
 106. D. Muraru, F. Veronesi, D. Dequal, A. Maddalozzo, C. Jenei, K. Addetia, R. Lang, G. Romeo, S. Iliceto, LP. Badano. Three-dimensional printing of tricuspid valve using transthoracic echocardiography. *Eur Heart J* 2015 (suppl); P88836 (selected for presentation during ESC Highlights)

107. C. Jenei, D. Muraru, K. Addetia, F. Veronesi, G. Cavalli, P. Aruta, S. Iliceto, RM. Lang, LP. Badano. Determinants of normal tricuspid annulus area in healthy volunteers: a three-dimensional echocardiographic study. *Eur Heart J* 2015 (suppl); P85197
108. MH. Miglioranza, D. Muraru, S. Mihaila, U. Cucchini, D. Peluso, D. Ermacora, A. Maddalozzo, C. Palermo, S. Iliceto, LP. Badano. Normative study of left atrium phasic volumetric changes by 3D echocardiography in 225 healthy volunteers. *Eur Heart J* 2015 (suppl); P87961
109. G. Romeo, P. Aruta, D. Muraru, G. Cavalli, MH. Miglioranza, C. Jenei, K. Addetia, F. Veronesi, RM. Lang, LP. Badano. In patients with functional tricuspid regurgitation, tricuspid annulus size by three-dimensional echocardiography is related to right heart chamber volumes. *Eur Heart J* 2015; 36 (Abstract Supplement):428
110. S. Mihaila, D. Muraru, P. Aruta, MH. Miglioranza, S. Iliceto, D. Vinereanu, LP. Badano. New cutoffs are needed for the assessment of functional mitral regurgitation severity using three-dimensional echocardiography. *Eur Heart J* 2015;36 (Abstract Supplement):614-615
111. D. Peluso, E. Pigatto, G. Romeo, U. Cucchini, D. Muraru, P. Aruta, F. Cozzi, L. Punzi, S. Iliceto, LP. Badano. Left atrial remodeling and dysfunction occur early in patients with systemic sclerosis and normal left ventricular function. *Eur Heart J* 2015; 36 (Abstract Supplement):106-107
112. A. Cecchetto, D. Muraru, V. Spadotto, G. Romeo, P. Aruta, S. Mihaila, S. Onciul, U. Cucchini, S. Iliceto, LP. Badano. Validation of novel vendor-independent software algorithm for left ventricular volumes and ejection fraction by three-dimensional echocardiography: impact of manual correction versus automated tracking. *Eur Heart J* 2015; 36 (Abstract Supplement):426
113. V. Spadotto, D. Muraru, A. Cecchetto, G. Romeo, P. Aruta, A. Maddalozzo, S. Mihaila, MH. Miglioranza, D. Peluso, S. Iliceto, LP. Badano. Novel vendor-independent software for right ventricular quantification by three-dimensional echocardiography shows good reproducibility and improved accuracy in comparison with cardiac magnetic resonance. *Eur Heart J* 2015;36 (Abstract Supplement):604
114. A. Cecchetto, D. Muraru, D. Ermacora, G. Romeo, A. Maddalozzo, S. Onciul, U. Cucchini, S. Iliceto, LP. Badano. Impact of vendor-independent versus vendor-specific software packages on left ventricular volume measurements performed on 3D echo data sets obtained from different echo systems. *Eur Heart J* 2015; 36 (Abstract Supplement):427
115. D. Muraru, G. Cavalli, K. Addetia, MH. Miglioranza, F. Veronesi, S. Mihaila, M. Tadic, U. Cucchini, L. Badano, RM. Lang. In patients with functional tricuspid regurgitation, tricuspid annulus size by 3D echocardiography is closely related to right heart chamber volumes. *Eur Heart J Cardiovasc Imaging* 2014;15(Suppl 2);ii94
116. G. Cavalli, D. Muraru, MH. Miglioranza, K. Addetia, F. Veronesi, U. Cucchini, S. Mihaila, M. Tadic, RM. Lang L. Badano. Relationships between the severity of the regurgitation and the geometry of the tricuspid annulus in patients with functional tricuspid regurgitation. *Eur Heart J Cardiovasc Imaging* 2014;15(Suppl 2);ii247
117. MH. Miglioranza, D. Muraru, G. Cavalli, K. Addetia, U. Cucchini, S. Mihaila, M. Tadic, F. Veronesi, RM. Lang L. Badano. Three-dimensional tricuspid annulus surface area is a better predictor of functional tricuspid regurgitation severity than conventional 2D-echocardiography diameters. *Eur Heart J Cardiovasc Imaging* 2014;15(Suppl 2);ii180
118. S. Mihaila, D. Muraru, E. Piasentini, P. Aruta, S. Casablanca, D. Peluso, M. Haertel Miglioranza, U. Cucchini, S. Iliceto, D. Vinereanu, LP. Badano. In patients with organic mitral regurgitation and normal left ventricular systolic function, mitral valve leaflet flail is associated with reduced shortening of the mitral annulus area. *Eur Heart J Cardiovasc Imaging* 2014;15(Suppl 2);ii9
119. S. Mihaila, D. Muraru, P. Aruta, E. Piasentini, G. cavalla, L. Ucci, D. Peluso, D. Vinereanu, S. Iliceto, LP. Badano. The extent of mitral annulus dysfunction is related to regurgitation severity and left atrial size and function in patients with organic mitral regurgitation. *Eur Heart J Cardiovasc Imaging* 2014;15(Suppl 2);ii159
120. MH. Miglioranza, S. Mihaila, D. Muraru, U. Cucchini, A. Cecchetto, G. Cavalli, G. Romeo, S. Iliceto, LP. Badano. Normative study of left atrium phasic volumetric changes by two-dimensional echocardiography in 230 healthy volunteers. *Eur Heart J Cardiovasc Imaging* 2014;15(Suppl 2);ii16
121. MH. Miglioranza, S. Mihaila, D. Muraru, U. Cucchini, G. Cavalli, A. Cecchetto G. Romeo, S. Iliceto, LP. Badano. Reference values of left atrium longitudinal strain by two-dimensional speckle tracking echocardiography in 230 healthy volunteers. *Eur Heart J Cardiovasc Imaging* 2014;15(Suppl 2);ii11
122. Muraru D, Cucchini U, Padayattil-Jose S, Mihaila S, Miglioranza MH, Cecchetto A, Casablanca S, Iliceto S, Badano LP. Left ventricular myocardial strain by three-dimensional speckle-tracking echocardiography in healthy volunteers: a normative study. *J Am Coll Cardiol* 2014; 63 (12_S):A1167; doi 10.1016/S0735-1097(14)61167-0
123. Muraru D, Calore C, Melacini P, Cucchini U, Mihaila S, Peluso D, Ucci L, Miglioranza M, Iliceto S, Badano L. Mitral valve leaflet abnormalities correlate with left ventricular remodelling and obstruction in

- hypertrophic cardiomyopathy: a quantitative 3D transthoracic echocardiographic study. *J Am Coll Cardiol* 2014; 63 (12_S):A1075; doi 10.1016/S0735-1097(14)61075-5
124. Muraru D, Mihaila S, Piasentini E, Casablanca S, Naso P, Puma L, Ermacora D, Zoppellaro G, Iliceto S, Badano LP. Do a vendor-specific and a vendor-independent software for 3D echocardiographic analysis provide similar values for left ventricular volumes and ejection fraction? *J Am Coll Cardiol* 2014; 63 (12_S):
 125. MH. Miglioranza, D. Muraru, S. Mihaila, D. Peluso, U. Cucchini, S. Casablanca, S. Iliceto, L. Badano. Reference Values of Tricuspid Annulus Size and Dynamics by Two-Dimensional Transthoracic Echocardiography in 220 Healthy Volunteers. *J Am Coll Cardiol* 2014; 63 (12_S): A1987; doi 10.1016/S0735-1097(14)61990-2
 126. Mihaila S, Muraru D, Piasentini E, Peluso D, Casablanca S, Naso P, Puma L, Iliceto S, Vinereanu D, Badano LP. Static and dynamic analysis of the mitral valve annulus in normal subjects: a three-dimensional transthoracic echocardiography study. *J Am Coll Cardiol* 2014; 63(12_S):A1928; doi 10.1016/S0735-1097(14)61931-8
 127. Muraru D, Checchetto A, Aruta P, Cavalli G, Padayattil-Josè S, Naso P, Perazzolo Marra M, Iliceto S, Badano LP. Which are the optimal settings of 3D datasets used for left ventricular quantitative analysis by three-dimensional speckle-tracking echocardiography? *Eur Heart J* 2014;35(Abstr Suppl): 967 (P5414)
 128. Muraru D, Rizzo S, Puma L, Badano LP, Pittarello D, Bianco R, Thiene G, Iliceto S, Gerosa G, Basso C. Accuracy of two- and three-dimensional echocardiography to diagnose congenitally bicuspid aortic valves: a surgical pathology validation study. *Eur Heart J* 2014;35(Abstr Suppl): 245-246
 129. Muraru D, Aruta P, Cavalli G; calore C, Mihaila S, Cecchetto A, Ucci L, Melacini P, Iliceto S, Badano LP. Three-dimensional myocardial strain patterns in patients with physiological and pathological hypertrophy and preserved left ventricular systolic function: a comparative study. *Eur Heart J* 2014;35(Abstr Suppl): 928 (P5250)
 130. Cavalli G, Muraru D, Badano LP, Padalino M, Mihaila S, Aruta P, Perazzolo Marra M, Reffo E, Stellin G, Iliceto S. Two-dimensional longitudinal strain is a useful index to identify subclinical right ventricular dysfunction at long-term follow up of corrected Tetralogy of Fallot by trans-atrial approach. *Eur Heart J* 2014;35(Abstr Suppl): 189 (P1063)
 131. Mihaila S, Piasentini E, Muraru D, Miglioranza M, Aruta P, Cavalli G, Casablanca S, Iliceto S, Vinereanu D, Badano LP. Mitral annulus remodeling and dysfunction in patients with mild to severe organic mitral regurgitation. *Eur Heart J* 2014;35(Abstr Suppl): 746-747 (P4267)
 132. Mihaila S, Muraru D, Piasentini E, Miglioranza M, Cucchini U, Cavalli G, Tadic M, Iliceto S, Vinereanu D, Badano LP. In patients with ischemic cardiomyopathy and secondary mitral regurgitation, mitral annulus contractile dysfunction is related more to left atrial than to left ventricular contractile dysfunction. *Eur Heart J* 2014;35(Abstr Suppl): 746 (P4265)
 133. Mihaila S, Muraru D, Piasentini E, Aruta P, Cavalli G, Casablanca S, Peluso D, Iliceto S, Vinereanu D, Badano LP. Three-dimensional changes of the mitral annulus geometry and dynamics in patients with functional mitral regurgitation: insights for mitral valve repair. *Eur Heart J* 2014;35(Abstr Suppl):246 (P1390)
 134. Addetia K, Muraru D, Veronesi F, Maffessanti F, Mor-Avi V, Yamat M, Weinert L, Badano LP, Lang RM. Dynamic Analysis of the Tricuspid Annulus -Does Non Planarity of the Annulus Matter? *Circulation* 2014;130:A16726
 135. Muraru D, Addetia K, Veronesi F, Corsi C, Mor-Avi V, Yamat M, Weinert L, Lang RM, Badano LP. Dynamic Analysis of the Normal Tricuspid Annulus Using 3D Echocardiography. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 136. Muraru D, Addetia K, Veronesi F, Corsi C, Mor-Avi V, Yamat M, Weinert L, Lang RM, Badano LP. Physiological determinants of tricuspid annulus size during the cardiac cycle: implications for tricuspid annulus sizing by three-dimensional echocardiography. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 137. Muraru D, Piasentini E, Mihaila S, Naso P, Casablanca S, Peluso D, Denas G, Ucci L, Iliceto S, Badano LP. Reference values for 3D echo parameters describing left ventricular mechanics obtained by vendor-independent software. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 138. Muraru D, Piasentini E, Mihaila S, Padayattil-Josè S, Peluso D, Ucci L, Naso P, Puma L, Casablanca S, Iliceto S. Reference ranges for left ventricular geometry and function by 3D echocardiography using a vendor-independent software for quantitative analysis. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 139. Muraru D, Mihaila S, Piasentini E, Casablanca S, Naso P, Puma L, Ermacora D, Zoppellaro G, Iliceto S, Badano LP. Do a vendor-specific and a vendor-independent software for 3D echocardiographic analysis

- provide similar values for left ventricular volumes and ejection fraction? *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
140. Muraru D, Calore C, Badano LP, Melacini P, Mihaila S, Naso P, Casablanca S, Ortile A, Padayattil Jose' S, Iliceto S. Mitral valve abnormalities correlate with left ventricular remodelling and obstruction in hypertrophic cardiomyopathy: a quantitative 3D transthoracic echocardiographic study. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 141. Muraru D, Calore C, Badano LP, Melacini P, Mihaila S, Peluso D, Puma L, Kocabay G, Rizzon G, Iliceto S. Left ventricular outflow tract planimetry by 3D echocardiography predicts obstruction and heart failure symptoms in hypertrophic cardiomyopathy. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2) (selected for presentation during EuroEcho Highlights)
 142. Calore C, Muraru D, Badano LP, Melacini P, Mihaila S, Denas G, Naso P, Casablanca S, Santi F, Iliceto S. Relationship of 3D left ventricular mass with systolic and diastolic function indices in hypertrophic cardiomyopathy. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 143. Calore C, Muraru D, Melacini P, Badano LP, Mihaila S, Puma L, Peluso D, Casablanca S, Ortile A, Iliceto S. Left atrial longitudinal strain correlates better than its emptying fraction with left ventricular impairment in hypertrophic cardiomyopathy. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 144. Veronesi F, Muraru D, Addetia K, Corsi C, Lamberti C, Lang RM, Mor-Avi V, Badano LP. A novel tool to semi-automatically characterize tricuspid valve function and shape using transthoracic echocardiography. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 145. Miglioranza MH, Muraru D, Peluso D, Cucchini U, Mihaila S, Naso P, Puma L, Kocabay G, Badano LP. Two-dimensional assessment of tricuspid annulus dynamics and diameters: study for new reference values. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 146. Peluso D, Muraru D, Cucchini U, Mihaila S, Casablanca S, Pigatto E, Cozzi F, Punzi L, Badano LP, Iliceto S. Right heart function by 3D-echocardiography and 2D-speckle tracking in scleroderma patients in absence of pulmonary hypertension. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 147. Mihaila S, Muraru D, Piasentini E, Peluso D, Casablanca S, Naso P, Puma L, Iliceto S, Vinereanu D, Badano LP. Validation of a new, semiautomated software for quantitative assessment of the mitral annulus by three-dimensional echocardiography. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2)
 148. Mihaila S, Muraru D, Piasentini E, Peluso D, Casablanca S, Naso P, Puma L, Iliceto S, Vinereanu D, Badano LP. Static and dynamic analysis of the mitral valve annulus in normal subjects: a three-dimensional transthoracic echocardiography study. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2).
 149. Mihaila S, Piasentini E, Muraru D, Peluso D, Casablanca S, Naso P, Puma L, Iliceto S, Vinereanu D, Badano LP. Dynamic changes of mitral annular geometry during the cardiac cycle - a three-dimensional echo study in healthy volunteers. *Eur Heart J Cardiovasc Imaging* 2013;14 (Suppl 2).
 150. Muraru D, Gripari P, Esposito R, Tamborini G, Galderisi M, Ermacora D, Maffessanti F, Santoro C, Pepi M, Badano L. Reference values for right ventricular geometry and function by three-dimensional echocardiography. A multicenter study of a large cohort of healthy subjects. *Eur Heart J Cardiovasc Imaging* 2012; 13(suppl 1)
 151. Ippolito R, Gripari P, Muraru D, Esposito R, Kocabay G, Tamborini G, Galderisi M, Maffessanti F, Badano L, Pepi M. Age is an independent predictor of right ventricular geometry and function in males only. *Eur Heart J Cardiovasc Imaging* 2012; 13(suppl 1)
 152. Kocabay GK, Dal Bianco L, Muraru D, Peluso D, Segafredo B, Iliceto S, Badano L. Reference values for aortic diameters obtained using both inner-edge-to-inner-edge and leading-edge-to-leading-edge methods in 190 healthy subjects. *Eur Heart J Cardiovasc Imaging* 2012; 13(suppl 1)
 153. Muraru D, Calore C, Badano LP, Melacini P, Mihaila S, Casablanca S, Cucchini U, Miglioranza MH, Polo A, Iliceto S. Radial function correlates with heart failure symptoms in hypertrophic cardiomyopathy with normal ejection fraction. *Eur Heart J* 2013; 34 (suppl 1): doi:10.1093/eurheartj/eh307.P622
 154. Addetia K, Muraru D, Veronesi F, Corsi C, Mor-Avi V, Yamat M, Weinert L, Badano LP, Lang RM. Dynamic analysis of the normal tricuspid annulus using 3D echocardiography. *Circulation* 2013; 128:A14836
 155. Badano L, Maffessanti F, Muraru D, Gripari P, Esposito R, Galderisi M, Tamborini G, Santoro C, Ermacora D, Pepi M. Reference values for right ventricular geometry and function by 3D echocardiography: a multicenter study of 533 healthy subjects. *J Am Coll Cardiol* 2013; 61 (10-S) doi:10.1016/S0735-1097(13)60893-1
 156. Badano L, Muraru D, Zoppellaro G, Cucchini U, Ermacora D, De Lazzari M, Peluso D, Marra MP, Iliceto S. Predictive value of 2D and 3D deformation parameters and wall motion score to identify transmural myocardial necrosis in STEMI patients: a comparative study against CMR. *J Am Coll Cardiol*.2013;61(10_S): doi:10.1016/S0735-1097(13)61013-X.

