

Cardiomiopatie Unit

Descrizione

Responsabile *in via di nomina*

Contatti

cardiomiopatie@aou-careggi.toscana.it

Tel. 055 794 5138 dal lunedì al venerdì ore 7:30 – 08:30, 13:00 – 14:00

Le cardiomiopatie sono un'entità clinica eterogenea, spesso misconosciuta e quindi non diagnosticata, ma importante dal punto di vista epidemiologico e complessa da punto di vista assistenziale, con aspetti culturali peculiari, la cui gestione necessita di competenze specifiche ed esperienza nel settore. Queste le patologie trattate:

- cardiomiopatie genetiche, dell'adulto e pediatriche: cardiomiopatia ipertrofica, cardiomiopatie dilatative, cardiomiopatia aritmogena, cardiomiopatie restrittive, cardiomiopatie associate a canalopatie, cardiomiopatie non classificate.
- morte cardiaca improvvisa giovanile e relativo inquadramento diagnostico e terapeutico delle famiglie colpite
- cardiomiopatie secondarie (tossiche e da trattamenti oncologici, infettive, infiltrative, autoimmuni, ecc.)
- Sindrome di Marfan e patologie correlate, afferenti al Centro di Riferimento regionale [Diagnosi e trattamento della sindrome di Marfan](#) di cui questa Unit svolge la valutazione cardiologica

Funzioni

- gestione del percorso di diagnosi e cura dei pazienti affetto da cardiomiopatia, in contesto multidisciplinare e multiprofessionale, in rete con altre strutture, intraospedaliere ed inter-ospedaliere (ad esempio col Prof Iacopo Olivotto – [AOU Meyer](#) per valutazione congiunta delle cardiomiopatie pediatriche e metaboliche, AOU Senese per la gestione trapiantologica etc) e territoriale (Medicina Generale, specialista territoriale, ecc.)
- organizzazione di consulenza clinico – genetica per le cardiomiopatie a carattere familiare, e eventuali indagini genetiche mirate, in collaborazione con la SOD [Diagnostica Genetica](#)
- promozione della ricerca scientifica, applicazione e sviluppo di protocolli e Linee guida
- sviluppo di progetti specifici nell'ambito della didattica per studenti del corso di laurea, per medici in formazione specialistica e fellow, organizzazione eventi scientifici e formativi di livello locale, nazionale ed internazionale
- sensibilizzazione e informazione sul tema delle malattie cardiologiche rare, in collaborazione con le associazioni di pazienti, la [Fondazione Careggi](#) ed altri Enti di supporto

Percorso di diagnosi e cura

- prima visita specialistica cardiologica per miocardiopatia (presa in carico del paziente presso [Ambulatorio cardiovascolare Clinica Medica secondo piano](#))
- prescrizione di indagini strumentali e di laboratorio
- programmazione interventi terapeutici (farmacologici o chirurgici)
- programmazione interventi di riabilitazione
- follow-up

Modalità di accesso alle prestazioni

Contattare il Centro (preferibilmente per e-mail) indicando il sospetto diagnostico o la patologia accertata; il paziente sarà successivamente ricontattato per concordare la data dell'appuntamento.

Collaborazioni

- [Cardioanestesia](#)
- [Cardiochirurgia](#)
- [Diagnostica cardiovascolare](#)
- [Diagnostica Genetica](#)
- [Medicina nucleare](#)
- [Riabilitazione cardiologica](#)
- [Cardiologia Pediatrica e Studio Malattie Metaboliche e Muscolari Ereditarie](#) -Azienda Ospedaliero-Universitaria Meyer

Collaborazioni internazionali

Il Centro collabora attivamente con i principali centri universitari italiani che si occupano di cardiomiopatie, e con vari numerosi gruppi di ricerca:

- Dipartimento di Fisiologia dell'Università degli studi di Firenze
- Dipartimento di Farmacologia dell'Università degli studi di Firenze
- HCM Center, Tufts Medical Center (Boston, USA)
- HCM Center, Minneapolis Heart Institute (Minneapolis, USA)
- Magdi Yacoub Research Network

Progetti di ricerca

- Progetti finanziati dal Ministero dell'Università e della Ricerca Scientifica e Tecnologica:

-COFIN 2002 e 2006 su "Determinanti clinici dello scompenso cardiaco e della morte improvvisa nei pazienti con cardiomiopatia ipertrofica con mutazioni sarcomeriche";

- Unione Europea: Collaborative project FP7-HEALTH-2009-single-stage: "Bench-to-bedside InteGrated approach to familial hypertrophic cardiomyopathy: to the HEART of the disease (BIG-HEART)".

- Ricerca Finalizzata del Ministero della Salute:

-RF 2010 – 2313451 “Hypertrophic cardiomyopathy: new insights from deep sequencing and psychosocial evaluation”.

