

EUROCMR 2013

Firenze ~ Florence ~ Italy
23-25 Maggio ~ May 23rd-25th

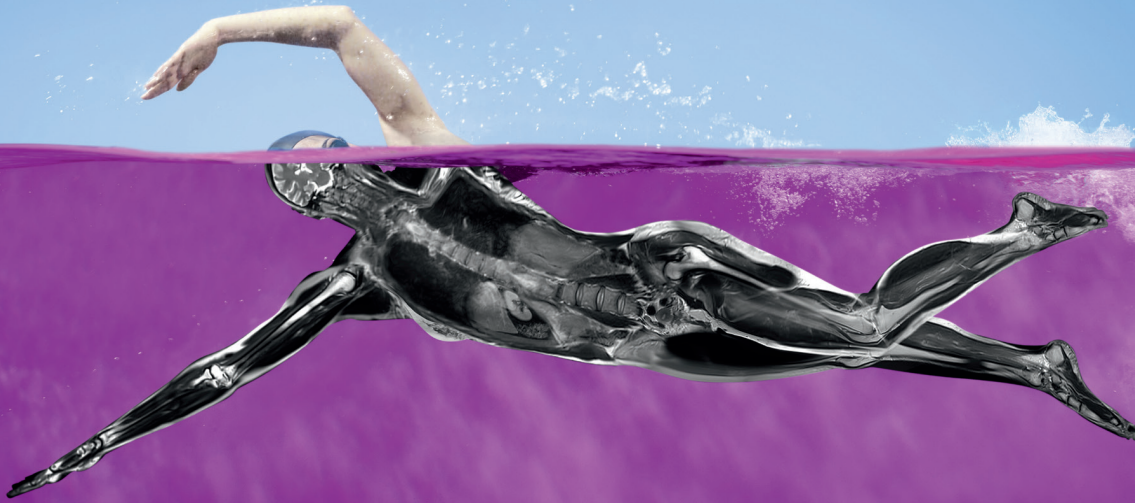
FINAL PROGRAM
Palazzo dei Congressi, Florence, Italy



Cardiovascular
Magnetic Resonance
ESC Working Group



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1) Frenzel T, et al.: Stability of gadolinium-based magnetic resonance imaging contrast agents in human serum at 37 degree. Clin Invest Radiol 43. 12. 817-828 (2008). 2) Voth M, et al.: Safety of Gadobutrol – Experience from Clinical Trials and Post-marketing Surveillance. Invest Radiol. In press (2013). 3) Rohrer M, et al.: Comparison of magnetic properties of MRI contrast media solutions at different magnetic field strengths: review of Preclinical and clinical data on gadobutrol. Eur Radiol 2002; 12(6): 1550-1556. et al.: Value of 1.0 M gadolinium chelates: review of Preclinical and clinical data on gadobutrol. Eur Radiol 2002; 12(6): 1550-1556. 4) Tombach B, et al.: Comparison of 1.0 M gadobutrol and 0.5 M gadopentetate dimeglumine-enhanced MRI in 471 patients with known or suspected renal lesions: results of a multicentre, single-blind, interindividual, randomized clinical phase III trial. Eur Radiol 2008; 5) Tombach B, et al.: Gadovist 1.0 mmol/ml solution for injection. Composition: 1 mL solution for injection contains 604.72 mg gadobutrol (equiv. 1.0 mmol) as active ingredient. Excipients: calcium chloride, sodium, tromethamol, hydrochloric acid, water for injections. Indications: This medicinal product is for diagnostic use only. Gadovist® 1.0 is indicated in adults, adolescents, and children aged 2 years and older for contrast enhancement in cranial and spinal magnetic resonance imaging (MRI), contrast enhancement of magnetic resonance angiography (CE-MRA). Gadovist can also be used for MR imaging of pathologies of the whole body. It facilitates visualization of abnormal structures or lesions and helps in the differentiation between healthy and pathological tissue. Contraindications: Hypersensitivity to the active substance or any of the excipients. Special warnings and precautions for use: While injecting Gadovist into veins with a small lumen there is the possibility of adverse effects such as reddening and swelling. The usual safety requirements for magnetic resonance imaging, especially the exclusion of ferromagnetic materials, also apply when using Gadovist. Hypersensitivity reactions, including anaphylactoid reactions ranging to shock, have been observed after administration of Gadovist. To be able to react immediately to an emergency, medical products and equipment (e.g. endotracheal tube and respirator) should be within hand reach. Hypersensitivity reactions are not predictable, however in patients with an allergic disposition hypersensitivity may occur more often than in patients without such a disposition. In rare cases delayed anaphylactoid reactions (later hours to days) have been observed. Severe cardiovascular disease: Gadovist should only be used in patients with severe cardiovascular disease. Class III and IV patients should be based on a risk assessment of the cause of the disease. Class II and III patients should be based on a risk assessment of the cause of the disease. Class II and III patients should be based on a risk assessment of the cause of the disease. Class I and II patients should be based on a risk assessment of the cause of the disease. Gadovist should not be used in patients with uncorrected hypokalaemia. Impaired renal function: It is recommended that all patients are screened for renal dysfunction by obtaining laboratory tests. There have been reports of nephrogenic systemic fibrosis (NSF) associated with use of some gadolinium-containing contrast agents in patients with acute or chronic severe renal impairment (GFR < 30 mL/min/1.73 m²). Patients undergoing liver transplantation are at particular risk since the incidence of acute renal failure is high in this group. As there is a possibility that NSF may occur with Gadovist, it should therefore only be used in patients with severe renal impairment and in patients in the perioperative liver transplantation period after careful risk/benefit assessment and if the diagnosis is essential and not available with non-contrast enhanced magnetic resonance imaging (MRI). Haemodialysis shortly after Gadovist administration may be useful at removing Gadovist from the body. There is no evidence to support the initiation of haemodialysis for prevention or treatment of NSF in patients not already undergoing haemodialysis. Elderly: As the renal clearance of gadobutrol may be impaired in the elderly, it is particularly important to screen patients aged 65 years and older for renal dysfunction. Seizure disorders: Like with other gadolinium containing contrast agents special precaution is necessary in patients with a low threshold for seizures. Undesirable effects: Following adverse reactions have been observed in clinical trials. Urgecom (2:1,10,000 to < 1:1,000): Headache, dizziness, paresthesia, dysgeusia, nausea, vasodilatation, injection site pain, injection site reaction. Rare (1:10,000 to < 1:1,000): Anaphylactoid reaction, parosmia, hypotension, dyspnoea, vomiting, urticaria, rash. Following additional adverse reactions have been reported from postmarketing spontaneous reporting. Rare (1:10,000 to < 1:1,000): Cardiac arrest, tachycardia, loss of consciousness, convulsion, conjunctivitis, eyelid oedema, respiratory arrest, bronchospasm, cyanosis, oropharyngeal swelling, cough, sneezing, face edema, hyperhidrosis, pruritus, erythema, circulatory collapse. Usualing, feeling hot, malaise, emphysema, shock, fainting, mild to moderate feelings of coldness, warmth or pain at the injection site have been uncommonly observed in association with the venous puncture or contrast medium injection. Or paravascular injection Gadovist may cause tissue pain lasting up to several minutes. Hypersensitivity reactions: Isolated cases of renal impairment or renal impairment aggravation have been reported. Isolated cases of nephrogenic systemic fibrosis (NSF) have been reported with Gadovist. Date of revision of text: August 2012 Please note: for current prescribing information refer to the package insert and/or contact your local Bayer Healthcare organisation. Bayer Pharma AG, 13342 Berlin, Germany. Adverse reactions can be reported to GPN_CaseProcessing@bayer.com. SPCs available at the booth.