157. Badano L, Peluso D, Muraru D, Dal Bianco L, Kovacs A, Iliceto S. Right atrial volumes and phasic functions by 3D echocardiography in healthy subjects. *J Am Coll Cardiol* 2013; 61 (10-S) doi:10.1016/S0735-1097(13)61101-8.
158. Maffessanti F, Muraru D, Esposito R, Tamborini G, Gripari P, Ermacora D, Santoro C, Galderisi M, Badano LP, Pepi M. Allometric normative equations for 3D right ventricular size and function: development and validation with equations derived using cardiac magnetic resonance. *Eur Heart J* 2013; 34 (Abstract Supplement), 685-686
159. Badano LP, Muraru D, Mihaila S, Miglioranza MH, Padayattil-Jose S, Ucci L, Dal Bianco L, Peluso D, Cucchini U, Iliceto S. Quantitative analysis of mitral valve geometry by transthoracic three-dimensional echocardiography: accuracy, feasibility, reproducibility and reference values. *Eur Heart J* 2013; 34 (suppl 1): doi:10.1093/eurheartj/eh311.5863
160. Ermacora D, Badano LP, Muraru D, Gentian D, Dal Bianco L, Casablanca S, Peluso D, Zoppellaro G, Cucchini U, Iliceto S. Reference values of right ventricular longitudinal strain by speckle tracking echocardiography in 219 healthy volunteers. *Eur Heart J* 2013; 34 (suppl 1): doi:10.1093/eurheartj/eh309.P3848
161. Kovacs A, Peluso D, Muraru D, Badano L, Casablanca S, Dal Bianco L, Zoppellaro G, Iliceto S. Shift in relative contribution of radial and longitudinal mechanics to right ventricular ejection fraction between normal subjects and patients with pulmonary hypertension. *Eur Heart J* 2013; 34 (suppl 1): doi:10.1093/eurheartj/eh307.P231
162. Peluso D, Muraru D, Cucchini U, Dal Bianco L, Pigatto E, Zanatta E, Punzi L, Cozzi F, Badano LP, Iliceto S. Right ventricular function by 3D-echocardiography and 2D-speckle tracking in scleroderma patients in absence of pulmonary hypertension. *Eur Heart J* 2013; 34 (suppl 1): doi:10.1093/eurheartj/eh308.P1181
163. Mihaila S, Muraru D, Casablanca S, Peluso D, Cucchini U, Dal Bianco L, Vinereanu D, Iliceto S, Badano LP. Three-dimensional changes in mitral valve annulus geometry in organic and functional mitral regurgitation: insights for mitral valve repair. *Eur Heart J* 2013; 34 (suppl 1): doi:10.1093/eurheartj/eh310.P4751
164. C. Ghingina, R. Enache, D. Muraru, BA Popescu, A. Calin, M. Rosca, C. Beladan, F. Purcarea. Presence of hypertension impacts left ventricular remodeling and function in patients with aortic regurgitation. A speckle-tracking echocardiography study. *Archives of Cardiovascular Diseases Supplements* 2013; 5: 33
165. Muraru D, Napodano M, Badano L, Tarantini G, Sarais C, Kocabay G, Isabella G, D'Onofrio A, Gerosa G, Iliceto S. Novel three-dimensional transoesophageal echocardiography platform allows a fast and accurate assessment of aortic annulus size and shape before transcatheter aortic valve implantation. *Eur Heart J Cardiovasc Imaging* 2012; 13(suppl 1):i38-i39
166. Muraru D, Cattarina M, Dal Bianco L, Peluso D, Zoppellaro G, Segafredo B, Calore C, Cucchini U, Iliceto S, Badano LP. Quantitative analysis of mitral valve geometry by transthoracic three-dimensional echocardiography: reference values, feasibility and reproducibility. *Eur Heart J Cardiovasc Imaging* 2012; 13(suppl 1)
167. Muraru D, Gripari P, Esposito R, Tamborini G, Galderisi M, Ermacora D, Maffessanti F, Santoro C, Pepi M, Badano L. Reference values for right ventricular geometry and function by three-dimensional echocardiography. A multicenter study of a large cohort of healthy subjects. *Eur Heart J Cardiovasc Imaging* 2012; 13(suppl 1)
168. Ippolito R, Gripari P, Muraru D, Esposito R, Kocabay G, Tamborini G, Galderisi M, Maffessanti F, Badano L, Pepi M. Age is an independent predictor of right ventricular geometry and function in males only. *Eur Heart J Cardiovasc Imaging* 2012; 13(suppl 1)
169. Kocabay GK, Dal Bianco L, Muraru D, Peluso D, Segafredo B, Iliceto S, Badano L. Reference values for aortic diameters obtained using both inner-edge-to-inner-edge and leading-edge-to-leading-edge methods in 190 healthy subjects. *Eur Heart J Cardiovasc Imaging* 2012; 13(suppl 1)
170. Muraru D, Badano LP, Ermacora D, Bellu R, De Lazzari M, Marra MP, Dal Bianco L, Peluso D, Bocalini F, Iliceto S. Two-dimensional longitudinal strain is more accurate than three-dimensional longitudinal strain to identify infarcted LV segments in STEMI patients. *Eur Heart J* 2012; 33 (Abstract Supplement), 672-673
171. Muraru D, Badano LP, Bellu R, Ermacora D, De Lazzari M, Marra MP, Dal Bianco L, Peluso D, Cucchini U, Iliceto S. Predictive value of 2D/3D deformation parameters and 3D wall motion score to identify transmural myocardial necrosis in STEMI patients: a comparative study against cardiac magnetic resonance. *Eur Heart J* 2012; 33 (Abstract Supplement), 159 (selected for presentation during ESC Highlights)
172. Muraru D, Badano LP, Ermacora D, Bellu R, De Lazzari M, Marra MP, Dal Bianco L, Peluso D, Cucchini U, Iliceto S. Two-dimensional vs three-dimensional deformation parameters to estimate infarct size and

- global left ventricular function after STEMI: which parameter is better? *Eur Heart J* 2012; 33 (Abstract Supplement), 167-168
173. Enache R, Muraru D, Piazza R, Popescu BA, Purcarea F, Calin A, Beladan CC, Rosca M, Nicolosi GL, Gingham C. Left ventricular shape and mass impact apical rotation in patients with aortic regurgitation. A speckle-tracking echocardiography study. *Eur Heart J* 2012; 33 (Abstract Supplement), 31
 174. Muraru D, Peluso D, Dal Bianco L, Beraldo M, Solda' E, Tuveri MF, Cucchini U, Al Mamary A, Badano LP, Iliceto S. Effect of ageing on left atrial geometry and function assessed by three-dimensional echocardiography. *Eur J Echocardiogr* 2011;12(Suppl 2):ii91 (P648)
 175. Muraru D, Peluso D, Dal Bianco L, Beraldo M, Solda' E, Tuveri MF, Cucchini U, Al Mamary A, Badano LP, Iliceto S. Single-plane and biplane 2D algorithms and non-atrial specific 3D echo softwares underestimate left atrial volumes in comparison with specific 3D echo software tailored for left atrium. *Eur J Echocardiogr* 2011;12(Suppl 2):ii50 (P391)
 176. Maffessanti F, Caiani E, Muraru D, Tuveri F, Dal Bianco L, Badano LP. Left atrial shape evaluation based on endocardial surfaces obtained by 3D echocardiography. *Eur J Echocardiogr* 2011;12(Suppl 2):ii15 (P260)
 177. Peluso D, Muraru D, Dal Bianco L, Beraldo M, Solda' E, Tuveri MF, Cucchini U, Al Mamary A, Badano LP, Iliceto S. Comprehensive assessment of right atrial volume and function in healthy subjects using two-dimensional and speckle-tracking echocardiography. *Eur J Echocardiogr* 2011;12(Suppl 2):ii126 (P777)
 178. Enache R, Piazza R, Muraru D, Roman-Pognuz A, Calin A, Popescu BA, Purcarea F, Leiball E, Gingham C, Nicolosi GL. Assessment of left ventricular untwisting by speckle-tracking echocardiography in patients with aortic regurgitation. *Eur Heart J* 2011; 32(Abstr suppl): 203 (P1416)
 179. Muraru D, Beraldo M, Solda' E, Cucchini U, Peluso D, Tuveri MF, Al Mamary A, Badano LP, Iliceto S. Global 3D circumferential strain is related to infarct size and transmural extent of myocardial necrosis in patients with successfully reperfused STEMI. *Eur J Echocardiogr* 2011;12(Suppl 2):ii21 (P283)
 180. Muraru D, Dal Bianco L, Solda' E, Cucchini U, Peluso D, Tuveri MF, Al Mamary A, Badano LP, Iliceto S. Comprehensive assessment of left ventricular geometry and function in healthy subjects using three-dimensional echocardiography. *Eur J Echocardiogr* 2011;12(Suppl 2):ii36 (P344)
 181. Muraru D, Beraldo M, Solda' E, Ermacora D, Cucchini U, Dal Bianco L, Peluso D, De Lazzari M, Badano LP, Iliceto S D. 3D echocardiography is a valuable clinical tool to identify global left ventricular remodeling and myocardial dysfunction early after STEMI. *Eur J Echocardiogr* 2011;12(Suppl 2):ii56 (P418)
 182. Cucchini U, Muraru D, Badano LP, Solda' E, Tuveri MF, Al Nono O, Sarais C, Iliceto S. 3D strain parameters are highly accurate in identifying global left ventricular systolic dysfunction in ischemic heart disease. *Eur J Echocardiogr* 2011;12(Suppl 2):ii166 (P964)
 183. Muraru D, Dal Bianco L, Beraldo M, Solda' E, Cucchini U, Peluso D, Tuveri MF, Al Mamary A, Badano LP, Iliceto S. Reference ranges for the various components of left ventricular myocardial deformation assessed by 3D speckle-tracking, and comparison with 2D speckle-tracking. *Eur J Echocardiogr* 2011;12(Suppl 2):ii 181 (P1020)
 184. Enache R, Muraru D, Piazza R, Roman-Pognuz A, Popescu BA, Calin A, Beladan C, Purcarea F, Nicolosi GL, Gingham C. Left ventricular mechanics in patients with aortic regurgitation. A speckle-tracking echocardiography study. *Eur J Echocardiogr* 2011;12(Suppl 2):ii59 (P427)
 185. Muraru D, Cucchini U, Badano LP, Solda' E, Tuveri F, Al Nono O, Sarais C, Iliceto S. Inconsistency of 3D strain measurements between vendors. *Eur Heart J* 2011; 32(Abstr suppl): 205-6 (P1424)
 186. Muraru D, Cucchini U, Badano LP, Solda' E, Tuveri F, Al Nono O, Sarais C, Iliceto S. Different vendors show comparably high reproducibility of 3D strain measurements except for radial strain. *Eur Heart J* 2011; 32(Abstr suppl): 205 (P1423)
 187. Muraru D, Cucchini U, Badano LP, Solda' E, Tuveri F, Al Nono O, Sarais C, Iliceto S. Global area strain is a new and robust parameter to characterize left ventricular systolic function by three-dimensional speckle-tracking echocardiography. *Eur Heart J* 2011; 32(Abstr suppl): 207 (P1430)
 188. Solda' E, Muraru D, Badano LP, Perazzolo Marra M, De Lazzari M, Cucchini U, Ermacora D, Sarais C, Iliceto S. 3D speckle tracking does not allow to characterize transmural extent of myocardial necrosis in individual left ventricular segments. *Eur Heart J* 2011; 32(Abstr suppl): 1055 (P5634)
 189. Calin A, Popescu BA, Beladan C, Rosca M, Muraru D, Lupascu L, Calin C, Jurcut R, Sandu C, Gingham C. The impact of increased global left ventricular afterload on left ventricular torsion and untwisting in patients with severe aortic stenosis. *Eur J Echocardiogr* 2010;11 (Suppl 2):ii76
 190. Beladan C, Calin A, Rosca M, Popescu BA, Muraru D, Voinea F, Popa E, Matei F, Curea F, Gingham C. Changes in left atrial function are related to the type rather than the extent of left ventricular hypertrophy in patients with hypertension, aortic stenosis and hypertrophic cardiomyopathy. *Eur J Echocardiogr* 2010;11 (Suppl 2):ii25

191. Piazza R, Enache R, Roman-Pognuz A, Muraru D, Popescu BA, Leiballi E, Pecoraro R, Antonini-Canterin F, Gingham C, Nicolosi GL. Left ventricular torsion in patients with aortic regurgitation. A speckle-tracking echocardiography study. *Eur J Echocardiogr* 2010;11 (Suppl 2):ii33
192. Rosca M, O'Connor K, Romano G, Magne J, Calin A, Popescu BA, Muraru D, Pierard L, Gingham C, Lancellotti P. Relationship between aortic stiffness and left atrial function in severe aortic stenosis. *Eur J Echocardiogr* 2010;11 (Suppl 2):ii63
193. Muraru D, Badano LP, Cardillo M, Del Mestre L, Gianfagna P, Proclemer A. Three-dimensional myocardial strain to assess global left ventricular function. A feasibility study and comparison with 2D speckle tracking. *Eur J Echocardiogr* 2010;11 (Suppl 2):ii73
194. Enache R, Piazza R, Muraru D, Roman-Pognuz A, Popescu BA, Calin A, Leiballi E, Antonini-Canterin F, Gingham C, Nicolosi GL. Assessment of left ventricular untwisting and its relationship with parameters of left ventricular diastolic function in patients with aortic regurgitation. *Eur J Echocardiogr* 2010;11 (Suppl 2):ii97
195. Muraru D, Badano LP, Gianfagna P, Ermacora D, Proclemer P. Sources of variation and bias in assessing left ventricular dyssynchrony using three-dimensional echocardiography. *Eur Heart J* 2010;04941
196. Muraru D, Badano LP, Gianfagna P, Ermacora D, Proclemer P. Technical factors affecting the assessment of left ventricular volumes using three-dimensional echocardiography. *Eur Heart J* 2010; P4895
197. Muraru D, Badano LP, Faggiano P, Gianfagna P, Ermacora D, Proclemer A. Indexing effective orifice area by body surface area does not improve assessment of aortic stenosis severity in adults. *Eur Heart J* 2010; P5277
198. Beladan CC, Popescu BA, Calin A, Rosca M, Moise B, Voinea F, Enache R, Muraru D, Jurcut R, Gingham C. Ventricular-arterial coupling and left ventricular torsional dynamics in hypertensive heart disease. *Eur Heart J* 2010; P665
199. Beladan CC, Calin A, Popescu BA, Rosca M, Muraru D, Constantin L, Dima L, Antohi L, Antonini-Canterin F, Gingham C. Serum carbohydrate antigen 125 in patients with severe aortic stenosis and preserved ejection fraction. *Eur Heart J* 2010; P809
200. Rosca M, Calin A, Popescu BA, Beladan CC, Floares E, Muraru D, Jurcut R, Vriza O, Antonini-Canterin F, Gingham C. Arterial stiffness and its relationship with left ventricular function in patients with hypertrophic cardiomyopathy. *Eur Heart J* 2010; P2066
201. Rosca M, Popescu BA, Beladan CC, Calin A, Floares E, Muraru D, Enache R, Ghionea M, Coman IM, Gingham C. Relationship of left atrial myocardial deformation with left ventricular deformation and clinical status in patients with hypertrophic cardiomyopathy. *Eur Heart J* 2010; P2073
202. Piazza R, Enache R, Pognuz AR, Muraru D, Popescu BA, Pecoraro R, Leiballi E, Andriani C, Antonini-Canterin F, Cervesato E, Gingham C, Nicolosi GL. Correlates of apical rotation in patients with aortic regurgitation. A speckle-tracking echocardiography study. *Eur Heart J* 2010; P5728
203. Miani D, Muraru D, Grillo MT, Onut R, Ermacora D, Gianfagna P, Badano L. Three-dimensional echocardiography to assess right ventricular size and function. Validation against magnetic resonance, two-dimensional and M-mode measurements. *Eur J Heart Fail* 2010;9(S1):905
204. Miani D, Onut R, Muraru D, Ermacora D, Grillo MT, Gianfagna P, Badano L. Left ventricular end-ejection and not end-systolic indexes predict postoperative left ventricular function after mitral valve repair. *Eur J Heart Fail* 2010;9(S1):316
205. Muraru D, Badano LP, Del Mestre L, Ermacora D, Gianfagna P, Proclemer A. Third-generation full-volume three-dimensional stress echocardiography to assess inducible myocardial ischemia. *J Am Soc Echocardiogr* 2010; 23: B44-5
206. Muraru D, Badano LP, Faggiano P, Gianfagna P, Del Mestre, Proclemer A. Indexing effective orifice area by body surface area does not improve assessment of aortic stenosis severity. *J Am Soc Echocardiogr* 2010; 23: B73-4
207. Muraru D, Badano LP, Del Mestre L, Ermacora D, Gianfagna P, Proclemer A. Technical factors affecting the assessment of left ventricular volumes using three-dimensional echocardiography. *J Am Soc Echocardiogr* 2010; 23: B62
208. Muraru D, Badano LP, Ermacora D, Grillo MT, Gianfagna P, Fioretti PM. Impact of temporal resolution of the full-volume data set in assessing left ventricular dyssynchrony using real-time three-dimensional echocardiography. *Eur J Echocardiogr* 2009;20 (Suppl 2):S157
209. Muraru D, Badano LP, Ermacora D, Grillo MT, Gianfagna P, Fioretti PM. Influence of contour detection sensitivity on the accuracy of semi-automated 4D LV function software: comparison against cardiac magnetic resonance. *Eur J Echocardiogr* 2009;20 (Suppl 2):S153
210. Onut R, Badano LP, Muraru D, Ermacora D, Grillo MT, Gianfagna P, Fioretti PM. Left ventricular end-systolic or end-ejection indexes: how to predict postoperative left ventricular function after mitral valve repair? *Eur J Echocardiogr* 2009;20 (Suppl 2):S85

211. Calin A, Popescu BA, Beladan C, Rosca M, Muraru D, Antonini-Canterin F, Nicolosi GL, Gingham C. Relationship of left atrial myocardial deformation with left ventricular filling pressures in patients with severe aortic stenosis. *Eur J Echocardiogr* 2009;20 (Suppl 2):S9
212. Beladan CC, Rosca M, Popescu BA, Calin A, Muraru D, Floares E, Moise B, Gingham C. Relationship between changes in left atrial strain and left ventricular torsional dynamics in patients with hypertension and mild diastolic dysfunction. *Eur J Echocardiogr* 2009;20 (Suppl 2):S5
213. Beladan CC, Calin A, Popescu BA, Rosca M, Muraru D, Antonini-Canterin F, Nicolosi GL, Gingham C. The influence of valvulo-arterial impedance on left ventricular torsional dynamics in patients with severe aortic stenosis and preserved ejection fraction. *Eur J Echocardiogr* 2009;20 (Suppl 2):S164
214. Badano L, Muraru D, Onut R, Ermacora D, Grillo MT, Zakja E, Gianfagna P, Fioretti PM. Impact of time resolution of the full-volume data set in assessing left ventricular dyssynchrony using real-time three-dimensional echocardiography. *Eur Heart J* 2009;30 (1):571
215. Badano L, Zakja E, Grillo MT, Onut R, Muraru D, Ermacora D, Gianfagna P, Fioretti PM. Measurement of right ventricular size and function by real-time three-dimensional echocardiography: validation against magnetic resonance and comparison with two-dimensional and M-mode measurements. *Eur Heart J* 2009;30 (1): 116
216. Calin A, Beladan CC, Popescu BA, Rosca M, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Gingham C. Left ventricular torsion in patients with aortic stenosis, normal ejection fraction and diastolic dysfunction. *Eur Heart J* 2009;30:455
217. Popescu BA, Beladan CC, Calin A, Muraru D, Deleanu D, Gingham C. Reversed apical rotation as a marker of disease severity in dilated cardiomyopathy. *Eur J Heart Fail Suppl* 2009;8(2):33
218. Popescu BA, Muraru D, Teodorescu A, Beladan CC, Savu O, Hirsu M, Gingham C - Relationship of age-related changes in left atrial strain with left ventricular untwisting: a speckle-tracking echocardiography study in normal subjects. *J Am Coll Cardiol* 2009 (March 10, Abstr Suppl); 238. ISSN: 0735-1097
219. Muraru D, Popescu BA, Teodorescu A, Beladan CC, Savu O, Gingham C. Differences in timing of peak apical and basal rotation: a possible mechanism for early alterations in left ventricular mechanics. *Eur J Echocardiogr* 2008;9 (Suppl 1):S116.
220. Teodorescu A, Popescu BA, Beladan CC, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Gingham C. The relationship between left ventricular untwisting and parameters of diastolic function and filling pressures in patients with aortic stenosis. *Eur J Echocardiogr* 2008;9 (Suppl 1):S1.
221. Popescu BA, Beladan CC, Teodorescu A, Muraru D, Hirsu M, Gingham C. Left ventricular apex rotation and inflow dynamics: a speckle-tracking echocardiography study in normal subjects. *Eur J Echocardiogr* 2008;9 (Suppl 1):S81.
222. Revnic C, Craciunescu IS, Serban M, Iancu M, Muraru D, Jurcut R, Popescu BA, Gingham C. Subclinical changes in myocardial deformation associated with serum levels of BNP. *Eur J Echocardiogr* 2008;9 (Suppl 1):S118. ISSN 1525-2167
223. Popescu BA, Muraru D, Teodorescu A, Beladan CC, Hirsu M, Savu O, Gingham C - Relationship of left atrial strain with left ventricular torsion and untwisting. A speckle-tracking echocardiography study in normal subjects. *Eur J Echocardiogr* 2008;9 (Suppl 1):S57.
224. Beladan CC, Popescu BA, Teodorescu A, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Gingham C. Heterogeneity of left ventricular rotational dynamics in patients with non-ischemic dilated cardiomyopathy. *Eur J Echocardiogr* 2008;9 (Suppl 1) S94.
225. Popescu BA, Beladan CC, Teodorescu A, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Gingham C. Left ventricular rotation and torsion in patients with dilated cardiomyopathy: could left ventricular remodeling explain changes in torsional dynamics? *Eur J Echocardiogr* 2008;9 (Suppl 1):S94.
226. Craciunescu I.S, Serban M, Popescu BA, Beladan CC, Teodorescu A, Muraru D, Iancu M, Gingham C. Interobserver variability of strain and strain rate: poor agreement of echographic measures in apical ischemic myocardial segments. *Eur J Echocardiogr* 2008;9 (Suppl 1):S23.
227. Iancu M, Serban M, Craciunescu IS, Muraru D, Revnic C, Uscatescu V, Popescu BA, Gingham C. Strain rate imaging for characterization of left ventricular function in patients with previous myocardial infarction. *Eur J Echocardiogr* 2008;9 (Suppl 1):S179.
228. Craciunescu IS, Iancu M, Serban M, Revnic C, Muraru D, Uscatescu V, Craciunescu A, Gingham C. Evaluation of left ventricular performance with 2D-strain in patients with coronary artery disease and normal systolic function. *Eur J Echocardiogr* 2008;9 (Suppl 1):S18.
229. Serban M, Craciunescu IS, Iancu M, Revnic C, Muraru D, Ghiorghiu I, Craciunescu A, Gingham C. Changes in myocardial deformation in non-infarcted segments post myocardial infarction. *Eur J Echocardiogr* 2008;9 (Suppl 1):S184.