-NET-2011-02347173 (Mechanisms and treatment of coronary microvascular dysfunction in patients with genetic or secondary left ventricular hypertrophy)

-RF-2013-02356787 (Left ventricular hypertrophy in aortic valve disease and hypertrophic cardiomyopathy: genetic basis, biophysical correlates and viral therapy models)

- Telethon Italia (GGP13162)

Studi clinici in corso

- Centro Coordinatore dello studio Liberty-HCM. “A Phase 2/3, Pivotal, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Effect of GS 6615 on Exercise Capacity in Subjects with Symptomatic Hypertrophic Cardiomyopathy”.
- NIH Grant U01HL117006-01A1; HCMR Protocol “HCMR – Novel Predictors of Outcome in Hypertrophic Cardiomyopathy”. Inizio arruolamento previsto in autunno. Dr.Olivotto, investigator. Sponsor: US National Institutes of Health.
- Centro coordinatore dello studio “Ranolazine in patients with symptomatic hypertrophic cardiomyopathy: a pilot study assessing the effects on exercise capacity, diastolic function and symptomatic status. A Randomized, Double blind, Placebo controlled, Parallel Group, Pilot Study, in patients with Symptomatic Hypertrophic Cardiomyopathy.
- Centro partecipante allo studio: “ATTRACT Study (AT1001 Therapy Compared to Enzyme Replacement in Fabry Patients with AT1001-responsive Mutations: a Global Clinical Trial)”

Registri internazionali

- SHaRe: The Sarcomeric Human Cardiomyopathies Registry. Brigham and Women’s Hospital; Children’s Hospital Boston; Stanford University; University of Michigan; the Florence Centre for Cardiomyopathies (IT); University College, London (UK); and Erasmus Medical Center (Rotterdam, NL). www.theshareregistry.com
- Fabry Registry: A Multi-Center, International, Longitudinal, Observational Program Designed to Track the Natural History and Outcomes of Patients with Gaucher, Fabry, MPS I, and Pompe Disease. – codice DIREGC07006
- EuroObservational Research Program (EORP): Cardiomyopathy Pilot Registry. European Society of Cardiology

Pubblicazioni

Queste le pubblicazioni scientifiche degli ultimi anni a cui hanno partecipato i medici dell'equipe della Cardiomiopatie Unit

- Quarta G, Papadakis M, Donna PD, Maurizi N, Iacovoni A, Gavazzi A, Senni M, Olivotto I. Grey zones in cardiomyopathies: defining boundaries between genetic and iatrogenic disease. *Nat Rev Cardiol.* 2017 Feb;14(2):102-112. doi: 10.1038/nrcardio.2016.175. Review. PubMed PMID: 27830773.
- Picano E, Ciampi Q, Citro R, D'Andrea A, Scali MC, Cortigiani L, Olivotto I, Mori F, Galderisi M, Costantino MF, Pratali L, Di Salvo G, Bossone E, Ferrara F, Gargani L, Rigo F, Gaibazzi N, Limongelli G, Pacileo G, Andreassi MG, Pinamonti B, Massa L, Torres MA, Miglioranza MH, Daros CB, de Castro E Silva Pretto JL, Beleslin B, Djordjevic-Dikic A, Varga A, Palinkas A, Agoston G, Gregori D, Trambaiolo P, Severino S, Arystan A, Paterni M, Carpeggiani C, Colonna P. Stress echo 2020: the international stress echo study in ischemic and non-ischemic heart disease. *Cardiovasc Ultrasound.* 2017 Jan 18;15(1):3. doi: 10.1186/s12947-016-0092-1. PubMed PMID: 28100277; PubMed Central PMCID: PMC5242057.
- Maurizi N, Tanini I, Olivotto I, Amendola E, Limongelli G, Losi MA, Allocca G, Perego GB, Pieragnoli P, Ricciardi G, De Filippo P, Ferrari P, Quarta G, Viani S, Rapacciuolo A, Bongiorno MG, Cecchi F. Effectiveness of subcutaneous implantable cardioverter-defibrillator testing in patients with hypertrophic cardiomyopathy. *Int J Cardiol.* 2017 Jan 4. pii: S0167 5273(16)33706-8. doi: 10.1016/j.ijcard.2016.12.187. [Epub ahead of print] PubMed PMID: 28073660.
- Sciagrà R, Calabretta R, Cipollini F, Passeri A, Castello A, Cecchi F, Olivotto I, Pupi A. Myocardial blood flow and left ventricular functional reserve in hypertrophic cardiomyopathy: a (13)NH(3) gated PET study. *Eur J Nucl Med Mol Imaging.* 2017 Jan 3. doi: 10.1007/s00259-016-3603-2. [Epub ahead of print] PubMed PMID: 28050630.
- Re F, Zachara E, Avella A, Baratta P, di Mauro M, Uguccioni M, Olivotto I. Dissecting functional impairment in hypertrophic cardiomyopathy by dynamic assessment of diastolic reserve and outflow obstruction: A combined cardiopulmonary-echocardiographic study. *Int J Cardiol.* 2017 Jan 15;227:743-750. doi: 10.1016/j.ijcard.2016.10.067. PubMed PMID: 27839814.
- Tomberli B, Cappelli F, Perfetto F, Olivotto I. Abrupt Onset of Refractory Heart Failure Associated With Light-Chain Amyloidosis in Hypertrophic Cardiomyopathy. *JAMA Cardiol.* 2017 Jan 1;2(1):94-97. doi: 10.1001/jamacardio.2016.3894. PubMed PMID: 27806176.
- Castagnoli H, Ferrantini C, Coppini R, Passeri A, Baldini K, Berti V, Cecchi F, Olivotto I, Sciagrà R. Role of quantitative myocardial positron emission tomography for risk stratification in patients with hypertrophic cardiomyopathy: a 2016 reappraisal. *Eur J Nucl Med Mol Imaging.* 2016 Dec;43(13):2413-2422. PubMed PMID: 27527796.
- Barlocco F, Olivotto I. Can anthropology improve our care of inherited cardiac arrhythmias? A modest proposal. *Heart Rhythm.* 2016 Dec;13(12):2395-2398. doi: 10.1016/j.hrthm.2016.08.042. PubMed PMID: 27590433.
- Hughes DA, Nicholls K, Shankar SP, Sunder-Plassmann G, Koeller D, Nedd K, Vockley G, Hamazaki T, Lachmann R, Ohashi T, Olivotto I, Sakai N, Deegan P, Dimmock D, Eyskens F, Germain DP, Goker-Alpan O, Hachulla E, Jovanovic A, Lourenco CM, Narita I, Thomas M, Wilcox WR, Bichet DG, Schiffmann R, Ludington E, Viereck C, Kirk J, Yu J, Johnson F, Boudes P, Benjamin ER, Lockhart DJ, Barlow C, Skuban N, Castelli JP, Barth J, Feldt-Rasmussen U. Oral pharmacological chaperone migalastat compared with enzyme replacement therapy in Fabry disease: 18-month results from the randomised phase III ATTRACT study. *J Med Genet.* 2016 Nov 10. pii: jmedgenet-2016-104178. doi: 10.1136/jmedgenet-2016-104178. [Epub ahead of print] PubMed PMID: 27834756.