Dear Friends and Colleagues

► Welcome to Florence for the 11th EuroCMR meeting, the annual conference of the Working Group (WG) on Cardiovascular Magnetic Resonance (CMR) of the European Society of Cardiology (ESC). From the 23rd to the 25th of May Florence will see itself as the city of both renaissance and science.

The EuroCMR meeting is the largest CMR meeting in Europe with an increasing number of attendees from all over the world, from over 400 in Vienna last year to a new record number that we expect this year.

The program firmly focuses on the current clinical application of CMR. It represents a unique educational opportunity spanning from a pre-course on. Thus tailored for the trainees to cutting-edge lectures and overviews on the latest research in the field and advanced CMR methods. It also represents an opportunity to meet and learn from the leading experts in CMR in a friendly and interactive environment. A second, parallel track will offer a mixture of abstracts, case reviews and practical sessions.

The highlights of this year's program include a multi-modality imaging session organised jointly with the European Association of Cardiovascular Imaging and the Working Group on Nuclear Cardiology and Cardiac CT of the ESC, a breakfast session on the role of CMR in Europe - challenges, differences and opportunities in various different European countries, and a round table discussion on training and certification in CMR in Europe.

A copy of the ESC Textbook of Cardiovascular Imaging will be the prize awarded to the best oral and poster presentation. And for the first time this year we have introduced an additional prize for the best submitted case.

The two latest educational products of the WG on CMR will also be available throughout the meeting: the CMR Update booklet and the CMR Pocket Guide.

As usual, at the end of the EuroCMR meeting (Sat pm) you will also have the opportunity to take the European CMR Exam, a primary requisite to obtain level 2 or level 3 competency in CMR.

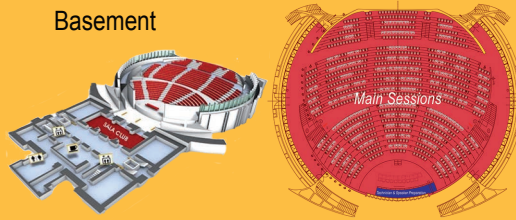
We are delighted to welcoming you to Florence.

Chiara BUCCIARELLI-DUCCI
Oliver BRUDER
Chairs
EuroCMR 2013 program committee

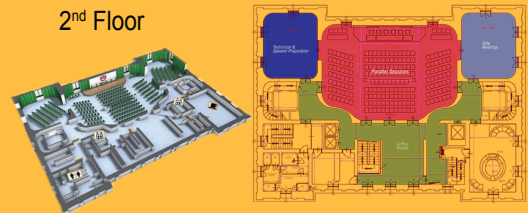
Massimo LOMBARDI
Local Organizer EuroCMR 2013
Heiko MAHRHOLDT
Chair WG CMR ESC

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17	► Scientific Sessions Parallel Sala Verde, 2nd Floor
27	► Appendix I: Schedule Poster Presentations
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Auditorium | Plenary Sessions



Sala Verde | Parallel Sessions



Thursday May 23

13:00	▶ Basic Course I	p 11	
<i>Coffee Break</i>			
15:45	▶ Basic Course II	p 11	▶ 5th T1-mapping Development Group Meeting p 17 Oral Presentations Debate <i>starts at 15:30</i>
18:20	▶ Round Table: Update on training and certification in CMR in Europe	p 11	