230. Popescu BA, Muraru D, Teodorescu A, Beladan CC, Hîrșu M, Ginghină C. Left ventricular torsion: an important mechanism for maintaining normal filling pressures. A speckle tracking echocardiography study in normal subjects. *J Am Coll Cardiol* 2008;51:A80(abstr).
231. Popescu BA, Muraru D, Teodorescu A, Beladan CC, Hîrșu M, Ginghină C. Left ventricular torsion: an important mechanism for maintaining normal filling pressures. A speckle tracking echocardiography study in normal subjects. *Eur J Echocardiogr* 2007; 8, Suppl 1:S2 (abstr).
232. Popescu BA, Teodorescu A, Beladan CC, Muraru D, Popescu AC, Antonini-Canterin F, Nicolosi GL, Ginghină C. Changes in left ventricular rotation and torsion in patients with aortic stenosis. A speckle tracking echocardiography study. *Eur J Echocardiogr* 2007; 8, Suppl 1:S2 (abstr).
233. Beladan CC, Popescu BA, Teodorescu A, Muraru D, Popescu AC, Antonini-Canterin F, Nicolosi GL, Ginghină C. Left ventricular torsion: a compensatory mechanism for maintaining a normal left ventricular ejection fraction in patients with moderate-severe aortic stenosis. *Eur J Echocardiogr* 2007; 8, Suppl 1:S8 (abstr).

Abstracts presented at national congresses:

1. Giorgio Oliverio, Michele Tomaselli, Denisa Muraru, Alexandra Clement, Marco Penso, Francesca Heilbron, Noela Radu, Francesco Paolo Perelli, Andrea Cascella, Mara Gavazzoni, Alessandra Rota, Antonio Sorropago, Paolo Springhetti, Sergio Caravita, Claudia Baratto, Samantha Fisicaro, Gianfranco Parati, Luigi Paolo Badano. The prognostic importance of the presence of multiple severity criteria at the echocardiographic evaluation of secondary tricuspid regurgitation. Abstract 84° Congresso Società Italiana di Cardiologia 2023
2. Michele Tomaselli, Denisa Muraru, Alexandra Clement, Marco Penso, Noela Radu, Francesco P. Perelli, Andrea Cascella, Mara Gavazzoni, Antonio Sorropago, Sergio Caravita, Claudia Baratto, Samantha Fisicaro, Gianfranco Parati, Luigi P. Badano. The prognostic impact of right ventricular function and right ventricular-to-pulmonary artery coupling in patients with low-risk secondary tricuspid regurgitation. Abstract 84° Congresso Società Italiana di Cardiologia 2023
3. Mara Gavazzoni, Andrea Cascella, Marco Penso, Giordano Maria Pugliesi, Alexandra Clement (4), Michele Tomaselli, Francesca Heilbron, Giorgio Oliverio, Sergio Caravita, Claudia Baratto, Samantha Fisicaro, Gianfranco Parati, Cristina Giannattasio, Luigi Paolo Badano, Denisa Muraru. In patients with secondary tricuspid regurgitation the use of the conventional apical 4-chamber view underestimates the right atrial volumes calculated by two-dimensional echocardiography. Abstract 84° Congresso Società Italiana di Cardiologia 2023
4. Alexandra Clement, Michele Tomaselli, Luigi P. Badano, Mara Gavazzoni, Andrea Cascella, Diana R, Handareanu, Noela Radu, Samantha Fisicaro, Marco Penso, Sergio Caravita, Claudia Baratto, Denisa Muraru. Correcting the right ventricular ejection fraction by the volume overload improves the association with outcome in patients with secondary tricuspid regurgitation. Abstract 84° Congresso Società Italiana di Cardiologia 2023
5. Fisicaro Samantha, Alexandra Clement, Michele Tomaselli, Marco Penso, Alessandra Rota, Alessandro Menna, Luigi P. Badano, Denisa Muraru. Timing and patients' position during cuff blood pressure measurement affect myocardial work parameters measured by echocardiography. Abstract 84° Congresso Società Italiana di Cardiologia 2023
6. Michele Tomaselli, Luigi Paolo Badano, Francesco Paolo Perelli, Noela Radu, Giorgio Oliverio, Heilbron Francesca, Davide Stucchi, Cinzia Pece, Virginia Camponetti, Andrea Cascella, Sergio Caravita, Claudia Baratto, Francesca Ciambellotti, Gianfranco Parati, Mara Gavazzoni, Denisa Muraru 227. The Prognostic Value of Right Atrial Strain in Patients With Secondary Tricuspid Regurgitation. *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, suac121.238, <https://doi.org/10.1093/eurheartjsupp/suac121.238>
7. Sergio Caravita, Claudia Baratto, Aurora Filippo, Davide Soranna, Giovanni Battista Perego, Denisa Muraru, Luigi P Badano, Gianfranco Parati, 1017 Clinical and hemodynamic characteristics associated with latent pulmonary vascular disease in heart failure with preserved left ventricular ejection fraction, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, suac121.255, <https://doi.org/10.1093/eurheartjsupp/suac121.255>
8. Michele Tomaselli, Vincenzo Cannone, Denisa Muraru, Giorgio Oliverio, Mara Gavazzoni, Francesca Heilbron, Noela Radu, Francesco Perelli, Davide Stucchi, Cinzia Pece, Virginia Camponetti, Salvatore Rizzo, Giovanni Battista Perego, Sergio Caravita, Claudia Baratto, Gianfranco Parati, Francesco Brasca, Luigi Paolo Badano, 511. Incremental Value of Right Atrial Strain Analysis to Predict Atrial Fibrillation

- Recurrence After Cardioversion. *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, <https://doi.org/10.1093/eurheartjsupp/suac121.239>
9. Michele Tomaselli, Emanuele Curti, Noela Radu, Francesco Perelli, Andrea Cascella, Davide Stucchi, Cinzia Pece, Virginia Camponetti, Giorgio Oliverio, Francesca Ciambellotti, Mara Gavazzoni, Francesca Heilbron, Sergio Caravita, Claudia Baratto, Gianfranco Parati, Denisa Muraru, Luigi Paolo Badano, 843. Quantification of Ventricular Functional Mitral Regurgitation Using the Volumetric Method by 3D-Echocardiography, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, <https://doi.org/10.1093/eurheartjsupp/suac121.241>
 10. Samantha Fisicaro, Denisa Muraru, Sorina Mihaila Baldea, Davide Genovese, Michele Tomaselli, Francesca Heilbron, Mara Gavazzoni, Noela Radu, Sergio Caravita, Claudia Baratto, Francesco Paolo Perelli, Emanuele Curti, Gianfranco Parati, Luigi Paolo Badano, 920 Association of outcome with left ventricular volumes and ejection fraction measured with two-and three-dimensional echocardiography in patients referred for routine, clinically indicated studies, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, <https://doi.org/10.1093/eurheartjsupp/suac121.242>
 11. Mara Gavazzoni, Francesca Heilbron, Diana Florescu, Pellegrino Ciampi, Andrada C Guta, Roberto Ochoa, Michele Tomaselli, Valentina Volpato, Giorgio Oliverio, Sergio Caravita, Gianfranco Parati, Denisa Muraru, Luigi Badano, 144 Atrial and ventricular phenotypes in a cohort of patients with functional tricuspid regurgitation: clinical, echocardiographic, and prognostic aspects. *European Heart Journal Supplements*, Volume 23, Issue Supplement_G, December 2021, suab132.024, <https://doi.org/10.1093/eurheartj/suab132.024>
 12. Claudia Baratto, Sergio Caravita, Giorgia Corbetta, Davide Soranna, Antonella Zambon, Gianfranco Parati, Luigi P Badano, Denisa Muraru, 588 Exploring the impact of severe secondary tricuspid regurgitation on rest and exercise hemodynamics of patients with heart failure and a preserved left ventricular ejection fraction, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, suac121.423, <https://doi.org/10.1093/eurheartjsupp/suac121.423>
 13. Andrea Cascella, Mara Gavazzoni, Denisa Muraru, Francesca Heilbron, Sergio Caravita, Michele Tomaselli, Gianfranco Parati, Luigi Paolo Badano, 394 Prognostic power of a new index of rightventricle-pulmonary artery coupling based on right ventricular volumes in patients with secondary tricuspid regurgitation, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, suac121.167, <https://doi.org/10.1093/eurheartjsupp/suac121.167>
 14. Cinzia Pece, Michele Tomaselli, Noela Radu, Francesco Perelli, Giuseppe Muscogiuri, Silvia Castelletti, Camilla Torlasco, Oliverio Giorgio, Francesca Heilbron, Valeria Rella, Mara Gavazzoni, Sergio Caravita, Claudia Baratto, Gianfranco Parati, Denisa Muraru, Lia Crotti, Luigi Paolo Badano, 517 Right atrial thrombus in a patient with cardiac amyloidosis: a multimodality imaging approach, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, suac121.240, <https://doi.org/10.1093/eurheartjsupp/suac121.240>
 15. Muraru D, Aruta P, Rodriguez-Zanella H, Boccalini F, Secco E, Tenaglia R, Sammarco G, Cavalli G, Palermo C, Guta A, Bertaglia M, Migliore F, Iliceto S, Badano LP. In pazienti con cardiopatia organica, la dispersione temporale della deformazione longitudinale segmentaria del ventricolo sinistro è un predittore di aritmie ventricolari maggiori più potente e accurato della frazione d'eiezione del ventricolo sinistro. 49° Congresso Nazionale ANMCO, 31 maggio-2 giugno 2018
 16. Muraru D, Nagata Y, Surkova E, Genovese D, Azzolina D, Iliceto S, Takeuchi M, Badano LP. Sviluppo e validazione prognostica dei valori soglia per la gradazione della gravità della disfunzione di pompa del ventricolo destro con ecocardiografia tridimensionale. 49° Congresso Nazionale ANMCO, 31 maggio-2 giugno 2018
 17. Ermacora D, Miglioranza-Haertel M, Muraru D, Mihaila S, Cucchini U, Marotta C, Calabrò F, Brunello G, Cecchetto A, Cavalli G, Romeo G, Iliceto S, Badano LP. Left atrial volumes measured with 3D echocardiography are significantly larger than those calculated with 2D echocardiography and need different normative values (Best abstract presentation award). XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/COMUNICAZIONI%20ORALI/01%20-%20I%20MIGLIORI%20ABSTRACT%20DEL%20CONGRESSO%202015/03.pdf>
 18. Ermacora D, Calabrò F, Brunello G, Cecchetto A, Muraru D, Sambugaro F, Palermo C, Badano LP. Multimodality imaging of a floating mass in ascending aorta. Role of three-dimensional echocardiography. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/COMUNICAZIONI%20ORALI/03%20-%20I%20MIGLIORI%20CASI%20CLINICI%20DEL%20CONGRESSO/09.pdf>
 19. Muraru D, Veronesi F, Dequal D, Maddalozzo A, Addetia K, Romeo G, Lang RM, Badano LP. 3D printing of the tricuspid valve obtained from a three-dimensional echocardiography data set acquired from

- transthoracic approach. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/COMUNICAZIONI%20ORALI/05%20-%20L'IMAGING%20NELLO%20STUDIO%20DELLE%20VALVOLE%20E%20DELL'AORTA/05.pdf>
20. Calabrò F, Muraru D, Zoppellaro G, Ermacora D, Marotta C, Brunello G, Mihaila S, Peluso D, Romeo G, Iliceto S, Badano LP. Reference values of left ventricular mechanics by 3D echocardiography using a vendor-independent software for quantitative analysis. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/COMUNICAZIONI%20ORALI/02%20-%20INNOVAZIONI%20NELLO%20STUDIO%20DELLA%20FUNZIONE%20CARDIACA%20DESTRA/05.pdf>
 21. Marotta C, Mihaila S, Piasentini E, Muraru D, Miglioranza-Haertel M, Aruta P, Cavalli G, Casablanca S, Ermacora D, Brunello G, Calabrò F, Iliceto S, Badano LP. Mitral annulus remodeling and dysfunction in patients with mild to severe organic mitral regurgitation. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/COMUNICAZIONI%20ORALI/05%20-%20L'IMAGING%20NELLO%20STUDIO%20DELLE%20VALVOLE%20E%20DELL'AORTA/10.pdf>
 22. Maddalozzo A, Aruta P, Cavalli G, Miglioranza-Haertel M, Romeo G, Muraru D, Arcidiacono AA, Mihaila S, Badano LP. Relationship between the severity of the regurgitation and the geometry of the tricuspid annulus in patients with functional tricuspid regurgitation. A 3D echocardiography study XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER%20MODERATI/01%20-%20STRESS,%203D,%20AORTA%20ED%20EMERGENZE/PM10.pdf>
 23. Brunello G, Muraru D, Zoppellaro G, Ermacora D, Calabrò F, Marotta C, Cecchetto A, Romeo G, Iliceto S, Badano LP. Do a vendor specific-specific and a vendor-independent software for 3D echocardiography analysis provide similar values for left ventricular volumes and ejection fraction? XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER%20MODERATI/01%20-%20STRESS,%203D,%20AORTA%20ED%20EMERGENZE/PM11.pdf>
 24. Muraru D, Borile G, Damonte F, Palermo C, Iliceto S, Badano LP. Implementation of proprietary plug-ins in the DICOM-based computerized echo reporting software package fuels the use of 3D echocardiography and deformation imaging in the clinical routine of a multi-vendor high-volume echocardiography laboratory. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER%20MODERATI/01%20-%20STRESS,%203D,%20AORTA%20ED%20EMERGENZE/PM12.pdf>
 25. Ermacora D, Zilio F, Perez-Salum JF, Muraru D, Marotta C, Calabrò F, Brunello G, Arcidiacono AA, Iliceto S, Badano LP. Clinical relevance and proposal of diagnostic criteria for degenerative mitral stenosis. A relatively unknown and not yet defined heart valve disease. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER%20MODERATI/03%20-%20CASI%20CLINICI%20INTERESSANTI/PM44.pdf>
 26. Calabrò F, Ermacora D, Brunello G, Marotta P, Aruta P, Sambugaro F, Perazzolo-Marra M, Iliceto S, Badano LP. Colon adenocarcinoma metastasis localized on the right ventricular free wall. The added value of multimodality cardiovascular imaging. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER/SESSIONE%201/P9.pdf>
 27. Cavalli G, Muraru D, Aruta P, Miglioranza-Haertel M, Addetia K, Maddalozzo A, Jenei C, Veronesi F, Lang RM, Badano LP. In patients with functional tricuspid regurgitation, tricuspid annulus size by 3D echocardiography is closely related to right heart chamber volumes. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER/SESSIONE%202/P44.pdf>
 28. Maddalozzo A, Aruta P, Cavalli G, Miglioranza-Haertel M, Cecchetto A, Muraru D, Spadotto V, Mihaila S, Badano LP. Three-dimensional tricuspid annulus surface area is a better predictor of functional tricuspid regurgitation severity than conventional two-dimensional echocardiography diameters. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER/SESSIONE%202/P46.pdf>
 29. Muraru D, Jenei C, Veronesi F, Cavalli G, Aruta P, Maddalozzo A, Iliceto S, Badano LP. Physiologic determinants of the tricuspid annulus area. A three-dimensional echocardiography study in healthy volunteers. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER/SESSIONE%202/P49.pdf>
 30. Muraru D, Addetia K, Jenei C, Cavalli G, Veronesi F, Mor-Avi V, Iliceto S, Badano LP. Transthoracic 3D