- Galati G, Leone O, Pasquale F, Olivotto I, Biagini E, Grigioni F, Pilato E, Lorenzini M, Corti B, Foà A, Agostini V, Cecchi F, Rapezzi C. Histological and Histometric Characterization of Myocardial Fibrosis in End-Stage Hypertrophic Cardiomyopathy: A Clinical-Pathological Study of 30 Explanted Hearts. *Circ Heart Fail.* 2016 Sep;9(9). pii: e003090. doi: 10.1161/CIRCHEARTFAILURE.116.003090. PubMed PMID: 27618852.
- Giovannelli F, Simoni D, Gavazzi G, Giganti F, Olivotto I, Cincotta M, Pratesi A, Baldasseroni S, Viggiano MP. Electrophysiological correlates of word recognition memory process in patients with ischemic left ventricular dysfunction. *Clin Neurophysiol.* 2016 Sep;127(9):3007-13. doi: 10.1016/j.clinph.2016.06.022. PubMed PMID: 27469528.
- Ciampi Q, Olivotto I, Gardini C, Mori F, Peteiro J, Monserrat L, Fernandez X, Cortigiani L, Rigo F, Lopes LR, Cruz I, Cotrim C, Losi M, Betocchi S, Beleslin B, Tesic M, Dikic AD, Lazzeroni E, Lazzeroni D, Sicari R, Picano E. Prognostic role of stress echocardiography in hypertrophic cardiomyopathy: The International Stress Echo Registry. *Int J Cardiol.* 2016 Sep 15;219:331-8. doi: 10.1016/j.ijcard.2016.06.044. PubMed PMID: 27348413.
- Ammirati E, Contri R, Coppini R, Cecchi F, Frigerio M, Olivotto I. Pharmacological treatment of hypertrophic cardiomyopathy: current practice and novel perspectives. *Eur J Heart Fail.* 2016 Sep;18(9):1106-18. doi: 10.1002/ejhf.541. Review. PubMed PMID: 27109894.
- Biagini E, Pazzi C, Olivotto I, Musumeci B, Limongelli G, Boriani G, Pacileo G, Mastromarino V, Bacchi Reggiani ML, Lorenzini M, Lai F, Bernardini A, Mingardi F, Rosmini S, Resciniti E, Borghi C, Autore C, Cecchi F, Rapezzi C. Usefulness of Electrocardiographic Patterns at Presentation to Predict Long-term Risk of Cardiac Death in Patients With Hypertrophic Cardiomyopathy. *Am J Cardiol.* 2016 Aug 1;118(3):432-9. doi: 10.1016/j.amjcard.2016.05.023. PubMed PMID: 27289293.
- Krishnamoorthy N, Gajendrarao P, Olivotto I, Yacoub M. Impact of disease-causing mutations on inter-domain interactions in cMyBP-C: a steered molecular dynamics study. *J Biomol Struct Dyn.* 2016 Jun 30:1-7. [Epub ahead of print] PubMed PMID: 27267291.
- Homburger JR, Green EM, Caeshu C, Sunitha MS, Taylor RE, Ruppel KM, Metpally RP, Colan SD, Michels M, Day SM, Olivotto I, Bustamante CD, Dewey FE, Ho CY, Spudich JA, Ashley EA. Multidimensional structure-function relationships in human β -cardiac myosin from population-scale genetic variation. *Proc Natl Acad Sci U S A.* 2016 Jun 14;113(24):6701-6. doi: 10.1073/pnas.1606950113. PubMed PMID: 27247418; PubMed Central PMCID: PMC4914177.
- Maron MS, Hellawell JL, Lucove JC, Farzaneh-Far R, Olivotto I. Occurrence of Clinically Diagnosed Hypertrophic Cardiomyopathy in the United States. *Am J Cardiol.* 2016 May 15;117(10):1651-4. doi: 10.1016/j.amjcard.2016.02.044. PubMed PMID: 27006153.
- Bongini C, Ferrantini C, Girolami F, Coppini R, Arretini A, Targetti M, Bardi S, Castelli G, Torricelli F, Cecchi F, Ackerman MJ, Padeletti L, Poggesi C, Olivotto I. Impact of Genotype on the Occurrence of Atrial Fibrillation in Patients With Hypertrophic Cardiomyopathy. *Am J Cardiol.* 2016 Apr 1;117(7):1151-9. doi: 10.1016/j.amjcard.2015.12.058. PubMed PMID: 26869393.
- Ballo P, Nistri S, Galderisi M, Mele D, Rossi A, Dini FL, Olivotto I, Losi MA, D'Andrea A, Zuppiroli A, Santoro GM, Mondillo S, Gentile F; Working Group on Echocardiography of the Italian Society of Cardiology.. Determinants of discrepancies between two-dimensional echocardiographic methods for assessment of maximal left atrial volume. *Eur Heart J Cardiovasc Imaging.* 2016 Apr 20. pii: jew067. [Epub ahead of print] PubMed PMID: 27099273.
- Olivotto I, Hellawell JL, Farzaneh-Far R, Blair C, Coppini R, Myers J, Belardinelli L, Maron MS. Novel Approach Targeting the Complex Pathophysiology of Hypertrophic Cardiomyopathy: The Impact of Late Sodium Current Inhibition on Exercise Capacity in Subjects with Symptomatic Hypertrophic Cardiomyopathy (LIBERTY-HCM) Trial. *Circ Heart Fail.* 2016 Mar;9(3):e002764.