Friday May 24

08:25	▶ Welcome Address	p 12	
08:30	▶ Opening Plenary: Clinical CMR in Europe		▶ Technician Round Table p 18
<i>Break</i>			
09:45	▶ Best Oral Abstracts	p 12	▶ Didactic Case Session: Heart failure p 18
10:45	<i>Coffee Break + Poster Presentation I (Sala Club, Basement) Appendix 1 p 28</i>		
11:30	▶ Session I: CMR in the management of IHD	p 13	▶ Oral Abstracts I: Heart failure p 18
12:45	<i>Lunch Break + INDUSTRY FORUM & Hotline (Auditorium, Basement) p 13</i>		
14:00	▶ KEYNOTE: Role of CMR in heart failure in Europe	p 13	
14:30	▶ Session II: Pro/con debate		▶ Didactic Case Session: Best submitted cases p 19
<i>Break</i>			
15:50	▶ Session III: Congenital Imaging: the Aorta	p 14	▶ Oral Abstracts II: T1 and T2 mapping p 20
17:00	<i>Coffee Break + Poster Presentation II (Sala Club, Basement) Appendix 1 p 31 + Case Poster Presentation (Sala Verde)</i>		
17:45	▶ Session IV: LGE and prognosis	p 14	▶ Didactic Case Session: How to avoid artefacts? p 21
19:00	<i>Welcome Drinks Wine & Cheese Reception (Garden and/or Limonaia)</i>		

Saturday May 25

07:30	▶ Breakfast Session: Round table discussion 'CMR in Europe'	p 15	
08:30	▶ Session V: CMR for the interventionalist		▶ Didactic Case Session: Congenital p 23
<i>Break</i>			
09:50	▶ Session VI: ARVC	p 15	▶ Oral Abstracts III: Ischemic heart disease p 23
11:00	<i>Coffee Break + Poster Presentation III (Sala Club, Basement) Appendix 1 p 34</i>		
11:45	▶ Session VII: Multimodality imaging - Imaging stable IHD: which test has the future	p 16	▶ Didactic Case Session: Interactive cases (audience participation) p 24
12:55	▶ Closing Plenary: Imaging in heart failure		
14:00	▶ Best Poster/Best Oral Abstract AWARDS	p 16	
14:15	▶ Closing Remarks		

15:00 - 18:00

European CMR EXAM | University of Florence

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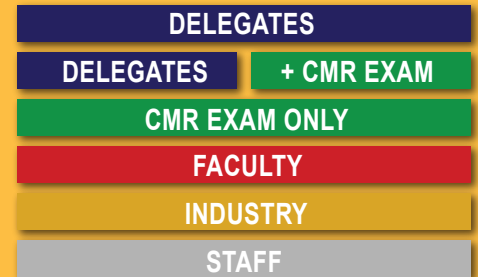
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Ralf WASSMUTH | Berlin, Germany
Mark WESTWOOD | London, UK

Venue ▶ **Palazzo dei Congressi**
 Piazza Adua 1, 50123 Florence, Italy

Admission & Badges ▶ **Conference name badges** are required for admission to all scientific sessions and activities at EuroCMR 2013, including the exhibit halls, social events, and the exam on Sat. Please make sure to wear them at all times.

Badges are color-coded for different groups or admissions.



Registration Desk & Opening Hours ▶ **The Registration Desk** is located on the ground floor in SALA 5 accessible from the main hallway. It will be open and staffed during the following hours:

Thursday May 23:	10:00 - 19:00
Friday May 24:	07:30 - 19:00
Saturday May 25:	07:00 - 15:00

Exhibits ▶ **Educational and informational exhibits** are available in SALA ONICE, SALA 4 and 9 also accessible from the main hallway. Exhibits will be open

Thursday May 23:	12:00 - 18:30
Friday May 24:	08:30 - 19:00
Saturday May 25:	08:30 - 14:00

EBAC CME Certificate & Italian CME Credits ▶ Please hand in the completed **EBAC Evaluation Form** (enclosed in the conference bag) at the end of the meeting in order to receive the **EBAC CME Certificate**. Certificates will be available at the registration desk from 10:00 -15:00 on Saturday. For **ITALIAN CME CREDITS** please apply at the desk set up for that purpose in SALA 5.

CMR Exam ▶ The CMR Exam will take place at the Computer Lab at the University of Florence

University of Florence (Università degli Studi di Firenze)
 Entrance at **Viale Morgagni 44**

Please walk up to the first floor to sign in with your **BADGE** at our desk.

A **shuttle bus** will be available outside the conference venue at 14:00 on Saturday (leaving at 14:15). If you prefer to go there on your own, please make sure to be at the lab at 14:30. There will be no shuttle back, the university is located close to public transportation.

Coffee Breaks Lunch, Social Event ▶ All **Coffee Breaks** will take place in the groundfloor and 2nd floor hallways, **Lunchboxes** will be handed out on Friday before the **Industry Forum** which will be held during the lunch break. The **Wine & Cheese Reception** will take place in the Palazzo garden and/or the Limonaia adjacent to the main building (depending on the weather).

Speaker Preparation Technicians ▶ Our technicians will be located **behind the stage in the main AUDITORIUM** and in **Sala 202** (left from SALA VERDE on the 2nd floor).

Our technical staff will assist you with preparing your talk for presentation in both, the plenary and parallel sessions. Please check with them prior to your talk in order to sort out eventual technical requirements.

Session Recordings ▶ Sessions will be recorded and published on the Working Group's website www.escardio.org/communities/Working-Groups/eurocmr shortly after the meeting has been adjourned.