- echocardiography analysis of the tricuspid annulus allows to assess normal dynamics of the tricuspid valve throughout the cardiac cycle. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER/SESSIONE%202/P50.pdf>
31. Romeo G, Muraru D, Beltrame V, Napodano M, Aruta P, Covolo E, Rubino M, Iliceto S, Badano LP. Pseudoaneurysm of the left ventricle after transapical transcatheter aortic valve replacement. Multimodality approach with 3D echocardiography and angio-CT for diagnosis and management XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER/SESSIONE%202/P47.pdf>
 32. Marotta C, Mihaila S, Muraru D, Piasentini E, Aruta P, Ermacora D, Calabrò F, Brunello G, Cavalli G, Casablanca S, Peluso D, Iliceto S, Vinereanu D, Badano LP. Three-dimensional changes of the mitral annulus geometry and dynamics in patients with functional mitral regurgitation: insights for mitral valve repair. XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli
<http://www.oic.it/siec2015/documenti/abstract/POSTER/SESSIONE%203/P65.pdf>
 33. Mihaila S, Muraru D, Miglioranza MH, Peluso D, Casablanca S, Puma L, Naso P, Iliceto S, Vinereanu D, Badano L. Alterações Dinâmicas na Geometria Anular Mitral Durante o Ciclo Cardíaco: Estudo Ecocardiográfico 3D em Voluntários Normais. Arq Bras Cardiol: imagem cardiovasc 2014; 28(2): 109-116. Poster 030
 34. Peluso D, Miglioranza M, Pigatto E, Cozzi F, Puma L, Piasentini E, Cucchini U, Muraru D, Badano L, Iliceto S. Comprometimento Miocárdico Ventricular Esquerdo Subclínico na Esclerose Sistêmica. Arq Bras Cardiol: imagem cardiovasc 2014; 28(2): 109-116. Poster 028
 35. Muraru D, Badano L, Miglioranza M, Calore C, Melacini C, Mihaila S, Peluso D, Puma L, Rizzon G, Iliceto S. Planimetria do Trato de Saída Ventricular Esquerdo por Ecocardiograma 3D Prediz Obstrução e Sintomas de Insuficiência Cardíaca na Cardiomiopatia Hipertrófica. Arq Bras Cardiol: imagem cardiovasc 2014; 28(2): 109-116. Poster 003
 36. Cattarina M, Muraru D, Dal Bianco L, Peluso D, Kocabay G, Boccacini F, Sarais C, Iliceto S, Badano LP. Accuratezza e riproducibilità dell'ecocardiografia transtoracica tridimensionale per l'analisi quantitativa della valvola mitrale: confronto con l'approccio ecocardiografico transesofageo 3D. 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 - 17 dicembre 2012
 37. Cattarina M, Muraru D, Dal Bianco L, Peluso D, Zoppellaro G, Segafredo B, Calore C, Cucchini U, Iliceto S, Badano LP. Analisi quantitativa della geometria della valvola mitrale tramite ecocardiografia transtoracica tridimensionale: valori di riferimento, fattibilità e riproducibilità. 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 - 17 dicembre 2012
 38. Dal Bianco L, Muraru D, Badano LP, Ermacora D, Bellu R, De Lazzari M, Marra MP, Peluso D, Cucchini U, Kocabay G, Nour A, Iliceto S. Confronto tra i parametri di deformazione 2D e 3D nel stimare l'estensione dell'infarto miocardico e la funzione globale del ventricolo sinistro dopo STEMI: quale parametro è migliore? 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 - 17 dicembre 2012
 39. Dal Bianco L, Muraru D, Badano LP, Bellu R, Ermacora D, De Lazzari M, Marra MP, Peluso D, Cucchini U, Kocabay G, Nour A, Iliceto S. Valore predittivo dei parametri 2D/3D di deformazione miocardica e dell'indice di motilità 3D nell'identificare l'estensione della necrosi transmurale in pazienti con STEMI: confronto con la RMC. 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 - 17 dicembre 2012
 40. Dal Bianco L, Muraru D, Kocabay G, Zoppellaro G, Peluso D, Nour A, Segafredo B, Badano LP, Iliceto S. Valori di riferimento per i diametri aortici ottenuti sia con metodo inner-edge-to-inner-edge (interno-interno) che con metodo leading edge-to-leading edge (esterno-interno) in 190 soggetti sani. 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 - 17 dicembre 2012
 41. Ermacora D, Gripari P, Esposito R, Tamborini G, Galderisi M, Muraru D, Maffesanti F, Santoro C, Pepi M, Badano LP. Valori di riferimento della geometria e funzione del ventricolo destro ottenuti con ecocardiografia tridimensionale. Uno studio multicentrico su un'ampia coorte di soggetti sani. 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 - 17 dicembre 2012
 42. Peluso D, Muraru D, Badano LP, Ermacora D, Bellu R, De Lazzari M, Marra MP, Dal Bianco L, Nour A, Sarais C, Cucchini U, Kocabay G, Iliceto S. Superiore accuratezza dello strain longitudinale 2D rispetto a quello 3D nell'identificare i segmenti coinvolti dalla necrosi nei pazienti con STEMI. 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 - 17 dicembre 2012
 43. Peluso D, Muraru D, Badano LP, Bellu R, Ermacora D, De Lazzari M, Marra MP, Dal Bianco L, Zoppellaro G, Kocabay G, Sarais C, Cucchini U, Nour A, Iliceto S. Lo strain longitudinale 2D e lo strain circonferenziale 3D risultano predittori accurati di necrosi transmurale alla risonanza magnetica dopo uno STEMI. 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 - 17 dicembre 2012
 44. Zoppellaro G, Ippolito R, Gripari P, Muraru D, Esposito R, Nour A, Tamborini G, Galderisi M, Maffesanti F,

- Badano LP, Pepi M. L'età è un predittore indipendente della funzione e geometria del ventricolo destro solo nel genere maschile. 73° CONGRESSO NAZIONALE della Società Italiana di Cardiologia Roma, 15 – 17 dicembre 2012
45. Peluso D, Muraru D, Dal Bianco L, Beraldo M, Soldà E, Tuveri F, Cucchini U, Al Mamary A, Sattin D, Sarais C, Badano LP, Iliceto S. Effetto dell'invecchiamento sulla geometria e sulla funzione dell'atrio sinistro studiate con l'ecocardiografia tridimensionale. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 46. Dal Bianco L, Muraru D, Beraldo M, Soldà E, Cucchini U, Peluso D, Tuveri F, Al Mamary A, Sambugaro F, Sarais C, Badano LP, Iliceto S. Valori di riferimento per le diverse componenti della deformazione miocardica valutate attraverso il 3D speckle tracking, e confronto con il 2D speckle tracking. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 47. Dal Bianco L, Muraru D, Soldà E, Cucchini U, Peluso D, Tuveri F, Al Mamary A, Donolato T, Sarais C, Badano LP, Iliceto S. Valutazione integrata della geometria e della funzione del ventricolo sinistro in soggetti sani utilizzando l'ecocardiografia tridimensionale. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 48. Cucchini U, Muraru D, Badano LP, Soldà E, Tuveri MF, Al Nono O, Sarais C, Iliceto S. Valutazione della funzione ventricolare sinistra mediante strain tridimensionale (3D): accuratezza della metodica nella cardiopatia ischemica. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 49. Cucchini U, Muraru D, Badano LP, Soldà E, Tuveri MF, Al Nono O, Sarais C, Iliceto S. Confronto della riproducibilità dello strain tridimensionale misurato con metodica speckle tracking fra differenti piattaforme ecocardiografiche. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 50. Soldà E, Muraru D, Badano LP, Perazzolo Marra M, De Lazzari M, Cucchini U, Ermacora D, Sarais C, Iliceto S. Lo strain 3D nella valutazione della transmuralità dell'infarto miocardico; correlazione con l'estensione della necrosi valutata mediante risonanza magnetica cardiaca. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 51. Beraldo M, Muraru D, Soldà E, Ermacora D, Cucchini U, Dal Bianco L, Peluso D, De Lazzari M, Tuveri F, Badano LP, Iliceto S. 3D echocardiography is a valuable clinical tool to identify global LV remodeling and myocardial dysfunction early after STEMI. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 52. Beraldo M, Muraru D, Soldà E, Ermacora D, Cucchini U, Dal Bianco L, Peluso D, De Lazzari M, Badano LP, Iliceto S. Global 3D circumferential strain is related to infarct size and transmural extent of myocardial necrosis in patients with successfully reperfused STEMI. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 53. Peluso D, Muraru D, Dal Bianco L, Beraldo M, Soldà E, Tuveri F, Cucchini U, Al Mamary A, Badano LP, Iliceto S. Single-plane and biplane 2D algorithms and non-atrial specific 3D echo softwares underestimate left atrial volumes in comparison with specific 3D echo software tailored for left atrium. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 54. Peluso D, Muraru D, Dal Bianco L, Beraldo M, Soldà E, Tuveri F, Cucchini U, Al Mamary A, Frison L, Badano LP, Iliceto S. Comprehensive assessment of right atrial geometry and function in healthy subjects using two-dimensional and speckle tracking echocardiography. 72° Congresso nazionale della Società Italiana di Cardiologia, Roma, 10-12 dicembre 2011
 55. Muraru D, Cucchini U, Badano LP, Soldà E, Tuveri MF, Al Nono O, Sarais C, Iliceto S. Inconsistency of 3D strain measurements between vendors. XV Congresso Nazionale della Società Italiana di Ecografia Cardiovascolare, Naples, 14-16 Aprile 2011; 05:8; ISBN 978-88-904308-1-7
 56. Cucchini U, Muraru D, Badano LP, Soldà E, Tuveri MF, Al Nono O, Sarais C, Iliceto S. Confronto della riproducibilità dello strain tridimensionale misurato con metodica speckle-tracking fra differenti piattaforme ecocardiografiche. XV Congresso Nazionale della Società Italiana di Ecografia Cardiovascolare, Naples, 14-16 Aprile 2011;18:13; ISBN 978-88-904308-1-7
 57. Cucchini U, Muraru D, Badano LP, Soldà E, Tuveri MF, Al Nono O, Sarais C, Iliceto S. Valutazione della funzione ventricolare sinistra mediante strain tridimensionale (3D): accuratezza della metodica nella cardiopatia ischemica. XV Congresso Nazionale della Società Italiana di Ecografia Cardiovascolare, Naples, 14-16 Aprile 2011;21:14; ISBN 978-88-904308-1-7
 58. Soldà E, Cucchini U, Badano LP, Perazzolo-Marra M, De Lazzari M, Muraru D, Ermacora D, Sarais C, Iliceto S. Lo strain 3D nella valutazione della transmuralità dell'infarto miocardico; correlazione con l'estensione della necrosi valutata mediante risonanza magnetica cardiaca. Valutazione della funzione ventricolare sinistra mediante strain tridimensionale (3D): accuratezza della metodica nella cardiopatia ischemica. XV Congresso Nazionale della Società Italiana di Ecografia Cardiovascolare, Napoli, 14-16 Aprile 2011;41:23; ISBN 978-88-904308-1-7

59. Ermacora D, Muraru D, Badano LP. Diagnostic imaging of mechanical complications of acute myocardial infarction: the additive role of three-dimensional echocardiography in addressing management. XV Congresso Nazionale della Società Italiana di Ecografia Cardiovascolare, Napoli, 14-16 Aprile 2011;144:60; ISBN 978-88-904308-1-7
60. Muraru D, Badano LP, Del Mestre L, Gianfagna P, Ermacora D, Proclemer A. Technical factors affecting the assessment of left ventricular volumes using three-dimensional echocardiography. *G Ital Cardiol* 2010; Vol 11 Suppl 1-5; P223:92S. ISSN 1827-8981.
61. Muraru D, Badano LP, Gianfagna P, Ermacora D, Proclemer A. Sources of variation and bias in assessing left ventricular dyssynchrony using three-dimensional echocardiography. *G Ital Cardiol* 2010; Vol 11 Suppl 1-5; P221:91S.
62. Muraru D, Badano LP, Gianfagna P, Ermacora D, Proclemer A. Third-generation full-volume three-dimensional stress-echocardiography to assess inducible myocardial ischemia. *G Ital Cardiol* 2010; Vol 11, Suppl 1-5; C32:13S.
63. Piazza R, Enache R, Pognuz AR, Muraru D, Popescu BA, Pecoraro R, Leiballi E, Andriani C, Antonini Canterin F, Cervesato E, Ghingina C, Nicolosi GL. Correlates of apical rotation in patients with aortic regurgitation. A speckle-tracking echocardiography study. *G Ital Cardiol* 2010; Vol 11 Suppl 1-5; C41:15S.
64. Enache R, Piazza R, Pognuz AR, Muraru D, Popescu BA, Calin A, Pecoraro R, Leiballi E, Andriani C, Antonini Canterin F, Ghingina C, Nicolosi GL. Assessment of left ventricular untwisting and its relationship with parameters of left ventricular diastolic function in patients with aortic regurgitation. *G Ital Cardiol* 2010; Vol 11 Suppl 1-5; P216:90S.
65. Piazza R, Enache R, Pognuz AR, Muraru D, Popescu BA, Pecoraro R, Leiballi E, Andriani C, Antonini Canterin F, Cervesato E, Ghingina C, Nicolosi GL. Left ventricular torsion in patients with aortic regurgitation. A speckle-tracking echocardiography study. *G Ital Cardiol* 2010; Vol 11 Suppl 1-5; P218:90S.
66. Muraru D, Badano LP, Ermacora D, Grillo MT, Zakja E, Onut R, Del Mestre L, Gianfagna P. Impact of time resolution of the full-volume data set in assessing left ventricular volumes using real-time three-dimensional echocardiography. *G Ital Cardiol* 2009;10(6-Suppl 2);P230.
67. Muraru D, Badano LP, Ermacora D, Grillo MT, Zakja E, Onut R, Del Mestre L, Gianfagna P, Fioretti PM. Comparison between 4D AutoLVQ and TomTec 4D LV function softwares for quantitative analysis of left ventricular volumes from real-time three-dimensional echocardiography data sets. *G Ital Cardiol* 2009;10(6-Suppl 2);P241.
68. Zakja E, Badano LP, Grillo MT, Onut R, Muraru D, Ermacora D, Gianfagna P, Fioretti PM. Measurement of right ventricular size and function by real-time three-dimensional echocardiography: validation against magnetic resonance and comparison with two-dimensional and M-mode measurements. *G Ital Cardiol* 2009;10(6-Suppl 2);C86 (oral presentation).
69. Calin A, Popescu BA, Beladan CC, Muraru D, Deleanu D, Enache R, Leiballi E, Antonini-Canterin F, Nicolosi GL, Ghingina C. Relazione tra rotazione ventricolare sinistra, funzione diastolica e pressioni di riempimento nei pazienti con stenosi valvolare aortica severa. *G Ital Cardiol* 2009;10(6-Suppl 2);C88
70. Beladan CC, Popescu BA, Calin A, Muraru D, Deleanu D, Enache R, Leiballi E, Antonini-Canterin F, Nicolosi GL, Ghingina C. Dinamica rotazionale del ventricolo sinistro nella cardiomiopatia dilatativa di origine non-ischemica. *G Ital Cardiol* 2009;10(6-Suppl 2);P236.
71. Popescu BA, Beladan CC, Calin A, Muraru D, Deleanu D, Enache R, Leiballi E, Antonini-Canterin F, Nicolosi GL, Ghingina C. Rotazione e torsione ventricolare sinistra nei pazienti con cardiomiopatia dilatativa: le modificazioni nella dinamica torsionale potrebbero spiegare il rimodellamento ventricolare sinistro? *G Ital Cardiol* 2009;10(6-Suppl 2); P232.
72. Popescu BA, Beladan CC, Teodorescu A, Muraru D, Deleanu D, Leiballi E, Antonini-Canterin F, Nicolosi GL, Ghingina C. Left ventricular rotation and torsion in dilated cardiomyopathy: is there a relationship with remodeling? *G Ital Cardiol* 2008 (abstr).
73. Popescu BA, Teodorescu A, Beladan CC, Muraru D, Popescu AC, Antonini-Canterin F, Leiballi E, Nicolosi GL, Ghingina C. Torsione ventricolare sinistra: un meccanismo di compenso per mantenere un normale frazione d'eiezione nei pazienti con stenosi valvolare aortica? *G Ital Cardiol* 2008;vol. 9, n. 5 (suppl 2):87S.
74. Ghingina C, Ghiorghiu I, Popescu B.A, Lupescu I, Georgescu S.A, Istrate C, Muraru D – Imaging diagnosis of aortic coarctation – a state-of-the-art comparison. *Proceedings of the Xth World Congress of Echocardiography and Cardiovascular Imaging*:186-189. Casa Editrice Scientifica Internazionale 2006
75. Muraru D, Badano LP, Gianfagna P, Ermacora D, Popescu BA, Ghingina C, Proclemer A. Surse de variabilitate si eroare in evaluarea asincronismului ventricular stang prin ecocardiografie tridimensionala. *Revista Română de Cardiologie* 2010 vol XXV (suppl A):A221.
76. Muraru D, Calin A, Badano LP, Faggiano P, Popescu BA, Ghingina C, Proclemer A. Indexarea ariei

- valvulare functionale supraestimeaza prevalenta stenozei aortice stranse la pacientii obezi si nu amelioreaza estimarea severitatii acesteia la adulti. Revista Română de Cardiologie 2010 vol XXV (suppl A):A30.
77. Calin A, Popescu BA, Beladan CC, Rosca M, Muraru D, Lupascu L, Calin C, Jurcut R, Sandu C, Ginghina C. Impactul cresterii postsarcinii globale a ventriculului stang asupra torsionii si detorsionii ventriculare stangi la pacientii cu stenoza aortica stransa. Revista Română de Cardiologie 2010 vol XXV (suppl A):A76.
 78. Enache R, Piazza R, Roman-Pognuz A, Muraru D, Popescu BA, Calin A, Beladan C, Nicolosi GL, Ginghina C. Evaluarea torsionii ventriculului stang la pacientii cu insuficienta aortica prin ecocardiografie speckle-tracking. Revista Română de Cardiologie 2010 vol XXV (suppl A):A77.
 79. Calin A, Popescu BA, Beladan CC, Rosca M, Moise B, Voinea F, Lupascu L, Muraru D, Enache R, Ginghina C. Evaluarea functiei atriale stangi la pacientii cu hipertrofie ventriculara stanga: studiu comparativ la pacientii cu stenoza aortica si hipertensiune arteriala. Revista Română de Cardiologie 2010 vol XXV (suppl A):A92.
 80. Beladan CC, Popescu BA, Calin A, Rosca M, Moise B, Voinea F, Enache R, Muraru D, Jurcut R, Matei F, Ginghina C. Relatia dintre torsionea ventriculara stanga si cuplarea ventriculo-arteriala la pacientii hipertensivi. Revista Română de Cardiologie 2010 vol XXV (suppl A):A154.
 81. Rosca M, Popescu BA, Beladan CC, Calin A, Muraru D, Popa EC, Enache R, Ghionea M, Coman IM, Jurcut R, Ginghina C. Relatia deformarii atriului stang cu deformarea miocardica a ventriculului stang si statusul simptomatic la pacientii cu cardiomiopatie hipertrofica. Revista Română de Cardiologie 2010 vol XXV (suppl A):A164.
 82. Rosca M, Calin A, Popescu BA, Beladan CC, Popa EC, Muraru D, Jurcut R, Vriza O, Antonini-Canterin F, Ginghina C. Relatia dintre rigiditatea arteriala si presiunile de umplere ventriculare stangi la pacientii cu cardiomiopatie hipertrofica. Revista Română de Cardiologie 2010 vol XXV (suppl A):A207. ISSN:1583-2996. Cod CNCIS 379
 83. Enache R, Piazza R, Roman-Pognuz A, Muraru D, Popescu BA, Calin A, Beladan C, Antonini-Canterin F, Leiballi E, Nicolosi GL, Ginghina C. Detorsionea ventriculului stang si relatia sa cu parametrii de functie diastolica la pacientii cu insuficienta aortica. Revista Română de Cardiologie 2010 vol XXV (suppl A):A225.
 84. Matei F, Beladan CC, Calin A, Rosca M, Popescu BA, Muraru D, Enache R, Curea F, Sandu C, Ginghina C. Electrocardiografia versus ecocardiografie in diagnosticul hipertrofiei ventriculare stangi: expresia gradului sau a tipului hipertrofiei? Revista Română de Cardiologie 2010 vol XXV (suppl A):A21.
 85. Muraru D, Badano LP, Zakja E, Gianfagna P, Popescu BA, Ginghina C, Fioretti PM. Relatia intre dimensiunile si functia ventriculului drept evaluate prin ecocardiografie mod M si 2D cu volumele si fractia de ejectie masurate prin ecocardiografie tridimensionala. Revista Română de Cardiologie 2009, vol XXIV (suppl A):A8.
 86. Muraru D, Badano LP, Ermacora D, Grillo MT, Gianfagna P, Popescu BA, Ginghina C, Fioretti PM. Impactul rezoluției temporale în evaluarea asincronismului ventriculului stâng prin ecocardiografie tridimensională. Revista Română de Cardiologie 2009, vol XXIV (suppl A):A53.
 87. Beladan CC, Calin A, Popescu BA, Rosca M, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Ginghina C. Influenta postsarcinii ventriculare totale asupra torsionii ventriculului stang la pacientii cu stenoza aortica stransa si fractie de ejectie pastrata. Revista Română de Cardiologie 2009, vol XXIV (suppl A):A88.
 88. Rosca M, Popescu BA, Calin A, Beladan CC, Floares A, Muraru D, Moise B, Ghionea M, Coman IM, Ginghina C. Evaluarea deformarii atriului stang si a determinantilor sai la pacientii cu cardiomiopatie hipertrofica. Revista Română de Cardiologie 2009, vol XXIV (suppl A):A123.
 89. Beladan CC, Rosca M, Popescu BA, Calin A, Muraru D, Floares E, Moise B, Savu O, Antohi L, Ginghina C. Relatia intre deformarea atriului stang si dinamica torsionii ventriculului stang la pacientii cu hipertensiune arteriala si disfunctie diastolica ventriculara usoara. Revista Română de Cardiologie 2009, vol XXIV (suppl A):A194.
 90. Popescu BA, Beladan CC, Calin A, Muraru D, Deleanu D, Rosca M, Ginghina C. Rotatia apicala inversata: marker de severitate in cardiomiopatia dilatativa. Revista Română de Cardiologie 2009, vol XXIV (suppl A):A87.
 91. Craciunescu I, Iancu M, Serban M, Revnic C, Muraru D, Gheorghiu I, Popescu BA, Jurcut R, Ginghina C. Evaluarea deformarii miocardice a peretelui liber al ventriculului drept in boala cardiaca ischemica. Revista Română de Cardiologie 2009, vol XXIV (suppl A):A24.
 92. Popescu BA, Calin A, Beladan CC, Rosca M, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Ginghina C. Relatia dintre torsionea/detorsionea ventriculului stang si nivelul seric al peptidului natriuretic tip B la pacientii cu stenoza aortica. Revista Română de Cardiologie 2009, vol XXIV (suppl A):A19.