doi: 10.1161/CIRCHEARTFAILURE.115.002764. PubMed PMID: 26915375.

- Coppini R, Ferrantini C, Poggesi C, Mugelli A, Olivotto I. [Molecular targets and novel pharmacological options to prevent myocardial hypertrophic remodeling]. *G Ital Cardiol (Rome)*. 2016 Mar;17(3):189-96. doi: 10.1714/2190.23660. Review. Italian. PubMed PMID: 27029877.
- Maron MS, Rowin EJ, Olivotto I, Casey SA, Arretini A, Tomberli B, Garberich RF, Link MS, Chan RH, Lesser JR, Maron BJ. Contemporary Natural History and Management of Nonobstructive Hypertrophic Cardiomyopathy. *J Am Coll Cardiol*. 2016 Mar 29;67(12):1399-409. doi: 10.1016/j.jacc.2016.01.023. PubMed PMID: 27012399.
- Maurizi N, Olivotto I, Olde Nordkamp LR, Baldini K, Fumagalli C, Brouwer TF, Knops RE, Cecchi F. Prevalence of subcutaneous implantable cardioverter-defibrillator candidacy based on template ECG screening in patients with hypertrophic cardiomyopathy. *Heart Rhythm*. 2016 Feb;13(2):457-63. doi: 10.1016/j.hrthm.2015.09.007. PubMed PMID: 26362577.
- Jaafar N, Girolami F, Zairi I, Kraiem S, Hammami M, Olivotto I. Genetic profile of hypertrophic cardiomyopathy in Tunisia: Is it different? *Glob Cardiol Sci Pract*. 2015 Apr 7;2015:16. doi: 10.5339/gcsp.2015.16. PubMed PMID: 26779504; PubMed Central PMCID: PMC4448072.
- Pasqualucci D, Fornaro A, Castelli G, Rossi A, Arretini A, Chiriatti C, Targetti M, Girolami F, Corda M, Orrù P, Matta G, Stefàno P, Cecchi F, Porcu M, Olivotto I. Clinical Spectrum, Therapeutic Options, and Outcome of Advanced Heart Failure in Hypertrophic Cardiomyopathy. *Circ Heart Fail*. 2015 Nov;8(6):1014-21. doi: 10.1161/CIRCHEARTFAILURE.114.001843. PubMed PMID: 26446673.
- Parato VM, Olivotto I, Maron MS, Nanda NC, Pandian NG. Left Ventricular Apex Involvement in Hypertrophic Cardiomyopathy. *Echocardiography*. 2015 Oct;32(10):1575-80. doi: 10.1111/echo.12986. PubMed PMID: 26174694.
- Sciagrà R, Passeri A, Cipollini F, Castagnoli H, Olivotto I, Burger C, Cecchi F, Pupi A. Validation of pixel-wise parametric mapping of myocardial blood flow with ¹³NH₂ PET in patients with hypertrophic cardiomyopathy. *Eur J Nucl Med Mol Imaging*. 2015 Sep;42(10):1581-8. doi: 10.1007/s00259-015-3101-y. PubMed PMID: 26121929.
- Chan RH, Maron BJ, Olivotto I, Assenza GE, Haas TS, Lesser JR, Gruner C, Crean AM, Rakowski H, Rowin E, Udelson J, Lombardi M, Tomberli B, Spirito P, Formisano F, Marra MP, Biagini E, Autore C, Manning WJ, Appelbaum E, Roberts WC, Basso C, Maron MS. Significance of Late Gadolinium Enhancement at Right Ventricular Attachment to Ventricular Septum in Patients With Hypertrophic Cardiomyopathy. *Am J Cardiol*. 2015 Aug 1;116(3):436-41. doi: 10.1016/j.amjcard.2015.04.060. PubMed PMID: 26026863.
- Gajendrarao P, Krishnamoorthy N, Selvaraj S, Girolami F, Cecchi F, Olivotto I, Yacoub M. An Investigation of the Molecular Mechanism of Double cMyBP-C Mutation in a Patient with End-Stage Hypertrophic Cardiomyopathy. *J Cardiovasc Transl Res*. 2015 Jun;8(4):232-43. doi: 10.1007/s12265-015-9624-6. PubMed PMID: 25971843.
- Olivotto I, Rossi A, Stefano P. [Assessment of left ventricular outflow tract obstruction according to the latest European guidelines on hypertrophic cardiomyopathy]. *G Ital Cardiol (Rome)*. 2015 Mar;16(3):134-7. doi: 10.1714/1820.19816. Italian. PubMed PMID: 25837455.
- Olivotto I, Ashley EA. INHERIT (INHibition of the renin angiotensin system in hypertrophic cardiomyopathy and the Effect on hypertrophy-a Randomised Intervention Trial with losartan). *Glob Cardiol Sci Pract*. 2015 Jan 26;2015:7. doi: 10.5339/gcsp.2015.7. PubMed PMID: 25830151; PubMed Central PMCID: PMC4374100.
- Olivotto I, d'Amati G, Basso C, Van Rossum A, Patten M, Emdin M, Pinto Y, Tomberli B, Camici PG, Michels M. Defining phenotypes and disease progression in sarcomeric cardiomyopathies: contemporary role of clinical investigations. *Cardiovasc Res*. 2015 Apr 1;105(4):409-23. doi:

- 10.1093/cvr/cvv024. Review. PubMed PMID: 25631583.
- van der Velden J, Ho CY, Tardiff JC, Olivotto I, Knollmann BC, Carrier L. Research priorities in sarcomeric cardiomyopathies. *Cardiovasc Res*. 2015 Apr 1;105(4):449-56. doi: 10.1093/cvr/cvv019. Review. PubMed PMID: 25631582; PubMed Central PMCID: PMC4375392.
 - Vannucchi V, Tomberli B, Zammarchi L, Fornaro A, Castelli G, Pieralli F, Berni A, Yacoub S, Bartoloni A, Olivotto I. Chagas disease as a cause of heart failure and ventricular arrhythmias in patients long removed from endemic areas: an emerging problem in Europe. *J Cardiovasc Med (Hagerstown)*. 2015 Dec;16(12):817-23. doi: 10.2459/JCM.0000000000000045. Review. PubMed PMID: 25022923.
 - Maron BJ, Ommen SR, Semsarian C, Spirito P, Olivotto I, Maron MS. Hypertrophic Cardiomyopathy: Present and Future, With Translation Into Contemporary Cardiovascular Medicine. *J Am Coll Cardiol*. 2014 Jul 8;64(1):83-99. doi:10.1016/j.jacc.2014.05.003. Review. PubMed PMID: 24998133.
 - Maron BJ, Haas TS, Maron MS, Lesser JR, Browning JA, Chan RH, Olivotto I, Garberich RF, Schwartz RS. Left atrial remodeling in hypertrophic cardiomyopathy and susceptibility markers for atrial fibrillation identified by cardiovascular magnetic resonance. *Am J Cardiol*. 2014 Apr 15;113(8):1394-400. doi: 10.1016/j.amjcard.2013.12.045. Epub 2014 Jan 31. PubMed PMID: 24589281.
 - Maron BJ, Ommen SR, Semsarian C, Spirito P, Olivotto I, Maron MS. Reply: Obstructive sleep apnea and hypertrophic cardiomyopathy: obiter dictum or more? *J Am Coll Cardiol*. 2014 Dec 16;64(23):2562. doi: 10.1016/j.jacc.2014.10.001. PubMed PMID: 25500247.
 - Coppini R, Ho CY, Ashley E, Day S, Ferrantini C, Girolami F, Tomberli B, Bardi S, Torricelli F, Cecchi F, Mugelli A, Poggesi C, Tardiff J, Olivotto I. Clinical phenotype and outcome of hypertrophic cardiomyopathy associated with thin-filament gene mutations. *J Am Coll Cardiol*. 2014 Dec 23;64(24):2589-600. doi: 10.1016/j.jacc.2014.09.059. PubMed PMID: 25524337; PubMed Central PMCID: PMC4270453.
 - Bogaert J, Olivotto I. MR Imaging in Hypertrophic Cardiomyopathy: From Magnet to Bedside. *Radiology*. 2014 Nov;273(2):329-48. doi: 10.1148/radiol.14131626. Review. PubMed PMID: 25340269.
 - Girolami F, Iascone M, Tomberli B, Bardi S, Benelli M, Marseglia G, Pescucci C, Pezzoli L, Sana ME, Basso C, Marziliano N, Merlini PA, Fornaro A, Cecchi F, Torricelli F, Olivotto I. Novel α -actinin 2 variant associated with familial hypertrophic cardiomyopathy and juvenile atrial arrhythmias: a massively parallel sequencing study. *Circ Cardiovasc Genet*. 2014 Dec;7(6):741-50. doi: 10.1161/CIRCGENETICS.113.000486. PubMed PMID: 25173926.
 - Chan RH, Maron BJ, Olivotto I, Pencina MJ, Assenza GE, Haas T, Lesser JR, Gruner C, Crean AM, Rakowski H, Udelson JE, Rowin E, Lombardi M, Cecchi F, Tomberli B, Spirito P, Formisano F, Biagini E, Rapezzi C, De Cecco CN, Autore C, Cook EF, Hong SN, Gibson CM, Manning WJ, Appelbaum E, Maron MS. Prognostic value of quantitative contrast enhanced cardiovascular magnetic resonance for the evaluation of sudden death risk in patients with hypertrophic cardiomyopathy. *Circulation*. 2014 Aug 5;130(6):484-95. doi: 10.1161/CIRCULATIONAHA.113.007094. PubMed PMID: 25092278.
 - Nistri S, Olivotto I, Faggiano P, Antonini-Canterin F, Locantore E, Papesso B, Brighido S, Cioffi G, Rossi A, Otto CM. Incremental prognostic value of multiparametric echocardiographic assessment for severe aortic stenosis. *Int J Cardiol*. 2014 Mar 15;172(2):e356-8. doi: 10.1016/j.ijcard.2013.12.302. Epub 2014 Jan 10. PubMed PMID: 24461481.
 - Biagini E, Olivotto I, Iascone M, Parodi MI, Girolami F, Frisso G, Autore C, Limongelli G, Cecconi M, Maron BJ, Maron MS, Rosmini S, Formisano F, Musumeci B, Cecchi F, Iacovoni A, Haas TS,