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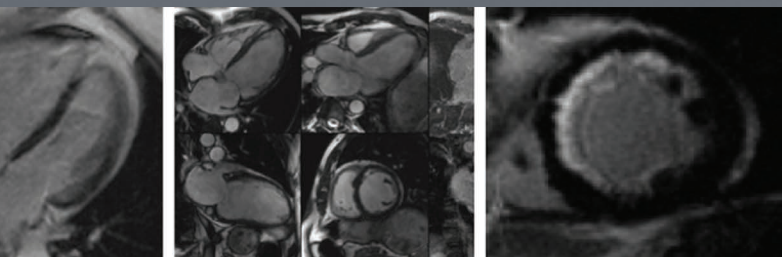
Munich, Germany
June 13-15, 2013

Some places for last-minute registration available!

For more information and online registration

www.cmr-course.de

Aernout Beek, Amsterdam | Oliver Bruder, Essen | Sohrab Fratz, Munich
Massimo Lombardi, Pisa | Heiko Mahrholdt, Stuttgart | Bogdan Marcu, Amsterdam
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Magnetic Resonance

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Accreditation

▶ The event “EuroCMR 2013” is accredited by the European Board for Accreditation in Cardiology (EBAC) for **16 hours of External CME credits** (day#1: 5 CME credits | day#2: 6 CME credits | day#3: 5 CME credits).

Each participant should claim only those hours of credit that have actually been spent in the educational activity. EBAC works according to the quality standards of the European Accreditation Council for Continuing Medical Education (EACCME), which is an institution of the European Union of Medical Specialists (UEMS).

Disclosure

▶ In compliance with EBAC/ EACCME guidelines, all speakers/chairpersons participating in this program have disclosed potential conflicts of interest that might cause a bias in the presentations.

The Organizing Committee is responsible for ensuring that all potential conflicts of interest relevant to the program are declared to the audience prior to the CME activities.



Italian CME Credits

▶ EuroCMR 2013 has been accredited for ITALIAN CME credits with the **ID 58499** and for **3.6 credits**.

To be eligible for the ITALIAN CME CREDITS you need to register at the ITALIAN CME desk set up in the registration area in SALA 5 and sign in and out there for each day of the meeting.

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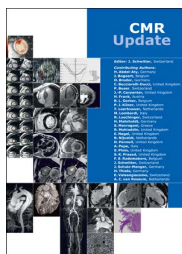


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THURSDAY May 23

13:00 - 15:15 ► Basic Course I

Chair **Philip KILNER** | London, UK
James MOON | London, UK

- 13:00 - 13:30 **MRI physics made easy.**
 1 **Vivek MUTHURANGU** | London, UK
- 13:30 - 13:45 **How to do - LV/RV regional and global function**
 2 **Ana ALMEIDA** | Lisbon, Portugal
- 13:45 - 14:00 **How to do - Anatomical imaging including T1 and T2 mapping**
 3 **Stefan PIECHNIK** | Oxford, UK
- 14:00 - 14:15 **Questions**
- 14:15 - 14:30 **How to do - Adenosine CMR stress imaging**
 4 **Chiara BUCCIARELLI-DUCCI** | Bristol, UK
- 14:30 - 14:45 **How to do - Dobutamine CMR stress imaging**
 5 **Ralf WASSMUTH** | Berlin, Germany
- 14:45 - 15:00 **How to do - High-quality late gadolinium enhancement**
 6 **Theo KARAMITSOS** | Oxford, UK
- 15:00 - 15:15 **Questions**

15:15 - 15:45 ► Coffee Break

15:45 - 18:15 ► Basic Course II

Chair **Tomasz MISZALSKI-JAMKA** | Wroclaw, Poland
John GREENWOOD | Leeds, UK

- 15:45 - 16:00 **How to do - Valve function and shunts**
 7 **Philip KILNER** | London, UK
- 16:00 - 16:15 **How to do - Coronary artery imaging**
 8 **Bernhard GERBER** | Leuven, Belgium
- 16:15 - 16:30 **CMR in the assessment of congenital heart disease**
 9 **Emanuela VALSANGIACOMO** | Zurich, Switzerland
- 16:30 - 16:45 **Questions**
- 16:45 - 17:00 **CMR in the assessment of acute coronary syndromes**
 10 **Ingo EITEL** | Leipzig, Germany
- 17:00 - 17:15 **CMR in the assessment ischemic heart disease**
 11 **John GREENWOOD** | Leeds, UK
- 17:15 - 17:30 **CMR in the assessment of cardiomyopathies**
 12 **Ian BOGAERT** | Leuven, Belgium
- 17:30 - 17:45 **CMR in the assessment of cardiac masses and pericardium**
 13 **Herbert FRANK** | Tulln, Austria
- 17:45 - 18:00 **Questions**
- 18:00 - 18:15 **How to do - Set up a CMR service**
 14 **Mark WESTWOOD** | London, UK

18:15 - 18:50 ► Round Table: Update on Training and Certification in CMR in Europe

15 *Panel* **Sven PLEIN** | Leeds, UK
Steffen PETERSEN | London, UK



FRIDAY May 24

08:25 ▶ **Welcome Address**
16 Massimo LOMBARDI | Pisa, Italy

08:30 - 09:30 ▶ **Opening Plenary: Clinical CMR in Europe**

Chair **Heiko MAHRHOLDT** | Stuttgart, Germany
Oliver BRUDER | Essen, Germany

08:30 - 08:45 **What can we learn from the new and ongoing CMR trials**
17 Eike NAGEL | London, UK

08:45 - 09:00 **Cost effectiveness of CMR in cardiology: a European perspective**
18 Juerg SCHWITTER | Lausanne, Switzerland

09:00 - 09:15 **EuroCMR registry: how CMR changes clinical practice**
19 Anja WAGNER | Stamford, USA