93. Calin A, Popescu BA, Beladan CC, Rosca M, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Gingham C. Relatia intre deformarea miocardica atriala stanga si presiunile de umplere ventriculare stangi la pacientii cu stenoza aortica stransa. *Revista Română de Cardiologie* 2009, vol XXIV (suppl A):A230.
94. Popescu BA, Muraru D, Beladan CC, Teodorescu A, Hirsu M, Savu O, Gingham C. Relatia dintre strain-ul longitudinal al atrului stang si torsiunea/detorsiunea ventriculului stang. Studiu prin ecocardiografie speckle-tracking la subiecti normali. *Revista Română de Cardiologie* 2008, vol XXIII:A110.
95. Craciunescu IS, Revnic C, Serban M, Iancu M, Muraru D, Craciunescu A, Uscatescu V, Jurcut R, Popescu BA, Gingham C. Modificari ale functiei diastolice si deformarii miocardice asociate cu nivelul seric al BNP la pacientii cu functie sistolica a ventriculului stang normala. *Revista Română de Cardiologie* 2008, vol XXIII:A184.
96. Craciunescu I, Revnic C, Serban M, Iancu M, Muraru D, Craciunescu A, Uscatescu V, Jurcut R, Popescu BA, Gingham C. Evaluarea functiei ventriculului stang la pacientii cu infarct miocardic in antecedente prin strain rate imaging. *Revista Română de Cardiologie* 2008, vol XXIII:A185. Muraru D, Popescu BA, Teodorescu A, Beladan CC, Savu O, Gingham C. Dissincronismul rotatiei apicale si bazale: un posibil mecanism de alterare precoce a functiei ventriculare stangi. *Revista Română de Cardiologie* 2008, vol XXIII:A187. ISSN:1583-2996. Cod CNCSIS 379 (Categorie B)
97. Popescu BA, Beladan CC, Teodorescu A, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Gingham C. Influenta remodelarii ventriculare asupra rotatiei si torsiunii ventriculare stangi la pacientii cu cardiomiopatie dilatativa non-ischemica. *Revista Română de Cardiologie* 2008, vol XXIII:A189. ISSN:1583-2996. Cod CNCSIS 379 (Categorie B)
98. Teodorescu A, Popescu BA, Beladan CC, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Gingham C. Relatia detorsiunii ventriculare stangi cu parametrii de functie diastolica si presiunile de umplere la pacientii cu stenoza aortica. *Revista Română de Cardiologie* 2008, vol XXIII:A126. ISSN:1583-2996. Cod CNCSIS 379 (Categorie B)
99. Beladan CC, Popescu BA, Teodorescu A, Muraru D, Popescu AC, Antonini-Canterin F, Nicolosi GL, Gingham C. Torsiunea ventriculului stâng - un mecanism compensator pentru menținerea unei fracții de ejeție ventriculare stângi normale la pacienții cu stenoză aortică medie strânsă. *Revista Română de Cardiologie, Supl.A*, vol XXII, 2007:A92. ISSN:1583-2996. Cod CNCSIS 379 (Categorie B)
100. Dan GA, Dan A, Daha I, Buzea A, Muraru D, Mitroi C. Răspunsul tensional inadecvat la efort la pacienții cu hipertensiune controlată semnifică un prognostic defavorabil ? Colentina Clinical Hospital, Cardiology Department. *Revista Română de Cardiologie, Supl. A*, vol XX, 2005:A83. ISSN: 1583-2996. Cod CNCSIS 379 (Categorie B)
101. Dan GA, Dan A, Buzea A, Daha I, Dinu I, Muraru D. Hiponatremia – o complicatie neglijata a tratamentului pe termen lung cu amiodarona. Colentina Clinical Hospital, Cardiology Department. *Revista Română de Cardiologie, Supl. A*, vol XX, 2005:A140. ISSN: 1583-2996. Cod CNCSIS 379 (Categorie B)

Organiser of International Scientific Meetings, Congresses and Courses

1. Scientific Program (SP) Chair EuroEcho Imaging 2024 Congress
2. Scientific Program Co-Chair EACVI 2023 Congress
3. Scientific Program Co-Chair EuroEcho 2021 Congress
4. Co-Director PCR Imaging Valves Madrid 2023, 2024
5. PCR Tricuspid Focus Group Referral Meeting - Regional chapter member - Milan 2024
6. Co-Director EACVI Echo Lisbon 2023
7. Co-Director EACVI Echo Nice 2022
8. CPC Member ESC Congress 2018-2020
9. Co-Director EACVI Teaching Course on 2D and 3D TOE (2017-2019)
10. Scientific Program Committee Advisor EuroEcho Congress 2019, 4-7 December 2019, Vienna, Austria
 - Organizer "Course on 3D Echocardiography by EACVI/ASE" with Rebecca Hahn (New York, US)
 - Organizer "EACVI TOE workshop" with Prof. Bogdan A. Popescu (Bucharest, Romania) - teaching course with hands-on practice on TEE simulators sponsored by Medaphor/Heartworks
11. Director of EACVI Webinar Program as Chair EACVI Education Committee 2016-2018 e 2018-2020
[https://www.esccardio.org/Sub-specialty-communities/European-Association-of-Cardiovascular-Imaging-\(EACVI\)/Education/Webinars](https://www.esccardio.org/Sub-specialty-communities/European-Association-of-Cardiovascular-Imaging-(EACVI)/Education/Webinars)
https://www.youtube.com/results?search_query=eacvi+free+webinar
12. Supervisor of EACVI E-learning courses as Chair EACVI Education Committee
[https://www.esccardio.org/Sub-specialty-communities/European-Association-of-Cardiovascular-Imaging-\(EACVI\)/Education/eacvi-e-learning-courses](https://www.esccardio.org/Sub-specialty-communities/European-Association-of-Cardiovascular-Imaging-(EACVI)/Education/eacvi-e-learning-courses)
13. Co-Director of International Workshop "3D Echo 360° European Edition" - 13-15 September 2019, Padua, Italy
14. Scientific Program Committee Advisor EuroEcho Imaging 2018 5-8 December 2018, Milan, Italy
 - Organizer "EACVI TOE workshop" with Prof. Bogdan A. Popescu (Bucharest, Romania) - teaching course with hands-on practice on TEE simulators sponsored by Medaphor/Heartworks
 - Organizer "EACVI Echocardiography Core Curriculum Teaching Course"
15. Co-Director "3D Echocardiography: Meet the Experts" - 25-27 October 2018, Eindhoven, The Netherlands
16. Member of Organizing Committee "Echocardiography for Trainees" Teaching Course organized by the EACVI Heart Imagers of Tomorrow and Turkish Society of Cardiology Cardiac Imaging Working Group - 20 October 2018, Antalya, Turkey
17. Co-Director International Course "Why and how to implement 4D TTE and 4D TEE in the routine of the echocardiography laboratory", 5-7 April 2018, Beirut, Lebanon
18. Scientific Committee Advisor - EuroEcho Imaging 2017 6-9 December 2017, Lisbon, Portugal
19. Co-Director International Course "3D Intensive Course", Padua, Italy - 3 editions/year since 2013
20. Co-Director International Workshop "3D Echo 360° European Edition" - 21-23 September 2017, Padova, Italy
21. Member of Scientific Committee International Congress "Right Heart - The New Frontier" - 1-3 March 2017, Padova, Italy
22. Organiser of International Course with online hands-on teaching sessions "Curso Intensivo de Formação em Ecocardiografia"- 10-14 October 2016, Rio de Janeiro, Brasil
23. Scientific Committee member of online echocardiography course (chinese): "China-Europe Echocardiography CME Project: Interactive Webcast on Basic and Advanced Echocardiography" organized by Chinese Society of Echocardiography and University of Padua (2014-2016)
24. Scientific secretary and speaker Tutorials for online course of echocardiography "My Echocardiolab" (spanish) organised by ECHOSIAC, Interamerican Society of Cardiology and University of Padova (2014-2015)
25. Organizer of International Workshop "3D Echo 360°. European Edition. From Innovation to Practice"- 26-27 October 2015, Padua, Italy
26. Scientific secretary of online course "Clinically oriented course on Echocardiography" organized by University of Padua, Emirates Cardiac Society and Gulf Heart association (2015)

27. Organiser of International Course "Echocardiography for trainees - Teaching course with hands-on sessions", 18 October 2014, Sofia, Bulgaria
28. Organiser of International Course "The Role of Advanced Cardiac Imaging: Course on 3D echo", 8-10 May 2013, Padua, Italy

Presentations

**IT, invited talks; AP, abstract presentation*

1. "Mitral regurgitation" – Echocardiography made easy - ESC Congress 2024, 1 Sep, London, UK **(IT)**
2. "New Approaches to Assessing RV Remodeling and Dysfunction by Echocardiography" – TomTec Webinar – 27 June 2024, online **(IT)**
3. "Tricuspid regurgitation severity grading: severe, massive, torrential – Does it really matter?" SECVI Webinar – 13 June 2024, online **(IT)**
4. "How to assess right ventricle function prior to transcatheter tricuspid valve replacement" – EuroPCR 14-17 June 2024, Paris **(IT)**
5. "Pacemaker Lead and Tricuspid Valve: Diagnosis" - EuroPCR 14-17 June 2024, Paris **(IT)**
6. "Standard TOE views, applied physics and image optimization" – EACVI Teaching Course on Transoesophageal 2D and 3D Echocardiography - 24-25 May 2024, Prague, Czech Republic **(IT)**
7. "Assessment of TR by TOE" - 24-25 May 2024, Prague, Czech Republic **(IT)**
8. "3D Echocardiography: Ready for Everyday Use" – POLECHO 10-11 May 2024, Krakow, Poland **(IT)**
9. "The integrated approach in mitral regurgitation patients: is it still appropriate? Do we need to switch to hemodynamic quantification? The time schedule of MR in echocardiography in relation to intervention: Repetitive documentations prior to therapy - a "MUST"? DEK Congress 28 April 2024, Leipzig, Germany **(IT)**
10. "Atrial Functional Regurgitation: Pathophysiology, Diagnosis and Clinical Relevance" - Portuguese Congress of Cardiology CPC 19-21 April 2024, Algarve, Portugal **(IT)**
11. "Tricuspid regurgitation: indication for percutaneous treatment – the optimal timing" – SIECVI Congress 4-6 April 2024, Milan, Italy **(IT)**
12. "Classification of TR etiology: Primary, Secondary disease, and CIED-related" – PCR Imaging Valves Madrid 2024 1-2 February 2014, Madrid, Spain **(IT)**
13. "Current approaches to aortic stenosis grading and staging classifications" – PCR Imaging Valves Madrid 2024 1-2 February 2014, Madrid, Spain **(IT)**
14. "Assessment of bioprosthetic mitral valve function" - PCR Imaging Valves Madrid 2024 1-2 February 2014, Madrid, Spain **(IT)**
15. "Management of tricuspid regurgitation in heart failure" - Heart Failure 2024 - 16 February 2024, Catania, Italy **(IT)**
16. "Progress in Secondary TR" – GE workshop, Lodz, Poland – online, 31 January 2024 **(IT)**
17. "Atrial vs Ventricular Secondary Tricuspid Regurgitation – PCR Tricuspid Referral Meeting Rennes 15 December 2023, France (online) **(IT)**
18. "Funzione ventricolare destra a riposo e da sforzo: oltre il TAPSE" – SIC Congress 2023, Rome, Italy **(IT)**
19. "New perspectives on atrial secondary tricuspid regurgitation" – Echo Lisbon 30 November – 2 December 2023, Lisbon, Portugal **(IT)**
20. "An intriguing case of TR" - Echo Lisbon 30 November – 2 December 2023, Lisbon, Portugal **(IT)**
21. "Echocardiography of the Tricuspid Valve - Diagnostic and Therapeutic Considerations" - CSC-ESC Joint Session Cardiac Imaging to Solve Clinical Problems - 25th Scientific Session of the Chinese Society of Cardiology – 3 November 2023 (online) **(IT)**
22. "La valutazione tridimensionale ecocardiografica della valvola tricuspide" - ECHO VALVE SURGERY VII National Congress 19-20 October 2023 Naples, Italy **(IT)**
23. "Atrial Functional Mitral Regurgitation" – EACVI Course: Cardiac Imaging in Clinical Practice – 13-14 October 2023, Bucharest, Romania **(IT)**
24. "Left atrial cardiomyopathy" – EACVI Course: Cardiac Imaging in Clinical Practice – 13-14 October 2023, Bucharest, Romania **(IT)**
25. "Clinical and Echocardiographic Phenotypes of TR" – GISE Congress – 3-6 October 2023, Milan, Italy **(IT)**
26. "Echocardiography when and how in hypertensive patient" – ESH Summer School – 24-29 September, Villa Cagnola, Italy **(IT)**
27. "Interventional treatment of tricuspid regurgitation: echocardiographic assessment before the procedure" – SIECVI Conference - 16 September 2023, Torino, Italy **(IT)**

28. "State-Of-The-Art Lecture: New Insights Into Left Atrial Cardiomyopathy" – ESC Congress 25 August 2023, Amsterdam, The Netherlands **(IT)**

29. "Understanding TR complexity: etiologies and anatomical imaging" – EuroPCR 2023, Paris **(IT)**
30. "Social Media and Building Your Personal Brand" – 8 June 2023, EACVI Leader of Tomorrow programme (online) **(IT)**
31. "Echocardiographic Techniques and Tips to Optimize the Diagnosis and Characterization of HCM" – EACVI 2023 Congress 10-12 May 2023 – Barcelona, Spain **(IT)**
32. "Advances in the Assessment of Secondary TR - EACVI 2023 Congress 10-12 May 2023 – Barcelona, Spain **(IT)**
33. "EACVI 2023 Highlights – Echocardiography" - EACVI 2023 Congress 10-12 May 2023 – Barcelona, Spain **(IT)**
34. "Imaging Insight into the Pathophysiology of Tricuspid Regurgitation" - ACC 4-6 March 2023 (online) **(IT)**
35. "How to select patients for tricuspid regurgitation interventions based on anatomical and functional assessment" – EACVI – PCR Tricuspid Focus Group webinar – online 26 January 2023 **(IT)**
36. "How to Assess Tricuspid Regurgitation Severity" - EACVI Webinar "New vision on the tricuspid valve" - 15 December 2022 <https://esc365.escardio.org/event/508> **(IT)**
37. "Atrial Functional Mitral and Tricuspid Regurgitation" – Keynote Lecture at the Annual Symposium of the Belgian Working Group on Non-Invasive Cardiac Imaging (BWGNICI) "Valvular Heart Disease in Heart Failure" - 18 November 2022, Brussels, Belgium **(IT)**
38. "Tricuspid regurgitation: novel advances in understanding its anatomy, pathophysiology and treatment" - Cardiovascular Institute of the Hospital Clínic de Barcelona weekly online scientific meeting - 4 November 2022 **(IT)**
39. "Left ventricular hypertrophy: measures for differential diagnosis" - Theoretical-practical course of echocardiography, A.R.C.A. Eco Liguria - 11-12 November 2022, Genoa **(IT)**
40. "The research journey from Mentee to Mentor" - Istituto Auxologico Italiano and Romanian Cardiology: A Long-Standing Win-Win Collaboration - 26 November 2022, Bucharest, Romania **(IT)**
41. "Standard TOE views, applied physics and image optimization" - EACVI Teaching Course on Transoesophageal 2D and 3D Echocardiography – 21-23 October 2022, Prague, Czech Republic
42. "Advanced examination of the tricuspid valve" - EACVI Teaching Course on Transoesophageal 2D and 3D Echocardiography – 21-23 October 2022, Prague, Czech Republic **(IT)**
43. "Tricuspid regurgitation and atrial fibrillation" - ECM course "Diagnostics and treatment of mitral and tricuspid regurgitation in 2022" organized by the Istituto Auxologico Italiano, IRCCS, San Raffaele Hospital, IRCCS and Milan-Bicocca University with the unconditional support of Abbott Medical Italia srl and GE Healthcare - 2 September 2022, Auxologico San Luca Hospital, Milan **(IT)**
44. "Mitral Valvular Dynamics: Understanding the Functional Mitral Insufficiency Mechanisms" - SONECOM Imagen Cardiovascular 8th Annual Multimodality Cardiovascular Imaging Update – 13-16 July 2022, Mexico (online) **(IT)**
45. "Right ventricular strain" at the "Cardiac Imaging in Clinical Practice" Romanian Society of Cardiology course endorsed by the EACVI – 17-18 June 2022, Bucharest, Romania **(IT)**
46. "The phenotypes of tricuspid regurgitation: how does echo help?" at the "Cardiac Imaging in Clinical Practice" Romanian Society of Cardiology course endorsed by the EACVI – 17-18 June 2022, Bucharest, Romania **(IT)**
47. "Imaging in Hypertrophic cardiomyopathy" at the "Cardiac Imaging in Clinical Practice" Romanian Society of Cardiology course endorsed by the EACVI – 17-18 June 2022, Bucharest, Romania **(IT)**
48. "Sindrome del Prolasso Mitralico: Mito o Realtà" - Corso ECM "La diagnostica ed il trattamento delle insufficienze mitralica e tricuspide nel 2022" organizzato da Istituto Auxologico Italiano, IRCCS, Ospedale San Raffaele, IRCCS e Università Milano-Bicocca con il supporto incondizionato di Abbott Medical Italia srl. e GE Healthcare - 6 May 2022, Ospedale Auxologico San Luca, Milano **(IT)**
49. "Tricuspid and Pulmonary Valve Diseases" – EACVI Level 1 Online Program – 23 June 2022 **(IT)**
50. "3D Echocardiography: RV Volumes and Ejection Fraction" - Grey Zones – 9-11 June 2022, Bergamo **(IT)**
51. "3D EF Left and right: how to measure, interpret and report" - EACVI EchoNice Course – 19-21 May 2022, Nice, France **(IT)**
52. "The phenotypes of tricuspid regurgitation: what echo brings" - EACVI EchoNice Course - 19-21 May 2022, Nice, France **(IT)**