- Bacchi Reggiani ML, Ferrazzi P, Salvatore F, Spirito P, Rapezzi C. Significance of sarcomere gene mutations analysis in the end-stage phase of hypertrophic cardiomyopathy. *Am J Cardiol*. 2014 Sep 1;114(5):769-76. doi: 10.1016/j.amjcard.2014.05.065. PubMed PMID: 25037680.
- Yacoub M, Bonow R, Olivotto I. Editors' page. *Glob Cardiol Sci Pract*. 2013 Nov 1;2013(3):279. doi: 10.5339/gcsp.2013.35. PubMed PMID: 24689029; PubMed Central PMCID: PMC3963754.
 - Bonow RB, Olivotto I, Yacoub MH. Editors' page. *Glob Cardiol Sci Pract*. 2013 Nov 1;2013(2):114. doi: 10.5339/gcsp.2013.14. PubMed PMID: 24689008; PubMed Central PMCID: PMC3963744.
 - Bonow RB, Olivotto I, Yacoub MH. Editors' page. *Glob Cardiol Sci Pract*. 2013 Nov 1;2013(1):1. doi: 10.5339/gcsp.2013.1. PubMed PMID: 24688995; PubMed Central PMCID: PMC3963731.
 - Delcrè SD, Di Donna P, Leuzzi S, Miceli S, Bisi M, Scaglione M, Caponi D, Conte MR, Cecchi F, Olivotto I, Gaita F. Relationship of ECG findings to phenotypic expression in patients with hypertrophic cardiomyopathy: a cardiac magnetic resonance study. *Int J Cardiol*. 2013 Aug 10;167(3):1038-45. doi: 10.1016/j.ijcard.2012.03.074. PubMed PMID: 22464482.
 - Yacoub M, Bonow R, Olivotto I. Editors' page. *Glob Cardiol Sci Pract*. 2013 Nov 1;2012(2):1. doi: 10.5339/gcsp.2012.14. PubMed PMID: 24688982; PubMed Central PMCID: PMC3963711.
 - Tenori L, Hu X, Pantaleo P, Alterini B, Castelli G, Olivotto I, Bertini I, Luchinat C, Gensini GF. Metabolomic fingerprint of heart failure in humans: a nuclear magnetic resonance spectroscopy analysis. *Int J Cardiol*. 2013 Oct 9;168(4):e113-5. doi: 10.1016/j.ijcard.2013.08.042. Epub 2013 Aug 16. PubMed PMID: 24007967.
 - Coppini R, Ferrantini C, Del Lungo M, Stillitano F, Sartiani L, Tosi B, Suffredini S, Tesi C, Poggesi C, Cerbai E, Mugelli A, Yao L, Fan P, Belardinelli L, Yacoub M, Olivotto I. Response to letter regarding article, "Late sodium current inhibition reverses electromechanical dysfunction in human hypertrophic cardiomyopathy". *Circulation*. 2013 Sep 3;128(10):e157. doi:10.1161/CIRCULATIONAHA.113.004016. PubMed PMID: 24002721.
 - Beavers DL, Wang W, Ather S, Voigt N, Garbino A, Dixit SS, Landstrom AP, Li N, Wang Q, Olivotto I, Dobrev D, Ackerman MJ, Wehrens XH. Mutation E169K in junctophilin-2 causes atrial fibrillation due to impaired RyR2 stabilization. *J Am Coll Cardiol*. 2013 Nov 19;62(21):2010-9. doi: 10.1016/j.jacc.2013.06.052. Epub 2013 Aug 21. PubMed PMID: 23973696; PubMed Central PMCID: PMC3830688.
 - Castelli G, Fornaro A, Ciaccheri M, Dolara A, Troiani V, Tomberli B, Olivotto I, Gensini GF. Improving survival rates of patients with idiopathic dilated cardiomyopathy in Tuscany over 3 decades: impact of evidence-based management. *Circ Heart Fail*. 2013 Sep 1;6(5):913-21. doi:10.1161/CIRCHEARTFAILURE.112.000120. Epub 2013 Jul 25. PubMed PMID: 23888044.
 - D'Amato R, Tomberli B, Castelli G, Spoladore R, Girolami F, Fornaro A, Caldini A, Torricelli F, Camici P, Gensini GF, Cecchi F, Olivotto I. Prognostic value of N-terminal pro-brain natriuretic Peptide in outpatients with hypertrophic cardiomyopathy. *Am J Cardiol*. 2013 Oct 15;112(8):1190-6. doi:10.1016/j.amjcard.2013.06.018. Epub 2013 Jul 19. PubMed PMID: 23871673.
 - Tomberli B, Cecchi F, Sciagrà R, Berti V, Lisi F, Torricelli F, Morrone A, Castelli G, Yacoub MH, Olivotto I. Coronary microvascular dysfunction is an early feature of cardiac involvement in patients with Anderson-Fabry disease. *Eur J Heart Fail*. 2013 Dec;15(12):1363-73. doi: 10.1093/eurjhf/hft104. Epub 2013 Jun 30. PubMed PMID: 23818648.
 - Olivotto I, Maron BJ, Tomberli B, Appelbaum E, Salton C, Haas TS, Gibson CM, Nistri S, Servettini E, Chan RH, Udelson JE, Lesser JR, Cecchi F, Manning WJ, Maron MS. Obesity and its association to phenotype and clinical course in hypertrophic cardiomyopathy. *J Am Coll Cardiol*. 2013 Jul 30;62(5):449-57. doi: 10.1016/j.jacc.2013.03.062. Epub 2013 Apr 30. PubMed PMID: 23643593.