09:15 - 09:30 **CMR in population science**
20 Steffen PETERSEN | London, UK

09:30 - 09:45 ▶ **Break**

09:45 - 10:45 ▶ **Best Oral Abstracts**

Chair **Chiara BUCCIARELLI-DUCCI** | Bristol, UK
Oliver BRUDER | Essen, Germany

09:45 - 10:00 **933: C-Reactive protein and early post-infarct pericardial injury in patients after reperfused acute myocardial infarction. A cardiovascular magnetic resonance study**
21 Doulaptsis C, Masci PG, Goetschalckx K, Janssens S, Bogaert J.
Departments of Radiology and Cardiology, University Hospitals Leuven, Herestraat 49, B-3000 Leuven, Belgium

10:00 - 10:15 **1072: T1 mapping is a superior method to T2-weighted imaging in the detection of acute myocarditis using cardiovascular magnetic resonance.**
22 Vanessa M Ferreira, MD^{1,2}; Stefan K Piechnik PhD MScEE¹; Erica Dall'Armellina, MD¹; Theodoros D Karamitsos, MD PhD¹; Jane M Francis, DCR(R), DNM¹; Ntobeko Ntusi, MBChB, FCP(SA)¹; Cameron Holloway, MRCP, FRACP, DPhil¹; Robin P Choudhury, DM¹; Attila Kardos, MD PhD³; Matthew D Robson PhD¹; Matthias G Friedrich, MD^{4,2}; Stefan Neubauer MD¹
1 Department of Cardiovascular Medicine, University of Oxford, John Radcliffe Hospital, Oxford, OX3 9DU, United Kingdom
2 Stephenson Cardiovascular MR Centre, Libin Cardiovascular Institute of Alberta, Calgary, AB, Canada. | 3 Department of Cardiology, Milton Keynes NHS Hospital Foundation trust, Milton Keynes, United Kingdom | 4 Department of Cardiology, Université de Montréal, Montréal, Quebec, Canada, H1T 1C8

10:15 - 10:30 **1052: Cardiac involvement in subjects with Churg-Strauss syndrome in clinical remission**
23 Tomasz Miszalski-Jamka^{1,2,3}, Barbara Sokołowska², Wojciech, Szczeklik², Krzysztof Karwat³, Karol Miszalski-Jamka⁴, Katarzyna Belzak², Łukasz Małek⁵, Wojciech Mazur⁶, Dean J. Kereiakes⁶, Przemysław Jaźwiec¹, Jacek Musiał²
1 Department of Clinical Radiology and Imaging Diagnostics, 4th Military Hospital, Wrocław, Poland | 2 Department of Internal Medicine, Jagiellonian University of Cracow, Kraków, Poland. | 3 Center for Diagnosis, Prevention and Telemedicine, John Paul II Hospital, Kraków, Poland | 4 Department of Cardiology, Congenital Heart Disease and Electrotherapy, Silesian Center for Heart Disease, Zabrze, Poland | 5 Department of Coronary Artery Disease and Structural Heart Diseases, Cardiac Magnetic Resonance Unit, Institute of Cardiology, Warsaw, Poland | 6 The Christ Hospital Heart and Vascular Center/The Lindner Center for Research and Education, Cincinnati, Ohio, USA

10:30 - 10:45 **939: CMR T1 Mapping Pre And Post Contrast Characterizes The Myocardium In Heart Transplant Recipients Without Rejection**
24 Patrizia Pedrotti¹, Gabriella Masciocco¹, Luciana D'Angelo², Angela Milazzo¹, Giuseppina Quattrocchi¹, Franco Zanotti¹, Maria Frigerio¹, Alberto Roghi¹ and Ornella Rimoldi³.
1) Cardiac-Thoracic-Vascular, Ospedale Niguarda Ca' Granda, Milan, Italy; 2) Vita Salute University, San Raffaele, Milan, Italy and 3) CNR, Segrate (Milan), Italy.

10:45 - 11:30 ▶ **Coffee Break & ABSTRACT POSTER Presentations I** (*Sala Club, Basement*)
See presentation details in **Appendix I** starting at page 28
The original abstract submissions are published in a special EHJ-CI supplement in print and online



FRIDAY May 24

11:30 - 12:45 ▶ Session I: CMR in the management of IHD

Chair **Sven PLEIN** | Leeds, UK
Juerg SCHWITTER | Lausanne, Switzerland

11:30 - 11:45 **25** **Pathophysiology of myocardial ischemia to understand imaging findings**
 Frank RADEMAKERS | Leuven, Belgium

11:45 - 12:00 **26** **Perfusion assessment by CMR as a surrogate for ischemia**
 Sven PLEIN | Leeds, UK

12:00 - 12:15 **27** **Myocardial ischemia as imaged by SPECT or PET**
 Danilo NEGLIA | Pisa, Italy

12:15 - 12:30 **28** **Limitations and pitfalls of stress CMR in clinical practice**
 Eike NAGEL | London, UK

12:30 - 12:45 **Discussion**

12:45 - 14:00 ▶ Lunch & INDUSTRY FORUM | Hotline

12:45 - 13:10 **29** *Main Sponsor of EuroCMR 2013 :* **BAYER**

13:10 - 13:25 **30** *Main Sponsor of EuroCMR 2013 :* **SIEMENS**

13:25 - 13:40 **31** *Gold Sponsor of EuroCMR 2013:* **GE**

13:45 - 14:00 **32** **HOTLINE: Future of the WG and the European Association of Cardiac Imaging**

Panel **Heiko MAHRHOLDT** | Stuttgart, Germany
Sven PLEIN | Leeds, UK

14:00 - 14:30 ▶ Keynote

14:00 - 14:30 **33** **Role of CMR in Heart Failure**
 Dudley PENNELL | London, UK