53. "Anatomic and Functional Classifications of TR: Clinical Application" – ACC Congress, 1 April 2022 (online) **(IT)**
54. "Selecting the most appropriate transcatheter TV intervention: what do I need to know?" in the PCR Tricuspid Group Webinar "Imaging the journey of a patient with severe tricuspid regurgitation: from diagnosis to management" - 22 December 2021 (online) https://www.youtube.com/watch?v=XYSO_8YXDE&t=1381s **(IT)**
55. "Latest Advances to Analyze Right Heart Efficiently" – 9-11 December, EuroEcho 2021 (online) **(IT)**
56. "How and Why to Assess the Functional Anatomy and Etiology of TR" – 9-11 December, EuroEcho 2021 (online) **(IT)**
57. "Pacemaker leads: pathophysiological role and tips for imaging" – 2021 PCR London Valves – 21-23 November 2021 (online) **(IT)**
58. "Newer Echo Techniques and Their Role in Pulmonary Hypertension" - RV Echocardiography Masterclass: Sheffield Pulmonary Hypertension Meeting – 22 October 2021 (online) **(IT)**
59. "When and How to Optimize 3D Ventricular Assessment" – British Society of Echocardiography – 16 October 2021 (online) **(IT)**
60. "Anatomy of Tricuspid Valve and Classification of Tricuspid Regurgitation" in the PCR Tricuspid Group Webinar "Natural history and prognosis of tricuspid valve disease" - 22 September 2021 (online) <https://www.youtube.com/watch?v=2f8WkRjIZAM> **(IT)**
61. "Tricuspid valve Imaging" - American Society of Echocardiography Scientific Sessions - 18-21 June 2021 (online) **(IT)**
62. "American Society of Echocardiography's 22nd Annual Feigenbaum Lecture: Right Heart, Right Now: The Role of Three-Dimensional Echocardiography" - - American Society of Echocardiography Scientific Sessions - 18-21 June 2021 (online) **(IT)**
63. "The Role of Advanced Echocardiography to Understand the Pathophysiology of FTR" - Innovation in Patient-Centered Multimodality Cardiac Imaging online symposium – 11 June 2021 (online) **(IT)**
64. Mitral Valve Prolapse or MV Billowing: What are the criteria and how should I properly and easily name it" – Brazilian International Symposium of Cardiovascular Imaging - DIC 2021 - 6 March 2021 (online) **(IT)**
65. "RV longitudinal strain: technical pitfalls and clinical value" - Brazilian International Symposium of Cardiovascular Imaging - DIC 2021 - 6 March 2021 (online) **(IT)**
66. "Welcome Seminar" – Value of 3D Echocardiography for the Imaging Assessment of the Right Heart" – 25 February 2021 (online) University of Milano-Bicocca https://www.youtube.com/watch?v=ZBZUpOGj_o&t=9s **(IT)**
67. "La valutazione della funzione sistolica nel paziente post COVID, cosa cercare e con che tempistiche". Corso A.R.C.A. Eco Liguria – 5 Dicembre 2020, Genova (online) **(IT)**
68. "Practical tips for 3D Transthoracic Echocardiography" organized by International Society of Tele-Medicine and eHealth – 26 November 2020 (online) **(IT)**
69. "Tricuspid Valve Evaluation in 2020" - ANCAM XIX Mexican National Congress of Cardiology online – 28 October 2020 **(IT)**
70. "3D Echo for Myocardial Structure and Function Assessment" - Saudi and Gulf Heart Association (SHA/GHA) Virtual meeting 2020 – 10 October 2020 **(IT)**
71. "TR Severity Assessment: My Routine" - Re-IMAGINE New York virtual meeting – 8 October 2020 **(IT)**
72. "Multimodality Imaging of the Tricuspid Valve and the Right Heart" – ESC Congress 2020 The Digital Experience **(IT)**
73. "Essential Tips on 3D Acquisition and Postprocessing" – EACVI webinar – 18 February 2020 (IT)
74. "3D Echocardiography in Clinical Practice: Implementation of 3D-TTE and 3D-TEE in the Daily Routine. Is it a Must, or just a Toy?" Honorary lecture "Gerhard Hoghenkerke" Mitteldeutscher Echokardiographie-Kongress der DGK – 14 June 2019, Leipzig, Germany **(IT)**
75. "My best 4D Clinical Case: Complication After Transapical TAVI Procedure" - PolEcho 2019. XXV World Congress of Echocardiography and Allied Techniques WorldEcho 2019, 17-19 May 2019, Lodz, Poland **(IT)**
76. "Tricuspid valve in 3D: specific benefits" - PolEcho 2019. XXV World Congress of Echocardiography and Allied Techniques WorldEcho 2019, 17-19 May 2019, Lodz, Poland **(IT)**
77. "Will 3D solve any issue" - PolEcho 2019. XXV World Congress of Echocardiography and Allied Techniques WorldEcho 2019, 17-19 May 2019, Lodz, Poland **(IT)**
78. "Lo studio della Funzione Diastolica del Ventricolo Sinistro" – Ecocardiografia in Cardiologia Pediatrica 5° Ed., 9-11 May 2019, Padova, Italy **(IT)**
79. "CMR in the evaluation and clinical management of mitral regurgitation" – EuroCMR 2019, 2-4 April 2019, Venice Lido, Italy **(IT)**

80. "Acquisition of 4D data sets" – Implementation of 4DTTE and 4DTEE in the routine of the echocardiography laboratory" – 24-26 Jan 2019, Dubai, United Arab Emirates **(IT)**
81. "Display and post-processing of 4D data sets" – Implementation of 4DTTE and 4DTEE in the routine of the echocardiography laboratory" – 24-26 Jan 2019, Dubai, United Arab Emirates **(IT)**
82. "The added value of 3D echo for assessing the aortic valve" – Implementation of 4DTTE and 4DTEE in the routine of the echocardiography laboratory" – 24-26 Jan 2019, Dubai, United Arab Emirates **(IT)**
83. "4D strain" – Implementation of 4DTTE and 4DTEE in the routine of the echocardiography laboratory" – 24-26 Jan 2019, Dubai, United Arab Emirates **(IT)**
84. "The added value of 3D echo for assessing the left atrium" – Implementation of 4DTTE and 4DTEE in the routine of the echocardiography laboratory" – 24-26 Jan 2019, Dubai, United Arab Emirates **(IT)**
85. "The added value of 3D echo for assessing the right ventricle" – Implementation of 4DTTE and 4DTEE in the routine of the echocardiography laboratory" – 24-26 Jan 2019, Dubai, United Arab Emirates **(IT)**
86. "The added value of 3D echo for assessing cardiac masses" – Implementation of 4DTTE and 4DTEE in the routine of the echocardiography laboratory" – 24-26 Jan 2019, Dubai, United Arab Emirates **(IT)**
87. "ASD and LAA closure" – Implementation of 4DTTE and 4DTEE in the routine of the echocardiography laboratory" – 24-26 Jan 2019, Dubai, United Arab Emirates **(IT)**
88. "EuroEcho Imaging Highlights on New Technologies" - EuroEcho Imaging Congress, 5-8 December 2018, Milan, Italy **(IT)**
89. "Incremental Value of 3D Echocardiography in Tricuspid Valve Disease" - EuroEcho Imaging Congress, 5-8 December 2018, Milan, Italy **(IT)**
90. "Tricuspid valve regurgitation" Teaching Course - EuroEcho Imaging Congress, 5-8 December 2018, Milan, Italy **(IT)**
91. "Right ventricular geometry and function" - 3D Echocardiography: Meet the Experts - 25-27 October 2018, Eindhoven, The Netherlands **(IT)**
92. "Atria" - 3D Echocardiography: Meet the Experts - 25-27 October 2018, Eindhoven, The Netherlands **(IT)**
93. "PFO, atrial septal defect closure" - 3D Echocardiography: Meet the Experts - 25-27 October 2018, Eindhoven, The Netherlands **(IT)**
94. "Mitral valve quantification" - Echocardiography for Trainees Teaching Course organized by the EACVI Heart Imagers of Tomorrow and Turkish Society of Cardiology Cardiac Imaging Working Group - 20 October 2018, Antalya, Turkey **(IT)**
95. "Tricuspid valve" - Echocardiography for Trainees Teaching Course organized by the EACVI Heart Imagers of Tomorrow and Turkish Society of Cardiology Cardiac Imaging Working Group - 20 October 2018, Antalya, Turkey **(IT)**
96. "EACVI Education for the HIT Community" - Echocardiography for Trainees Teaching Course organized by the EACVI Heart Imagers of Tomorrow and Turkish Society of Cardiology Cardiac Imaging Working Group – 20 October 2018, Antalya, Turkey **(IT)**
97. "Imaging in Coronary Heart Disease" - 2018 Cardiovascular Diseases. Current and Future Approaches in Diagnosis and Treatment. A Theoretical/Practical Interactive Course - 18-20 October 2018, Padua, Italy **(IT)**
98. "3D TOE imaging acquisition and display: a practical guide" - EACVI Teaching Course on 2D and 3D Echocardiography - European Heart House, 5-7 October 2018, Sophia Antipolis, France **(IT)**
99. "Left heart chambers" - EACVI Teaching Course on 2D and 3D Echocardiography - European Heart House, 5-7 October 2018, Sophia Antipolis, France **(IT)**
100. "Funzione e disfunzione diastolica" – XXII Congresso Regionale ARCA Sardegna, 28-29 September 2018, Oristano, Italy **(IT)**
101. "Insufficienza tricuspide funzionale: valore prognostico ed implicazioni fisiopatologiche e terapeutiche" - 10° ARCA Imaging, 14-15 September 2018, Monastier di Treviso, Italy **(IT)**
102. "Funzione ventricolare, funzione atriale, ricostruzione 3D dell'atrio e del ventricolo, l'auricola e la mitrale in 3D" – Interactive session with hands on practice - Up to Date della Fibrillazione Atriale tra Imaging e Terapia, 15 September 2018, Roncade, Italy **(IT)**
103. "Come studiare il ventricolo destro nel 2018?" - 52° Convegno Cardiologia Milano – 24-27 September 2018 Milan, Italy **(IT)**
104. "Left atrial function assessment: when does it provide added value?" - Joint Session Romanian Society of Cardiology – European Association of Cardiovascular Imaging (EACVI). Romanian Congress of Cardiology – 19-22 September 2018, Sinaia, Romania **(IT)**
105. "Tips and tricks in the assessment of mitral valve prolapse" - Joint Session Romanian Society of Cardiology – University of Medicine and Pharmacy Carol Davila – University of Padova. Romanian Congress of Cardiology – 19-22 September 2018, Sinaia, Romania **(IT)**
106. "In pazienti con cardiopatia organica, la dispersione temporale della deformazione longitudinale segmentaria del ventricolo sinistro è un predittore di aritmie ventricolari maggiori più potente e

- accurato della frazione d'eiezione del ventricolo sinistro" - 49° Congresso Nazionale ANMCO, 31 May - 2 June 2018, Rimini, Italy **(AP)**
107. "Carcinoid heart disease" – ASE 2018, 22-26 June 2018, Nashville, US **(IT)**
 108. "2D and 3D Assessment of Tricuspid Valve Anatomy" - ASE 2018, 22-26 June 2018, Nashville, US **(IT)**
 109. "Assessment of LA Function" – ASE's DVD: Utility of 3D Echocardiography: Promises and Perspectives – web-based recording of digital lecture – 29 March 2018 **(IT)**
 110. "Functional tricuspid regurgitation: How 3D echo is changing our understanding of FTR pathophysiology?" at the Symposium "Imagen en el Paciente Valvular" - 15 March 2018, Madrid, Spain **(IT)**
 111. "An uncommon mechanism of tricuspid regurgitation" - 5 January 2017, Tel-Aviv, Israel **(IT)**
 112. "Hands on 3D Lunch and Learn with the Sonographers" - 14 March 2017, Mayo Clinic, Rochester, Minnesota, US **(IT)**
 113. "The added value of 3D echocardiography to assess left and right ventricles" – Invited Visiting Professor at the Mayo Clinic Cardiac Imaging Grand Rounds - 15 March 2017, Rochester, Minnesota, US **(IT)**
 114. "Workshop with sonographers and fellows: 3DE in the echo lab" - 17 March 2017, Mayo Clinic, Rochester, Minnesota, US **(IT)**
 115. International Course on 3D Echocardiography - 19-20 May 2017, Dubai (UAE) **(IT)**
 116. "Echocardiographic assessment of the right ventricle" - International Congress "Right Heart - The New Frontier" - 1-3 March 2017, Padova, Italy **(IT)**
 117. "Teaching eco 3D: studio della valvola tricuspide" - 18° Congresso Nazionale SIEC, 6-8 April 2017, Naples, Italy **(IT)**
 118. "Ventricolo destro, tricuspide, stampa 3D" - 18° Congresso Nazionale SIEC, 6-8 April 2017, Naples, Italy
 119. "Remodelling of the tricuspid valve in functional tricuspid regurgitation: are all tricuspid regurgitant valves the same?" - Imaging and the Heart, 9-14 April 2017, Erice **(IT)**
 120. "Right ventricular function beyond TAPSE" - Imaging and the Heart, 9-14 April 2017, Erice, Italy
 121. "Aortopatie geneticamente determinate. Diagnostica per immagini" - XXXVI Corso di aggiornamento in cardiologia pediatrica - 19-20 April 2017, Padova, Italy **(IT)**
 122. IV° Workshop SIEC Triveneto 2017 "La patologia acuta e cronica dell'aorta nell'era dell'imaging multimodale" – 16 June 2017, Abano Terme, Italy **(IT)**
 123. "Il 3D nella pratica clinica" - Focus on Diagnosi e management dei difetti cardiaci semplici - Ecocardiografia in Cardiologia Pediatrica III Edizione - 4-6 May 2017, Padova, Italy **(IT)**
 124. "Pathology of tricuspid regurgitation by 3D echo" – Annual Scientific Congress of the Hungarian Society of Cardiology – 16 May 2017, Balatonfüred, Hungary **(IT)**
 125. "3D echo or CMR for RV assessment?" - EuroCMR 25-27 May 2017, Praga, Czech Republic **(IT)**
 126. "Beyond 2D Echo: When and why should I go for ...3D echocardiography" - International Congress "SYNERGY" 7-9 September 2017, Belgrade, Serbia **(IT)**
 127. "Assessing left ventricular function in aortic stenosis: standard and advanced echo techniques" - International Congress "SYNERGY" 7-9 September 2017, Belgrade, Serbia **(IT)**
 128. "Come misurare le dimensioni dell'atrio sinistro" - 51° Convegno Cardiologia Milano – 25-28 September 2017, Milan, Italy **(IT)**
 129. "Right ventricle. Case post-processed" - "3D Echo 360° European Edition" – 21-23 September 2017, Padova, Italy **(IT)**
 130. "How 3D echo changed our understanding of tricuspid regurgitation pathophysiology" - "3D Echo 360° European Edition" – 21-23 September 2017, Padova, Italy **(IT)**
 131. "Anatomy and functional dysfunction: the imaging cardiologist point of view" - 29th International day of Monaco Cardio Thoracic Center"- 3 November 2017, Monaco, France **(IT)**
 132. "Lessons learned about RV using 3D echo – clinical cases" - EuroEcho Imaging 2017 6-9 December 2017, Lisbon, Portugal **(IT)**
 133. "Right-sided valve diseases" - EuroEcho Imaging 2017 6-9 December 2017, Lisbon, Portugal **(IT)**
 134. "EuroEcho Imaging Highlights: New Technologies" - EuroEcho Imaging 2017 6-9 December 2017, Lisbon, Portugal **(IT)**
 135. "Strain e patologie del ventricolo destro". III Workshop SIEC Triveneto 2016 "Lo strain in ecocardiografia dalla A alla Z" - 27 maggio 2016, Camposampiero, Italia **(IT)**
 136. "Valutazione ecocardiografica della funzione ventricolare sinistra: dalle vecchie alle nuove tecnologie". Convegno SIEC "Rimodellamento e funzione ventricolare sinistra" – 6 maggio 2016, Pescara, Italia **(IT)**
 137. "Beyond right ventricular volumes: RV shape and mechanics" - EuroEcho Imaging 2016, 7-10 December 2016, Leipzig, Germany **(IT)**

138. "Comprehensive evaluation of the right ventricle: Pulmonary hypertension" - EuroEcho Imaging 2016, 7-10 December 2016, Leipzig, Germany **(IT)**
139. "Tips and tricks in tricuspid valve evaluation" - EuroEcho Imaging 2016, 7-10 December 2016, Leipzig, Germany **(IT)**
140. "Find the guilty" - ESC Congress 27-31 August 2016, Rome, Italy **(IT)**
141. "The Heart in 3D Echo - Clinical Applications. Assessment of LV volumes and function" - ESC Congress 27-31 August 2016, Rome, Italy **(IT)**
142. "EACVI Recommendations for the imaging assessment of prosthetic heart valves" - The 55th Edition of the Romanian Congress of Cardiology, 21-24 September 2016, Sinaia, Romania **(IT)**
143. "Left atrial size and function by 3D echo" – EACVI HIT Teaching course: Basic knowledge in advanced echo techniques", 25 September 2016, Sinaia, Romania **(IT)**
144. "The forgotten valve - tricuspid valve assessment using 3D echo" – EACVI HIT Teaching course: Basic knowledge in advanced echo techniques", 25 September 2016, Sinaia, Romania **(IT)**
145. "Imaging to evaluate CRT results" - EP Academy 2016, 27-28 October 2016, Padova, Italy **(IT)**
146. "Left Atrium in 3D". EuroEcho Imaging 2-5 December 2015, Seville, Spain **(IT)**
147. "Advanced Echo Imaging of the Right Ventricle: The Added Value of 3D Echocardiography". EuroEcho Imaging 2-5 December 2015, Seville, Spain **(IT)**
148. "Il paziente valvolare e il 3D" – 31 ottobre 2015 – "Il Laboratorio di Cardiac Imaging nello Scompenso Cardiaco", Trieste, Italia **(IT)**
149. "3D echocardiography: cardiomyopathies". 3D 360° Congress, 25-27 Sep 2015, Padua, Italy **(IT)**
150. "3D echocardiography: mitral stenosis". 3D 360° Congress, 25-27 Sep 2015, Padua, Italy **(IT)**
151. "3D echocardiography: the right ventricle" 3D 360° Congress, 25-27 Sep 2015, Padua, Italy **(IT)**
152. "New 4D Echo Enhancements for Evaluating Heart Anatomy and Function". 3D 360° Congress, 25-27 Sep 2015, Padua, Italy **(IT)**
153. "Current perspective on 3D strain: advantages and limitations". 3D 360° Congress, 25-27 Sep 2015, Padua, Italy **(IT)**
154. "Severe, secondary tricuspid regurgitation after mitral valve surgery". Mitral and tricuspid disease – keeping up with the guidelines. ESC Congress 2015, 29 Aug – 2 Sept 2015, London, UK **(IT)**
155. "3D Echo Assessment of Right Ventricular Geometry and Function" - Presentation at TomTec booth. ESC Congress 2015, 29 Aug – 2 Sept 2015, London, UK **(IT)**
156. "How to acquire and display 3D datasets". 3D Echo Intensive Course. 25-29 June 2015, Padua, Italy **(IT)**
157. "Right ventricle". 3D Echo Intensive Course. 25-29 June 2015, Padua, Italy **(IT)**
158. "Left and right atria". 3D Echo Intensive Course. 25-29 June 2015, Padua, Italy **(IT)**
159. "Aortic valve". 3D Echo Intensive Course. 25-29 June 2015, Padua, Italy **(IT)**
160. "Congenital heart diseases". 3D Echo Intensive Course. 25-29 June 2015, Padua, Italy **(IT)**
161. "Cardiac masses". 3D Echo Intensive Course. 25-29 June 2015, Padua, Italy **(IT)**
162. "3D strain". 3D Echo Intensive Course. 25-29 June 2015, Padua, Italy **(IT)**
163. "How to acquire and display 3D datasets". 3D Echo Symposium. 8-10 June 2015, St. Petersburg, Russia **(IT)**
164. "Right ventricle". 3D Echo Symposium. 8-10 June 2015, St. Petersburg, Russia **(IT)**
165. "Aortic valve" 3D Echo Symposium. 8-10 June 2015, St. Petersburg, Russia **(IT)**
166. "Tricuspid valve" 3D Echo Symposium. 8-10 June 2015, St. Petersburg, Russia **(IT)**
167. "How to acquire and display 3D datasets". 3D Echo Course. 18-21 May 2015, Porto Alegre, Brazil **(IT)**
168. "Right ventricle". 3D Echo Course. 18-21 May 2015, Porto Alegre, Brazil **(IT)**
169. "Congenital heart diseases" 3D Echo Course. 18-21 May 2015, Porto Alegre, Brazil **(IT)**
170. "How to acquire and display 3D datasets". 3D Echo Course. 11-15 May 2015, Rio de Janeiro, Brazil
171. "Right ventricle". 3D Echo Course. 11-15 May 2015, Rio de Janeiro, Brazil **(IT)**
172. "Aortic valve". 3D Echo Course. 11-15 May 2015, Rio de Janeiro, Brazil **(IT)**
173. "Congenital heart diseases". 3D Echo Course. 11-15 May 2015, Rio de Janeiro, Brazil **(IT)**
174. "Ecocardiogramma e Ventricolo Destro: cosa serve sapere in UTIC?" Novità in Terapia Intensiva Cardiologica: le sfide cardiologiche del nuovo millennio (2° Congresso). 8 May 2015, Padua, Italy **(IT)**
175. "Three-dimensional printing of tricuspid valve using transthoracic echocardiography". XVII Congresso SIEC, 16-18 April 2015, Naples, Italy **(AP)**
176. "Analisi Quantitativa e Refertazione dell'Ecocardiogramma Secondo le Linee Guida ASE/EACVI 2015" The 17th National Congress SIEC 2015, 17 April 2015, Naples, Italy **(IT)**