- Gajendrarao P, Krishnamoorthy N, Kassem HSh, Moharem-Elgamal S, Cecchi F, Olivotto I, Yacoub MH. Molecular modeling of disease causing mutations in domain C1 of cMyBP-C. *PLoS One*. 2013;8(3):e59206. doi: 10.1371/journal.pone.0059206. Epub 2013 Mar 19. PubMed PMID: 23527136; PubMed Central PMCID: PMC3602012.
- Olivotto I, Tomberli B, Spoladore R, Mugelli A, Cecchi F, Camici PG. Hypertrophic cardiomyopathy: The need for randomized trials. *Glob Cardiol Sci Pract*. 2013 Nov 1;2013(3):243-8. doi: 10.5339/gcsp.2013.31. eCollection 2013. Review. PubMed PMID: 24689025; PubMed Central PMCID: PMC3963756.
- Coppini R, Ferrantini C, Mazzoni L, Sartiani L, Olivotto I, Poggesi C, Cerbai E, Mugelli A. Regulation of intracellular Na(+) in health and disease: pathophysiological mechanisms and implications for treatment. *Glob Cardiol Sci Pract*. 2013 Nov 1;2013(3):222-42. doi: 10.5339/gcsp.2013.30. eCollection 2013. Review. PubMed PMID: 24689024; PubMed Central PMCID: PMC3963757.
- Coppini R, Ferrantini C, Yao L, Fan P, Del Lungo M, Stillitano F, Sartiani L, Tosi B, Suffredini S, Tesi C, Yacoub M, Olivotto I, Belardinelli L, Poggesi C, Cerbai E, Mugelli A. Late sodium current inhibition reverses electromechanical dysfunction in human hypertrophic cardiomyopathy. *Circulation*. 2013 Feb 5;127(5):575-84. doi: 10.1161/CIRCULATIONAHA.112.134932. Epub 2012 Dec 27. PubMed PMID: 23271797.
- Kassem HSh, Azer RS, Saber-Ayad M, Moharem-Elgamal S, Magdy G, Elguindy A, Cecchi F, Olivotto I, Yacoub MH. Early results of sarcomeric gene screening from the Egyptian National BA-HCM Program. *J Cardiovasc Transl Res*. 2013 Feb;6(1):65-80. doi: 10.1007/s12265-012-9425-0. Erratum in: *J Cardiovasc Transl Res*. 2013 Aug;6(4):663. Ayad, Maha S [corrected to Saber-Ayad, Maha]. PubMed PMID: 23233322; PubMed Central PMCID: PMC3546296.
- Biagini E, Lorenzini M, Olivotto I, Rocchi G, Lovato L, Lai F, Rosmini S, Pazzi C, Pasquale F, Reggiani ML, Fattori R, Rapezzi C. Effects of myocardial fibrosis assessed by MRI on dynamic left ventricular outflow tract obstruction in patients with hypertrophic cardiomyopathy: a retrospective database analysis. *BMJ Open*. 2012 Oct 11;2(5). pii: e001267. doi: 10.1136/bmjopen-2012-001267. Print 2012. PubMed PMID: 23065447; PubMed Central PMCID: PMC3488754.
- Olivotto I, Cecchi F, Poggesi C, Yacoub MH. Patterns of disease progression in hypertrophic cardiomyopathy: an individualized approach to clinical staging. *Circ Heart Fail*. 2012 Jul 1;5(4):535-46. doi: 10.1161/CIRCHEARTFAILURE.112.967026. Review. PubMed PMID: 22811549.
- Grimaldi A, Vermi AC, Alfieri O, Olivotto I, Sacco FM, Camici PG, Freers J. Calcified left ventricular endomyocardial fibrosis. *J Heart Valve Dis*. 2012 May;21(3):384-6. PubMed PMID: 22808844.
- Spoladore R, Maron MS, D'Amato R, Camici PG, Olivotto I. Pharmacological treatment options for hypertrophic cardiomyopathy: high time for evidence. *Eur Heart J*. 2012 Jul;33(14):1724-33. doi: 10.1093/eurheartj/ehs150. Review. PubMed PMID: 22719025.
- Nistri S, Olivotto I, Maron MS, Ferrantini C, Coppini R, Grifoni C, Baldini K, Sgalambro A, Cecchi F, Maron BJ. ? Blockers for prevention of exercise-induced left ventricular outflow tract obstruction in patients with hypertrophic cardiomyopathy. *Am J Cardiol*. 2012 Sep 1;110(5):715-9. doi: 10.1016/j.amjcard.2012.04.051. PubMed PMID: 22633205.
- Tomberli B, Girolami F, Coppini R, Ferrantini C, Rossi A, Cecchi F, Olivotto I. [Management of refractory symptoms in hypertrophic cardiomyopathy with restrictive pathophysiology: novel perspectives for ranolazine]. *G Ital Cardiol (Rome)*. 2012 Apr;13(4):297-303. doi: 10.1714/1056.11562. Italian. PubMed PMID: 22495647.