14:30 - 15:40 ▶ Session II: Pro/Con Debate

Chair **Eike NAGEL** | London, UK
Herbert FRANK | Tulln, Austria

14:30 - 14:45 **34** **T2 imaging for myocardial salvage PRO**
 Andrew ARAI | Bethesda, USA

14:45 - 15:00 **35** **T2 imaging for myocardial salvage CON**
 Robert JUDD | Durham, USA

15:00 - 15:15 **36** **Viability imaging - key to clinical decision making PRO**
 John GREENWOOD | Leeds, UK

15:15 - 15:30 **37** **Viability imaging - key to clinical decision making CON**
 Jeanette SCHULZ-MENGER | Berlin, Germany

15:30 - 15:40 **Discussion**

15:40 - 15:50 ▶ Break



FRIDAY May 24

15:50 - 17:00 ▶ Session III: Congenital Imaging: the Aorta

Chair **Emanuela VALSANGIACOMO** | Zurich, Switzerland
Vivek MUTHURANGU | London, UK

15:50 - 16:05 **Bicuspid aortic valve - morphology, flow, and beyond**
38
Raad MOHIADDIN | London, UK

16:05 - 16:20 **Aortic coarctation - is it only the arch?**
39
George BALLARD | Leeds, UK

16:20 - 16:35 **Aortic arch malfunctions**
40
Christian KELLENBERGER | Zurich, Switzerland

16:35 - 16:50 **Plaque imaging from the aorta to the coronaries**
41
Juerg SCHWITTER | Lausanne, Switzerland

16:50 - 17:00 **Discussion**

17:00 - 17:45 ▶ Coffee Break & ABSTRACT POSTER Presentations II *(Sala Club, Basement)*

See presentation details in **Appendix I** starting at page 31

The original abstract submissions are published in a special EHJ-CI supplement in print and online

17:45 - 18:55 ▶ Session IV: LGE and Prognosis

Chair **Robert JUDD** | Durham, USA
Massimo LOMBARDI | Pisa, Italy

17:45 - 18:00 **Ischemic heart disease**
42
Gerry MCCANN | Leicester, UK

18:00 - 18:15 **Cardiomyopathies (HCM, DCM)**
43
Oliver BRUDER | Essen, Germany

18:15 - 18:30 **Myocardial inflammation**
44
Heiko MAHRHOLDT | Stuttgart, Germany

18:30 - 18:45 **Where LGE changes clinical pathways**
45
Robert JUDD | Durham, USA

18:45 - 18:55 **Discussion**

19:00 ▶ Welcome Drinks | Wine & Cheese Reception *(Garden & Limonaia)*



SATURDAY May 25

07:30 - 08:30 ► Breakfast Session: Round Table Discussion 'CMR in Europe'

46 *Chair* **Sven PLEIN** | LEEDS, UK
Chiara BUCCIARELLI-DUCCI | Bristol, UK

Panel

Italy:	Giovanni AQUARO
UK:	James MOON
Germany:	Holger THIELE
Switzerland:	Juerg SCHWITTER
Netherlands:	Albert VAN ROSSUM

Members of other countries are invited to be part of the audience and contribute to the discussion
(Breakfast will be available)

08:30 - 09:40 ► Session V: CMR for the Interventionalist

Chair **Holger THIELE** | Leipzig, Germany
Chiara BUCCIARELLI-DUCCI | Bristol, UK

08:30 - 08:45 **CMR in Transcatheter Aortic Valve Implantation**
47 Francisco ALPENDURADA | London, UK

08:45 - 09:00 **CMR to guide coronary interventions**
48 Robin NIJVELDT | Amsterdam, Netherlands

09:00 - 09:15 **CMR to estimate prognosis in ACS**
49 Holger THIELE | Leipzig, Germany

09:15 - 09:30 **Differential diagnosis of ACS with unobstructed coronary arteries**
50 Piergiorgi MASCI | Pisa, Italy

09:30 - 09:40 **Discussion**

09:40 - 09:50 ► Break

09:50 - 11:00 ► Session VI: ARVC

Chair **Massimo LOMBARDI** | Pisa, Italy
Albert VAN ROSSUM | Amsterdam, Netherlands

09:50 - 10:05 **Structural changes in the heart with ARVC**
51 Gaetano THIENE | Padova, Italy

10:05 - 10:20 **Diagnostic criteria of ARVC**
52 Cristina BASSO | Padova, Italy

10:20 - 10:35 **Role of CMR in the diagnosis of ARVC**
53 Massimo LOMBARDI | Pisa, Italy

10:35 - 10:50 **ARVC and sudden cardiac death in athletes**
54 Stefano CASELLI | Rome, Italy

10:50 - 11:00 **Discussion**

11:00 - 11.45 ► Coffee Break & ABSTRACT POSTER Presentations III *(Sala Club, Basement)*

See presentation details in **Appendix I** starting at page 34

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SATURDAY May 25

11:45 - 12:55 ▶ **Session VII: Multimodality Imaging - Imaging Stable IHD: which has the future?**

Chair **Heiko MAHRHOLDT** | Stuttgart, Germany
Dudley PENNELL | London, UK

11:45 - 12:00 **Status of SPECT after CE-MARC and IMPACT2: the end of the road?**
 55 Alessia GIMELLI | Pisa, Italy

12:00 - 12:15 **CT: the new one-stop shop for coronaries, perfusion and viability?**
 56 Francesca PUGLIESE | London, UK

12:15 - 12:30 **Echocardiography: can it compete with CT and CMR?**
 57 Erwan DONAL | Rennes, France

12:30 - 12:45 **CMR: strengths and weaknesses compared with other imaging modalities**
 58 Albert VAN ROSSUM | Amsterdam, Netherlands