177. "L'eco 3D, la sonda a matrice e i setting di acquisizione". Corso teorico-pratico di ecocardiografia in cardiologia pediatrica. 9-11 April, 2015, Padua, Italy **(IT)**
178. "Il ventricolo destro ed il 3D: il santo Graal per l'ecografista?" Corso teorico-pratico di ecocardiografia in cardiologia pediatrica. 9-11 April, 2015, Padua, Italy **(IT)**
179. "Why and how to implement 3D echocardiography in daily routine?" Congress on Echocardiography. 18-20 March 2015, Tylosand, Sweden **(IT)**
180. "3D echocardiography for left atrium assessment". Congress on Echocardiography. 18-20 March 2015, Tylosand, Sweden **(IT)**
181. "How to acquire and display 3D datasets". 3D Echo Intensive Course. 2-6 March 2015, Padua, Italy **(IT)**
182. "Right ventricle". 3D Echo Intensive Course. 2-6 March 2015, Padua, Italy **(IT)**
183. "Left and right atria". 3D Echo Intensive Course. 2-6 March 2015, Padua, Italy **(IT)**
184. "Aortic valve". 3D Echo Intensive Course. 2-6 March 2015, Padua, Italy **(IT)**
185. "Congenital heart diseases". 3D Echo Intensive Course. 2-6 March 2015, Padua, Italy **(IT)**
186. "Cardiac masses". 3D Echo Intensive Course. 2-6 March 2015, Padua, Italy **(IT)**
187. "3D strain". 3D Echo Intensive Course. 2-6 March 2015, Padua, Italy **(IT)**
188. "A rare complication after transapical TAVI procedure" Meeting SIEC Triveneto. 20 February 2015, Padua, Italy **(IT)**
189. "Chamber quantification" - Imaging Highlights from 2014 Recommendations. Joint session EACVI Club 35 and ESC Cardiologists of Tomorrow. EuroEcho Imaging 2014, 3-6 December 2014, Vienna, Austria **(IT)**
190. "3D Echo Assessment of Right Ventricular Geometry and Function" - Presentation at TomTec booth. EuroEcho Imaging 2014, 3-6 December 2014, Vienna, Austria **(IT)**
191. "Speckle tracking 3D: vantaggi e limiti della tecnologia attuale" - 9 October 2014, Trieste, Italy **(IT)**
192. "How to acquire and display 3D datasets". 3D Echo Intensive Course. 27-31 October 2014, Padua, Italy
193. "Right ventricle". 3D Echo Intensive Course. 27-31 October 2014, Padua, Italy **(IT)**
194. "Left and right atria". 3D Echo Intensive Course. 27-31 October 2014, Padua, Italy **(IT)**
195. "Aortic valve". 3D Echo Intensive Course. 27-31 October 2014, Padua, Italy **(IT)**
196. "Congenital heart diseases". 3D Echo Intensive Course. 27-31 October 2014, Padua, Italy **(IT)**
197. "Cardiac masses". 3D Echo Intensive Course. 27-31 October 2014, Padua, Italy **(IT)**
198. "3D strain". 3D Echo Intensive Course. 27-31 October 2014, Padua, Italy **(IT)**
199. "3D Echo for cardiac chamber quantification" - EACVI Teaching course - Echocardiography for trainees - 18 October 2014, Sofia, Bulgaria **(IT)**
200. "Quantification of mitral stenosis severity" - China-Europe Echocardiography CME Project. Interactive webcast on basic and advanced echocardiography (IT) 14 September -15 October 2014, <http://cn.intermeeting.org/project.html> (IT)
201. "The added value of measuring RV deformation" - EACVI Teaching course - Echocardiography for trainees - 18 October 2014, Sofia, Bulgaria **(IT)**
202. "The left atrium by 3D echocardiography" - 3D Echo 360° Conference, 12-14 September 2014, Atlanta, US **(IT)**
203. "The left atrium – how and when do I measure 3D LA volume?" - 3D Echo 360° Conference, 12-14 September 2014, Atlanta, US **(IT)**
204. "Right heart" - 3D Echo 360° Conference, 12-14 September 2014, Atlanta, US **(IT)**
205. "3-D Echo for Tricuspid Valve Anatomy and Function" - 3D Echo 360° Conference, 12-14 September 2014, Atlanta, US **(IT)**
206. "3D Echocardiography" – Recent advances in cardiology: what does the busy cardiologist need to know about...- Joint session COT, EACVI Club 35, Young EAPCI, Young ACCA, EHRA Young Committee. ESC Congress 2014, 30 August – 3 September 2014, Barcelona, Spain **(IT)**
207. "Characterization of transmural longitudinal and circumferential mechanics by multi-layer strain analysis in hypertrophic cardiomyopathy". ESC Congress 2014, 30 August – 3 September 2014, Barcelona, Spain **(IT)**
208. "Prosthetic valve endocarditis complicated by embolism" – Infective endocarditis. Clinical cases: an echo nightmare. ESC Congress 2014, 30 August – 3 September 2014, Barcelona, Spain **(IT)**
209. "Low-flow/low-gradient aortic stenosis with low ejection fraction: dobutamine stress echo is useful!". ESC Congress 2014, 30 August – 3 September 2014, Barcelona, Spain **(IT)**
210. "How to acquire and display 3D datasets". 3D Echo Intensive Course. 9-13 June 2014, Padua, Italy **(IT)**
211. "Right ventricle". 3D Echo Intensive Course. 9-13 June 2014, Padua, Italy **(IT)**
212. "Left and right atria". 3D Echo Intensive Course. 9-13 June 2014, Padua, Italy **(IT)**

213. "Aortic valve". 3D Echo Intensive Course. 9-13 June 2014, Padua, Italy **(IT)**
214. "Congenital heart diseases". 3D Echo Intensive Course. 9-13 June 2014, Padua, Italy **(IT)**
215. "Cardiac masses". 3D Echo Intensive Course. 9-13 June 2014, Padua, Italy **(IT)**
216. "3D strain". 3D Echo Intensive Course. 9-13 June 2014, Padua, Italy **(IT)**
217. "Current perspective on 3D strain" - The XIXth World Congress of Echocardiography and Allied Techniques. 10-11 May 2014, Sibiu, Romania **(IT)**
218. "3D echo assessment of right ventricular geometry and function" - The XIXth World Congress of Echocardiography and Allied Techniques. 10-11 May 2014, Sibiu, Romania **(IT)**
219. "How to acquire and display 3D datasets". 3D Echo Intensive Course. 10-14 March 2014, Padua, Italy **(IT)**
220. "Right ventricle". 3D Echo Intensive Course. 10-14 March 2014, Padua, Italy **(IT)**
221. "Left and right atria". 3D Echo Intensive Course. 10-14 March 2014, Padua, Italy **(IT)**
222. "Aortic valve". 3D Echo Intensive Course. 10-14 March 2014, Padua, Italy **(IT)**
223. "Congenital heart diseases". 3D Echo Intensive Course. 10-14 March 2014, Padua, Italy **(IT)**
224. "Cardiac masses". 3D Echo Intensive Course. 10-14 March 2014, Padua, Italy **(IT)**
225. "Etiologies of tricuspid regurgitation" - The forgotten valve. Annual Congress of Belgian Society of Cardiology - 31 January 2014, Brussels, Belgium **(IT)**
226. "Right ventricular function" - 3D Echo in clinical practice: better than 2D? EuroEcho Imaging 2013, 11-14 December 2013, Istanbul, Turkey **(IT)**
227. "The left atrium: size and function" - Course on 3D echocardiography: ready for prime time. EuroEcho Imaging 2013, 11-14 December 2013, Istanbul, Turkey **(IT)**
228. "Storage diseases" - The heart in systemic diseases: what does the echocardiographer need to know? - EuroEcho Imaging 2013, 11-14 December 2013, Istanbul, Turkey **(IT)**
229. "Mitral valve abnormalities correlate with LV remodelling and dysfunction in hypertrophic cardiomyopathy: a quantitative 3DTTE study" - EuroEcho Imaging 2013, 11-14 December 2013, Istanbul, Turkey **(AP)**
230. "How to acquire and display 3D datasets". 3D Echo Intensive Course. 18-22 November 2013, Padua, Italy **(IT)**
231. "Right ventricle". 3D Echo Intensive Course. 18-22 November 2013, Padua, Italy **(IT)**
232. "Left and right atria". 3D Echo Intensive Course. 18-22 November 2013, Padua, Italy **(IT)**
233. "Aortic valve". 3D Echo Intensive Course. 18-22 November 2013, Padua, Italy **(IT)**
234. "Congenital heart diseases". 3D Echo Intensive Course. 18-22 November 2013, Padua, Italy **(IT)**
235. "Cardiac masses". 3D Echo Intensive Course. 18-22 November 2013, Padua, Italy **(IT)**
236. "3D Echocardiography: basic principles and clinical applications" - EACVI Club 35 Teaching course - Echocardiography for trainees - 9 November 2013, Athens, Greece **(IT)**
237. "Tricuspid valve: what 3D echo can add" - 52nd National Congress of Romanian Society of Cardiology. 3-5 October 2013, Sinaia, Romania **(IT)**
238. "Tricuspid regurgitation: what 3D echo can add?" - The tricuspid valve in the spotlight. ESC Congress 2013, 31 August-4 September, Amsterdam, The Netherlands **(IT)**
239. "A multimodality approach to assess RV remodelling" - Noninvasive imaging in pulmonary hypertension. ESC Congress 2013, 31 August-4 September, Amsterdam, The Netherlands **(IT)**
240. "How to acquire and display 3D datasets". 3D Echo Intensive Course. 3-7 June 2013, Padua, Italy **(IT)**
241. "Right ventricle". 3D Echo Intensive Course. 3-7 June 2013, Padua, Italy **(IT)**
242. "Left and right atria". 3D Echo Intensive Course. 3-7 June 2013, Padua, Italy **(IT)**
243. "Aortic valve". 3D Echo Intensive Course. 3-7 June 2013, Padua, Italy **(IT)**
244. "Congenital heart diseases". 3D Echo Intensive Course. 3-7 June 2013, Padua, Italy **(IT)**
245. "Cardiac masses". 3D Echo Intensive Course. 3-7 June 2013, Padua, Italy **(IT)**
246. "Right ventricle" - 3D Assessment of Heart Chambers. The Role of Advanced Cardiac Imaging. 8-10 May 2013, Venice, Italy **(IT)**
247. "Tricuspid valve" - 3D Assessment of Heart Valves. The Role of Advanced Cardiac Imaging. 8-10 May 2013, Venice, Italy **(IT)**
248. "Echocardiographic assessment in primary tricuspid valve pathology" - SIEC XVI Congresso Nazionale di Ecocardiografia, 29 April - 1 May 2013, Torino, Italy **(IT)**
249. "2D/3D strain imaging: where are we in 2013?" - 16 April 2013, Prague, Czech Republic **(IT)**
250. "How to acquire and display 3D datasets". 3D Echo Intensive Course. 18-22 March 2013, Padua, Italy
251. "Right ventricle". 3D Echo Intensive Course. 18-22 March 2013, Padua, Italy **(IT)**

252. "Left and right atria". 3D Echo Intensive Course. 18-22 March 2013, Padua, Italy **(IT)**
253. "Aortic valve". 3D Echo Intensive Course. 18-22 March 2013, Padua, Italy **(IT)**
254. "Congenital heart diseases". 3D Echo Intensive Course. 18-22 March 2013, Padua, Italy **(IT)**
255. "Cardiac masses". 3D Echo Intensive Course. 18-22 March 2013, Padua, Italy **(IT)**
256. "Tricuspid valve anatomy for repair" - Quantitative 3D Echocardiography of Heart Valve Disease - ACC13, 9-11 March 2013, San Francisco, US **(IT)**
257. "3D strain" - EuroEcho and Other Imaging Modalities, December 5-8, 2012, Athens, Greece **(IT)**
258. "Intervendor consistency of 3D strain", EuroEcho and Other Imaging Modalities, December 5-8, 2012, Athens, Greece **(IT)**
259. "How to acquire and display 3D datasets". November 26-29, 2012, Padua, Italy **(IT)**
260. "Right ventricle". 3D Echo Intensive Course. November 26-29, 2012, Padua, Italy **(IT)**
261. "Left and right atria". 3D Echo Intensive Course. November 26-29, 2012, Padua, Italy **(IT)**
262. "Aortic valve". 3D Echo Intensive Course. November 26-29, Padua, Italy **(IT)**
263. "Congenital heart diseases". 3D Echo Intensive Course. November 26-29, 2012, Padua, Italy **(IT)**
264. "Cardiac masses". 3D Echo Intensive Course. November 26-29, 2012, Padua, Italy **(IT)**
265. "3D echo assessment of the left atrium - basics and new methods". Role of multimodality imaging of the left atrium in clinical practice, organized by the Belgian Working Group of Non-Invasive Cardiac Imaging of the Belgian Society of Cardiology endorsed by EAE, November 23, 2012, Brussels (Belgium) **(IT)**
266. "3D speckle-tracking echocardiography: can it detect ischemic substrate?" - EKK Echocardiography Congress endorsed by EAE, November 8-10, 2012, Cologne, Germany **(IT)**
267. "Valvular heart disease by 3D transoesophageal echocardiography" - Walking into new technologies, November 14-16, 2012, Naples (Italy) **(IT)**
268. "How to acquire good 3D data sets?" - EAE Teaching Course, 26-27 October, 2012, Skopje **(IT)**
269. "3D echocardiography in ischemic heart disease" - EAE Teaching Course, 26-27 October, 2012, Skopje **(IT)**
270. "3D echocardiography for aortic valve" - EAE Teaching Course, 26-27 October, 2012, Skopje **(IT)**
271. "3D echocardiography for the left atrium and atrial appendage" - EAE Teaching Course, 26-27 October, 2012, Skopje **(IT)**
272. "Assessment of right ventricle: speckle-tracking and 3D echocardiography" - Echocardiography and new technologies - September 29, 2012, Città di Castello, Italy **(IT)**
273. "Three-dimensional deformation imaging: advantages and challenges" - ESC Congress 2012, August 25-28, 2012, Munich, Germany **(IT)**
274. "Two-dimensional longitudinal strain is more accurate than three-dimensional longitudinal strain to identify infarcted LV segments in STEMI patients" - ESC Congress 2012, August 25-28, 2012, Munich, Germany **(AP)**
275. "How to acquire and display 3D datasets". June 25-29, 2012, Padua, Italy **(IT)**
276. "Right ventricle". 3D Echo Intensive Course. June 25-29, 2012, Padua, Italy **(IT)**
277. "Left and right atria". 3D Echo Intensive Course. June 25-29, 2012, Padua, Italy **(IT)**
278. "Aortic valve". 3D Echo Intensive Course. June 25-29, 2012, Padua, Italy **(IT)**
279. "Congenital heart diseases". 3D Echo Intensive Course. June 25-29, 2012, Padua, Italy **(IT)**
280. "Cardiac masses". 3D Echo Intensive Course. June 25-29, 2012, Padua, Italy **(IT)**
281. "Impact of 3D echo on the assessment of aortic stenosis severity" - Joint EAE/SIEC Teaching Course: Update in Valvular Heart Diseases - May 8-9 2012, Milan, Italy **(IT)**
282. "The added value of three-dimensional transthoracic and transoesophageal echocardiography in valvular heart diseases: from diagnosis to treatment" - GE Satellite Symposium - May 7, 2012, Milan, Italy **(IT)**
283. "A novel approach to the tricuspid valve assessment by 3D echocardiography" - 10th Coronary and Cardiac National Multi-Imaging Congress - April 10, 2012, Naples, Italy **(IT)**
284. "3D strain: reference values and clinical application in STEMI" - Myocardial Velocity and Deformation Imaging, February 9-10, 2012, Leuven (Belgium) **(IT)**
285. „Assessment of 3D strain" - EuroEcho & other Imaging Modalities 2011 - December 7-10 - Budapest, Hungary **(IT)**
286. „3D strain: limitations and reproducibility" - EuroEcho & other Imaging Modalities 2011 - December 7-10 - Budapest, Hungary **(IT)**
287. „3D strain: from principles to practice" - 2nd Meeting of the Italian Council of PhD Fellows" - November 21-23 - Erice, Italy **(IT)**
288. „Echocardiografia Monaldi 2011: walking into new technologies" - November 9-11, 2011 - Naples, Italy