- El-Hamamsy I, Lekadir K, Olivotto I, El Guindy A, Merrifield R, Rega L, Yang G, Cecchi F, Yacoub MH. Pattern and degree of left ventricular remodeling following a tailored surgical approach for hypertrophic obstructive cardiomyopathy. *Glob Cardiol Sci Pract.* 2012 Jul 3;2012(1):9. doi: 10.5339/gcsp.2012.9. PubMed PMID: 25610840; PubMed Central PMCID: PMC4239823.
- Cecchi F, Tomberli B, Olivotto I. Clinical and molecular classification of cardiomyopathies. *Glob Cardiol Sci Pract.* 2012 Jul 3;2012(1):4. doi: 10.5339/gcsp.2012.4. Review. PubMed PMID: 25610835; PubMed Central PMCID: PMC4239818.
- Yacoub MH, Bonow R, Olivotto I. Editors' page. *Glob Cardiol Sci Pract.* 2012 Jul 3;2012(1):1. doi: 10.5339/gcsp.2012.1. Review. PubMed PMID: 25610832; PubMed Central PMCID: PMC4239811.
- Nistri S, Faggiano P, Olivotto I, Papesso B, Bordonali T, Vescovo G, Dei Cas L, Cecchi F, Bonow RO. Hemodynamic progression and outcome of asymptomatic aortic stenosis in primary care. *Am J Cardiol.* 2012 Mar 1;109(5):718-23. doi: 10.1016/j.amjcard.2011.10.035. PubMed PMID: 22154322.
- Grimaldi A, Olivotto I, Figini F, Pappalardo F, Capritti E, Ammirati E, Maisano F, Benussi S, Fumero A, Castiglioni A, De Bonis M, Vermi AC, Colombo A, Zangrillo A, Alfieri O. Dynamic assessment of 'valvular reserve capacity' in patients with rheumatic mitral stenosis. *Eur Heart J Cardiovasc Imaging.* 2012 Jun;13(6):476-82. doi: 10.1093/ejehocardi/jer269. PubMed PMID: 22143399.
- Camici PG, Olivotto I, Rimoldi OE. The coronary circulation and blood flow in left ventricular hypertrophy. *J Mol Cell Cardiol.* 2012 Apr;52(4):857-64. doi: 10.1016/j.yjmcc.2011.08.028. Review. PubMed PMID: 21924273.

Data

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