12:45 - 12:55 **Discussion**

12:55 - 14:00 ▶ **Closing Plenary: Imaging in Heart Failure**

Chair **Heiko MAHRHOLDT** | Stuttgart, Germany
Massimo LOMBARDI | Pisa, Italy

12:55 - 13:10 **Heart Failure in Europe: epidemiology and role of imaging**
 59 Erwan DONAL | Rennes, France

13:10 - 13:25 **CMR in new onset heart failure: does tissue mapping play a role?**
 60 James MOON | London, UK

13:25 - 13:40 **Risk stratification and clinical decision making guided by CMR**
 61 Albert VAN ROSSUM | Amsterdam, Netherlands

13:40 - 13:55 **Role of CMR in cardiac resynchronisation therapy**
 62 Jeanette SCHULZ-MENGER | Berlin, Germany

14:00 - 14:15 ▶ **Best Poster/Oral Abstract Awards**

Chair **Chiara BUCCIARELLI-DUCCI** | Bristol, UK
Oliver BRUDER | Essen, Germany

14:15 - 14:20 ▶ **Closing Remarks**
 63 Heiko MAHRHOLDT | Stuttgart, Germany

15:00 - 18:00 ▶ **European CMR Exam**
(Università degli Studi di Firenze, Viale Morgagni 44)
 Bus shuttle leaving at 14:15 outside the venue



THURSDAY May 23

15:30 - 18:30 ► The 5th T1-Mapping Development Group Meeting

15:30 - 17:00 Oral Presentations

Chair **Andrew ARAI** | Bethesda, USA

15:30 - 15:45 **Introduction and update of the T1-mapping literature**
 64 James MOON | London, UK

15:45 - 16:00 **Myocardial T1-mapping at 3T: reference values, influencing factors and implications**
 65 Florian VON KNOBELSDORFF | Berlin, Germany

16:00 - 16:15 **Improvements in MOLLI acquisition schemes**
 66 Sven PLEIN | Leeds, UK

16:15 - 16:30 **Clinical applications of T1-mapping in HCM and cardiac transplant patients**
 67 Patricia PEDROTTI | Milano, Italy

16:30 - 16:45 **International T1-multi-centre prospective study**
 68 Valentina PUNTMANN | London, UK

16:45 - 17:00 **T1-mapping - a tool for understanding cardiac disease**
 69 Andrew TAYLOR | Melbourne, Australia

17:00 - 17:15 Break

17:15 - 18:30 Debate: Pro/Con contrast for T1-mapping

Chair **Martin UGANDER** | Stockholm, Sweden

17:15 - 17:30 **We don't need contrast for T1-mapping**
 70 Stefan PIECHNIK | Oxford, UK

17:30 - 17:45 **We need contrast for T1-mapping**
 71 Marianna FONTANA | London, UK

17:45 - 18:00 **Discussion**

18:00 - 18:30 **Future directions of T1-mapping - things that still need to be done**
 72 James MOON | London, UK
 Vanessa FERREIRA | Oxford, UK

18:30 **Adjourn** | 5th T1-mapping development group meeting



FRIDAY May 24

08:30 - 09:30 ► Technician Round Table

Chair **Chris LAWTON** | Bristol, UK
Tomasz MISZALSKI-JAMKA | Wroclaw, Poland

08:30 - 08:45
73 **Right heart cardiomyopathy: not only ARVC**
 Ralf WASSMUTH | Berlin, Germany

08:45 - 09:00
74 **Stress perfusion imaging: how and why**
 Claudia Christina DELUIGI | Essen, Germany

09:00 - 09:15
75 **Imaging the aorta and gadolinium angiograms**
 Chris LAWTON | Bristol, UK

09:15 - 09:30
76 **Tips and tricks for CMR imaging**
 Alison FLETCHER | Southampton, UK

09:30 - 09:45 ► Break

09:45 - 10:45 ► Didactic Case Session: Heart Failure

Chair **Alberto ROGHI** | Milano, Italy
Gianluca DI BELLA | Messina, Italy

09:45 - 10:00
77 **Case Presentation**
 Santo DELLAGROTTAGLIE | Napoli, Italy

10:00 - 10:15
78 **Case Presentation**
 Martina PERAZZOLO MARRA | Padova, Italy

10:15 - 10:30
79 **Case Presentation**
 Piergiorgio MASCI | Pisa, Italy

10:30 - 10:45
80 **Case Presentation**
 Alberto ROGHI | Milano, Italy

10:45 - 11:30 ► Coffee Break & ABSTRACT POSTER Presentations I *(Sala Club, Basement)* See presentation details in **Appendix I** starting at page 28 The original abstract submissions are published in a special EHJ-CI supplement in print and online

11:30 - 12:45 ► Oral Abstracts I: Heart Failure

Chair **Florian VON KNOBELSDORFF** | Berlin, Germany
Gerry MCCANN | Leicester, UK

11:30 - 11:42
81 **954: Assessment of Organ Dysfunction in Systemic AL Amyloidosis using Equilibrium MRI to calculate Extracellular Volume Fraction**
 Sanjay M Banyersad, Marianna Fontana, Viviana Maestrini, Daniel M Sado, Jennifer Pinney, Ashutosh D Wechalekar, Julian D Gillmore, Helen Lachmann, Philip N Hawkins, James C Moon
 Heart Hospital Imaging Centre, London, UK