289. „Deformation imaging” - November 5th, 2011 - Master course for sonographers, University of Padua - Padua, Italy **(IT)**
290. “3D Echocardiography: Left atrium and left atrial appendage” - Present Clinical Practice and Future Developments of Three-dimensional Echocardiography (EAE Teaching Course) - October 27-28, 2011 - Venice, Italy **(IT)**
291. „Echocardiographic assessment of atrial size and function” - May 18th, 2011 - Master course for sonographers, University of Padua - Padua, Italy **(IT)**
292. „3D echocardiography: a primer on transducers, acquisitions and post-processing modalities” - 45th Congress of Cardiology 2011, Niguardia Ca' Granda Hospital - September 12-16 - Milan, Italy **(IT)**
293. „Future developments: 3D strain” - May 7th, 2011 - Brasov, Romania **(IT)**
294. „State-of-the-art for the noninvasive assessment of aortic stenosis” - April 11-13, 2011 - Ostuni, Italy **(IT)**
295. „3D echo to assess left ventricular morphology and function” - April 11-13, 2011 - Ostuni, Italy **(IT)**
296. „Speckle-tracking echocardiography and right ventricular function: an added value?” - The 15th National Congress SIEC 2011, April 14-16th - Naples, Italy **(IT)**
297. “Inconsistency of 3D strain measurements between vendors” - Finalist Young investigators’ award for best scientific presentation, The 15th National Congress SIEC 2011, April 14-16th - Naples, Italy **(AP)**
298. „3D assessment of tricuspid valve” - „Theoretical-practical Course of Three-Dimensional Echocardiography” - The 5th National Congress of Echo-cardiosurgery”, March 23-25, 2011 - Milano, Italy **(IT)**
299. „3D assessment of tricuspid and pulmonary valves” - Seminar on Three-Dimensional Echocardiography - Medical, Clinical and Experimental Sciences Doctoral School, February 22, 2011 - Padua, Italy **(IT)**
300. „3D assessment of left and right atria” - Seminar on Three-Dimensional Echocardiography - Medical, Clinical and Experimental Sciences Doctoral School, February 22, 2011 - Padua, Italy **(IT)**
301. „3D assessment of right ventricular geometry and function” - Seminar on Three-Dimensional Echocardiography - Medical, Clinical and Experimental Sciences Doctoral School, February 15, 2011 - Padua, Italy **(IT)**
302. „3D assessment of mitral valve” - Seminar on Three-Dimensional Echocardiography - Medical, Clinical and Experimental Sciences Doctoral School, February 15, 2011 - Padua, Italy **(IT)**
303. „3D speckle tracking: comparison of 3D strain among different echo machines” - Myocardial Velocity and Deformation Imaging, February 10-11, 2011 - Leuven, Belgium **(IT)**
304. „3D assessment of heart valves: right-sided valves” Teaching Course (Joint Session with the ASE) - EuroEcho 2010, December 8-11 - Copenhagen, Denmark **(IT)**
305. „Modern echo assessment of right ventricle function” Symposium - EuroEcho 2010, December 8-11 - Copenhagen, Denmark **(IT)**
306. „Mitral valve and 3D echocardiography” - November 3-4, 2010 - Naples, Italy **(IT)**
307. „3D echocardiography for the assessment of aortic and tricuspid valve” - November 3-4, 2010 - Naples, Italy **(IT)**
308. „European Association of Echocardiography recommendations for the assessment of valvular regurgitation. Part 2: tricuspid regurgitation” - National Congress of Cardiology, October 7-9, 2010 - Sinaia, Romania **(IT)**
309. „Sources of variation and bias in assessing left ventricular dyssynchrony using three-dimensional echocardiography” - ESC Congress 2010, August 28 - September 1st, Stockholm, Sweden **(AP)**
310. „Third-generation full-volume 3D stress echocardiography to assess inducible myocardial ischemia” - ANMCO 41th National Congress of Cardiology May 19-22, 2010 - Florence, Italy **(AP)**
311. „Assessment of myocardial deformation in ischemic heart disease” - May 10-12, 2010 - Gubbio, Italy **(IT)**
312. „Cost-effectiveness of 4D stress echocardiography” - May 10-12, 2010 - Gubbio, Italy **(IT)**
313. „3D Echocardiography - principles and clinical applications” Teaching Course for Advanced Level Echo Accreditation - April 21, 2010 - Institute of Cardiovascular Diseases, Bucharest, Romania **(IT)**
314. „Speckle-tracking echocardiography - principle and clinical applications” Teaching Course for Advanced Level Echo Accreditation - April 22, 2010 - Institute of Cardiovascular Diseases, Bucharest, Romania **(IT)**
315. „Tissue velocity imaging and speckle tracking” Teaching Course - EuroEcho 2009, December 9-12 - Madrid, Spain **(IT)**
316. „European Association of Echocardiography recommendations of standardization of performance, digital storage and reporting of echocardiographic studies” - National Congress of Cardiology, September 19-22, 2009 - Sinaia, Romania **(IT)**

317. „Echocardiographic assessment of right ventricular size and function” - June 13, 2009 - Palmanova, Italy **(IT)**
318. „Standard and real-time 3D echocardiography for the assessment of acute pulmonary embolism” - May 8, 2009 - University of Padua, Italy **(IT)**
319. „Real-time 3D echocardiography: quantitation of right ventricular size and function” - March 2nd, 2009 - University Hospital Santa Maria della Misericordia, Udine, Italy **(IT)**
320. „Differences in timing of peak apical and basal rotation: a possible mechanism for early alterations in left ventricular mechanics” - EuroEcho 2008, December 2008, 10-13 - Lyon, France **(AP)**
321. „Speckle-tracking echocardiography - a new tool for noninvasive assesment of left ventricular torsion and untwisting” - June 18-23, 2008 - The 6th International Cardiology Congress. Review Course: Latest news in cardiology, Clinical Emergency Hospital, Targu-Mures, Romania **(IT)**
322. „New echocardiographic techniques: between pathophysiology and clinics - Speckle-tracking echocardiography” - April 15, 2008 - Institute of Cardiovascular Diseases, Bucharest, Romania **(IT)**
323. „Left ventricular torsion: an important mechanism for maintaining normal filling pressures. A speckle tracking echocardiography study in normal subjects” - EuroEcho 2007, December 5-8, 2007 - Lisbon, Portugal **(AP)**
324. „Left ventricular torsion: an important mechanism for maintaining normal filling pressures” - March 26, 2007 - Monthly meeting of Bucharest Subsidiary of the Romanian Society of Cardiology, Romania **(IT)**

Chairperson

1. Young Investigator Award Session in Cardiovascular Imaging - ESC Congress 2024, 30 August 2024, London, UK
2. “Echo in heart failure, can we do better now?” – ESC Congress 2022 - Philips Healthcare Satellite Symposium 26 August 2022, Barcelona, Spain
3. “Imaging essentials in atrial secondary tricuspid regurgitation” - PCR Tricuspid Group Webinar 25 October 2022 <https://www.youtube.com/watch?v=x95rxkKs4Sg&t=110s>
4. EACVI Teaching Course on 2D and 3D Echocardiography: Session III - European Heart House, 5-7 October 2018, Sophia Antipolis, France
5. “Image Interpretation with the Masters” - ESC Congress 2018, 25-29 August 2018, Munich, Germany
6. “Multimodality imaging in arrhythmogenic cardiomyopathy” - EACVI Webinar (live webcast) Presenter: Kristina Haugaa (Oslo, Norway), 22 March 2017
7. “The tricuspid valve - new insights into invasive therapies” - ESC Congress 26-30 August 2017 Barcelona, Spain
8. “Teaching course on imaging aortic stenosis – Part 2”. International Congress “SYNERGY” 7-9 September 2017, Belgrade, Serbia
9. “Extend the experience of two important past EACVI webinars” - EuroEcho Imaging 2017 6-9 December 2017, Lisbon, Portugal
10. “Le nuove metodiche ecocardiografiche”. Corso teorico-pratico di ecocardiografia in cardiologia pediatrica. 9-11 April, 2015, Padua, Italy
11. “Case-based session: imaging unusual cases”. EuroEcho Imaging 2014, 3-6 December 2014, Vienna, Austria
12. “New approaches to analyze right ventricular function” - EuroEcho & other Imaging Modalities 2011 - 7-10 December - Budapest, Hungary
13. “How to critically read a research paper” - EuroEcho & other Imaging Modalities 2011 - 7-10 December - Budapest, Hungary

Fellowships, awards and acknowledgments

2024:

- Honorary Lecture PolEcho 2024 – the annual Congress of the Association of Echocardiography of the Polish Society of Cardiology, Krakow, Poland

2022:

- Keynote Lecture at the Annual Symposium of the Belgian Working Group on Non-Invasive Cardiac Imaging (BWGNICI) - 2022
- **Best Abstract Award** - 83rd SIC National Congress - 15-18 December, 2022, Rome

1. Michele Tomaselli, Luigi Paolo Badano, Francesco Paolo Perelli, Noela Radu, Giorgio Oliverio, Heilbron Francesca, Davide Stucchi, Cinzia Pece, Virginia Camponetti, Andrea Cascella, Sergio Caravita, Claudia Baratto, Francesca Ciambellotti, Gianfranco Parati, Mara Gavazzoni, **Denisa Muraru** 227 THE PROGNOSTIC VALUE OF RIGHT ATRIAL STRAIN IN PATIENTS WITH SECONDARY TRICUSPID REGURGITATION, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, suac121.238, <https://doi.org/10.1093/eurheartjsupp/suac121.238>
2. Michele Tomaselli, Vincenzo Cannone, **Denisa Muraru**, Giorgio Oliverio, Mara Gavazzoni, Francesca Heilbron, Noela Radu, Francesco Perelli, Davide Stucchi, Cinzia Pece, Virginia Camponetti, Salvatore Rizzo, Giovanni Battista Perego, Sergio Caravita, Claudia Baratto, Gianfranco Parati, Francesco Brasca, Luigi Paolo Badano, 511 INCREMENTAL VALUE OF RIGHT ATRIAL STRAIN ANALYSIS TO PREDICT ATRIAL FIBRILLATION RECURRENCE AFTER CARDIOVERSION, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, suac121.239, <https://doi.org/10.1093/eurheartjsupp/suac121.239>
3. Michele Tomaselli, Emanuele Curti, Noela Radu, Francesco Perelli, Andrea Cascella, Davide Stucchi, Cinzia Pece, Virginia Camponetti, Giorgio Oliverio, Francesca Ciambellotti, Mara Gavazzoni, Francesca Heilbron, Sergio Caravita, Claudia Baratto, Gianfranco Parati, **Denisa Muraru**, Luigi Paolo Badano, 843 QUANTIFICATION OF VENTRICULAR FUNCTIONAL MITRAL REGURGITATION USING THE VOLUMETRIC METHOD BY 3D-ECHOCARDIOGRAPHY, *European Heart Journal Supplements*, Volume 24, Issue Supplement_K, December 2022, suac121.241, <https://doi.org/10.1093/eurheartjsupp/suac121.241>

2021

- American Society of Echocardiography's 22nd Annual Feigenbaum Lecturer
- Top 3 Most Cited Articles in Eur Heart J Cardiovascular Imaging in the Past Two Years

#2 Muraru D, Addetia K, Guta AC, Ochoa-Jimenez RC, Genovese D, Veronesi F, Basso C, Iliceto S, Badano LP, Lang RM. Right atrial volume is a major determinant of tricuspid annulus area in functional tricuspid regurgitation: a three-dimensional echocardiographic study. *Eur Heart J Cardiovasc Imaging*. 2021 May 10;22(6):660-669. doi: 10.1093/ehjci/jeaa286. Erratum in: *Eur Heart J Cardiovasc Imaging*. 2021 May 10;22(6):669. PMID: 33387441.

#3 Muraru D, Previtero M, Ochoa-Jimenez RC, Guta AC, Figliozzi S, Gregori D, Bottigliengo D, Parati G, Badano LP. Prognostic validation of partition values for quantitative parameters to grade functional tricuspid regurgitation severity by conventional echocardiography. *Eur Heart J Cardiovasc Imaging*. 2021 Jan 22;22(2):155-165. doi: 10.1093/ehjci/jeaa282. PMID: 33247930.

<https://academic.oup.com/eurheartj/pages/highly-cited-articles#1886730caffbb3e46c3e>

- Two publications listed in Top 5 Best of Imaging in Eur Heart J Cardiovascular Imaging in 2020 (top Altmetric Scoring articles)

#4 Skulstad H, Cosyns B, Popescu BA, Galderisi M, Salvo GD, Donal E, Petersen S, Gimelli A, Haugaa KH, **Muraru D**, Almeida AG, Schulz-Menger J, Dweck MR, Pontone G, Sade LE, Gerber B, Maurovich-Horvat P, Bharucha T, Cameli M, Magne J, Westwood M, Maurer G, Edvardsen T. COVID-19 pandemic and cardiac imaging: EACVI recommendations on precautions, indications, prioritization, and protection for patients and healthcare personnel. *Eur Heart J Cardiovasc Imaging*. 2020 Jun 1;21(6):592-598. doi: 10.1093/ehjci/jeaa072. PMID: 32242891; PMCID: PMC7184341.

#5 Badano LP, **Muraru D**, Parati G, Haugaa K, Voigt JU. How to do right ventricular strain. *Eur Heart J Cardiovasc Imaging*. 2020 Aug 1;21(8):825-827. doi: 10.1093/ehjci/jeaa126. PMID: 32504092.

- Publication cited among the Top 6 Most Read Articles in JASE in the past 3 years (<https://www.onlinejase.com/>):

Guta AC, Badano LP, Tomaselli M, Mihalcea D, Bartos D, Parati G, **Muraru D**. The Pathophysiological Link between Right Atrial Remodeling and Functional Tricuspid Regurgitation in Patients with Atrial Fibrillation: A Three-Dimensional Echocardiography Study. *J Am Soc Echocardiogr*. 2021 Jun;34(6):585-594.e1. doi: 10.1016/j.echo.2021.01.004. Epub 2021 Jan 10. PMID: 33440232.

- **Best Abstract Award - 82rd SIC National Congress - 9-12 December, 2021, Rome**

Mara Gavazzoni, Francesca Heilbron, Diana Florescu, Pellegrino Ciampi, Andrada C Guta, Roberto Ochoa, Michele Tomaselli, Valentina Volpato, Giorgio Oliverio, Sergio Caravita, Gianfranco Parati, Denisa Muraru, Luigi Badano, 144 Atrial and ventricular phenotypes in a cohort of patients with functional tricuspid regurgitation: clinical, echocardiographic, and prognostic aspects, *European Heart Journal Supplements*, Volume 23, Issue Supplement_G, December 2021, suab132.024, <https://doi.org/10.1093/eurheartj/suab132.024>

2019:

- Fellow American Society of Echocardiography (FASE)
- Fellow American College of Cardiology (FACC)
- Honorary Lecture "Gerhard Hoghenkerke" Mitteldetscher Echokardiographie Kongress der GDK – 14 June 2019, Leipzig, Germany

2018:

- Honorary Member of Romanian Society of Cardiology - awarded during the 57° National Congress of Cardiology, 19-22 September 2018, Sinaia, Romania
- Fellow European Society of Cardiology (FESC)

2017:

- First Prize from the Sociedad Espanola de Cardiologia for the paper with highest number of citations at mid-term published in *Revista Espanola de Cardiologia*
- Award for Excellence in Research in 2017 from the Romanian Society of Cardiology with the original study "Mihaila S, Muraru D, Miglioranza MH, Piasentini E, Aruta P, Cucchini U, Iliceto S, Vinereanu D, Badano LP. Relationship between mitral annulus function and mitral regurgitation severity and left atrial remodelling in patients with primary mitral regurgitation" *European Heart Journal Cardiovascular Imaging* 2016;17(8):918-29. doi: 10.1093/ehjci/jev301

2016:

- Outstanding Contribution in Reviewing in 2016 from the Editorial Board of the Journal of the American Society of Echocardiography
- 1st Prize at the Young Investigators Award 2016 from the Romanian Society of Cardiology with the original study "Mihaila S, Marotta C, Calore C, Aruta P, Iliceto S, Vinereanu D, Badano LP, Muraru D. Impact of 3D echocardiography for mitral valve sizing in hypertrophic cardiomyopathy: excessive posterior mitral valve leaflet closure correlates with left ventricular outflow tract obstruction" (24 September 2016)

2015:

- Best abstract presentation award at XVII Congresso Nazionale SIEC, 16-18 Aprile 2015, Napoli. Ermacora D, Miglioranza-Haertel M, Muraru D, Mihaila S, Cucchini U, Marotta C, Calabrò F, Brunello G, Cecchetto A, Cavalli G, Romeo G, Iliceto S, Badano LP. Left atrial volumes measured with 3D echocardiography are significantly larger than those calculated with 2D echocardiography and need different normative values.
- High score abstract "Three-dimensional printing of normal and pathologic valves from transthoracic three-dimensional echocardiographic data sets: feasibility and relative accuracy" - poster EuroEcho Imaging 2015, Seville (Spain)

2014:

- Honorary Medal from the Romanian Society of Cardiology for the participation at the XIX World Congress of Echocardiography and Allied Techniques, 10-11 May 2014, Sibiu, Romania

2011:

- Winner of a 1-year Echocardiography Research Grant awarded by the European Association of Echocardiography with the project "Left and right atrial size and function assessment by novel semi-automated software tailored for atrium analysis by three-dimensional echocardiography" for 2011 (25.000 €)
- 3rd Prize at Young Investigators' Awards session, awarded by Romanian Society of Cardiology. Muraru D, Popescu BA, Ginghina C, Badano LP: Global 3D circumferential strain is related to infarct size and transmural extent of myocardial necrosis in patients with successfully reperfused STEMI. The 50th National Congress of Romanian Society of Cardiology, 29 Sep-1 Oct 2011, Sinaia, Romania (1.000 €)
- Finalist at Young Investigators' Awards session, awarded by Italian Society of Cardiovascular Echography: Muraru D, Cucchini U, Badano LP, Soldà E, Tuveri MF, Al Nono O, Sarais C, Iliceto S. Inconsistency of 3D strain measurements between vendors. XVth National Congress of Italian Society of Cardiovascular Echography, Naples, 14-16 April 2011

2010:

- Winner of a prize for excellence in cardiology research (co-author of 2 ISI papers with IF 1-3) awarded by Romanian Society of Cardiology in 2010 (1.500 €)
- Winner of a prize for abstract presenter of original research at ESC Congress 2010 (3 abstracts as first author) awarded by Romanian Society of Cardiology (1.200 €)
- Winner of a prize for scientific research results (co-author of 2 papers published in Web of Science - Thomson Reuters) awarded by the Romanian Ministry of Education, Research, Youth and Sport - CNCSIS in 2010 (4.000 RON)
- Second prize at Young Investigators award session, awarded by Romanian Society of Cardiology: Calin A, Popescu BA, Beladan CC, Rosca M, Muraru D, Lupascu L, Calin C, Jurcut R,

Sandu C, Gingham C. Impactul cresterii postsarcinii globale a ventriculului stang asupra torsionii si detorsionii ventriculare stangi la pacientii cu stenoza aortica stransa. National Congress of Romanian Society of Cardiology, Sinaia, 7-9 Oct 2010

2009:

- Winner of a 1-year Echocardiography Research Grant awarded by the Azienda Ospedaliero-Universitaria "S. Maria della Misericordia" (Udine, Italy) with the project „Time course and extent of left and right ventricular remodelling during pharmacological treatment of pulmonary hypertension. A real-time three-dimensional echocardiographic study” for 2009 (12.000 €)
- First prize for best original abstract awarded by Romanian Society of Cardiology: Popescu BA, Beladan CC, Calin A, Muraru D, Deleanu D, Rosca M, Gingham C. Rotația apicală inversată: marker de severitate în cardiomiopatia dilatativă. National Congress of Romanian Society of Cardiology, Sinaia, 19-22 Sep 2009

2008:

- First prize for best original abstract awarded by Romanian Society of Cardiology: Teodorescu A, Popescu BA, Beladan CC, Muraru D, Deleanu D, Antonini-Canterin F, Nicolosi GL, Gingham C. Relatia detorsionii ventriculare stangi cu parametrii de functie diastolica si presiunile de umplere la pacientii cu stenoza aortica. National Congress of Romanian Society of Cardiology, Sinaia, 20-23 Sep 2008.

2007:

- Winner of a Travel Grant with abstract oral presentation for EuroEcho 2007 (5-8 December 2007, Lisbon, Portugal) awarded by European Association of Echocardiography (500 €)
- First prize for best original abstract awarded by Romanian Society of Cardiology: Beladan CC, Popescu BA, Teodorescu A, Muraru D, Popescu AC, Antonini-Canterin F, Nicolosi GL, Gingham C. Torsiunea ventriculului stâng – un mecanism compensator pentru menținerea unei fracții de ejeție ventriculare stângi normale la pacienții cu stenoză aortică medie strânsă. National Congress of Romanian Society of Cardiology, Sinaia, 15-18 Sep 2007