11:42 - 11:54
82 **973: Aortic valve area, stroke volume, left ventricular hypertrophy, remodeling and fibrosis in aortic stenosis assessed by cardiac MRI. Comparison between high and low gradient, and normal and low flow aortic stenosis**
 Gilles Barone-Rochette MD, Sophie Pierard MD, Stéphanie Seldrum MD, Christophe De Meester de Ravensteen MS; Julie Melchior MD; Frederick Maes MD, Anne-Catherine Pouleur MD PhD, David Vancraeynest MD PhD, Agnes Pasquet MD PhD, Jean-Louis Vanoverschelde MD PhD FESC FACC, Bernhard L Gerber MD PhD FESC FACC
 Valvular Heart Disease Clinic Division of Cardiology, Department of Cardiovascular Diseases, Cliniques Universitaires St. Luc And Pôle de Recherche Cardiovasculaire (CARD) Institut de Recherche Expérimentale et Clinique (IREC) Université Catholique de Louvain, Brussels, Belgium



FRIDAY May 24

- 11:54 - 12:06 **83** **1082: From Tuscan Trabeculae to Florentine Fractals – A Novel Approach to Quantification by CMR**
 Gabriella Captur, Vivek Muthurangu, Andrew S Flett, Robert Wilson, Andrea Barison, Sarah Anderson, Christopher Cook, Daniel M Sado, William J McKenna, Timothy J Mohun, Perry M Elliott, James C Moon
 1. The Heart Hospital, London, UK; 2. National Institute of Medical Research, UK; 3. Great Ormond Street Hospital, UK
- 12:06 - 12:18 **84** **919: MRI in patients with a cardiac pacing device – a collaborative safety protocol for clinical practice**
 Touko Kaasalainen, Sari Kivistö, Miia Holmström, Sami Pakarinen, Helena Hänninen, Outi Sipilä, Kirsi Lauerma
 HUS Medical Imaging Center, Helsinki University Central Hospital
- 12:18 - 12:30 **85** **986: Prognostic CMR parameters for heart failure and arrhythmias in a large cohort of well treated thalassemia major patients**
 A. Pepe¹, A. Meloni¹, L. Gulino¹, G. Rossi², C. Paci³, A. Spasiano⁴, P. Keilberg¹, G. Restaino⁵, M. C. Resta⁶, V. Positano¹, M. Lombardi¹.
 1 CMR Unit, Fondazione G. Monasterio CNR-Regione Toscana and Institute of Clinical Physiology, Pisa, Italy; 2 Epidemiology and Biostatistics Unit, Institute of Clinical Physiology, CNR, Pisa, Italy; 3 Centro Trasfusionale, Ospedale S. Maria alla Gruccia, Montevarchi, Italy; 4 Unità Microcitemia, A.O.R.N. Cardarelli, Napoli, Italy; 5 Department of Radiology, Catholic University of the Sacred Heart, Campobasso, Italy; 6 Struttura Complessa di Radiologia, OSP. SS. Annunziata, Taranto, Italy.
- 12:30 - 12:42 **86** **950: Estimation of pulmonary arterial mean and wedge pressure by 4-dimensional magnetic resonance blood flow imaging in patients with pulmonary hypertension**
 Ursula Reiter¹, Gert Reiter², Gabor Kovacs³, Albrecht Schmidt⁴, Horst Olschewski³, Michael Fuchsjäger¹
 1 Department of Radiology, Medical University of Graz, Austria, 2 Siemens AG, Healthcare Sector, Graz, Austria, 3 Department of Pulmology, Medical University of Graz, Austria & LBI for Lung Vascular Research Graz, Austria, 4 Department of Cardiology, Medical University of Graz, Austria.

Auditorium | Plenary



12:45 - 14:00 ► Lunch & INDUSTRY FORUM | Hotline

BAYER | SIEMENS | GE

+ **HOTLINE: Future of the WG and the European Association of Cardiac Imaging**

14:00 - 14:30 ► Keynote

Role of CMR in Heart Failure in Europe
 Dudley PENNELL | London, UK

14:30 - 15:30 ► Didactic Case Session: Best Submitted Cases

Chair **Claudia Christina DELUIGI** | Essen, Germany
Raad MOHIADDIN | Londond, UK

- 14:30 - 14:40 **87** **Atypical endomyocardial fibrosis**
 Bart de BOECK | Luzern, Switzerland
- 14:40 - 14:50 **88** **Oedema mapping**
 Daniel SADO | London, UK
- 14:50 - 15:00 **89** **Pseudoaneurysm**
 Magda LANOCHA | Poznan, Poland
- 15:00 - 15:10 **90** **Loeffler endocarditis**
 Alessio LA MANNA | Catania, Italy
- 15:10 - 15:20 **91** **LGE HCM**
 Roberta DELLA BONA | Arezzo, Italy
- 15:20 - 15:30 **92** **ALVD**
 Elisa MC ALINDON | Bristol, UK

Additional submitted cases will be posted throughout the session in Sala VERDE and will be presented separately during the 17:00 Coffee Break (see next page)



FRIDAY May 24

15:30 - 17:00 ► Oral Abstracts II: T1 and T2-Mapping

Chair **James MOON** | London, UK
Andrew ARAI | Bethesda, USA

- 15:30 - 15:42
93 **943: Native T1 mapping correlates with echocardiographic indices of diastolic function in hypertrophic cardiomyopathy**
 Alexandra Macmillan BA, Darius Dabir MD, Toby Rogers MD, Mark Monaghan, MD, PhD, Eike Nagel MD PhD, Valentina Puntmann MD PhD
 King's College London
- 15:42 - 15:54
94 **1057: High-resolution faster modified look-locker inversion recovery (fast-MOLLI) for RV extracellular volume fraction at 3T: A feasibility study**
 E Semaan, B Spottiswoode, B Freed, M Carr, M Wasielewski, K Fortney-Campione, S Shah, J Carr, M Markl, J Collins
 Northwestern University, Chicago, IL; Siemens MR R&D Chicago, IL
- 15:54 - 16:06
95 **1075: Shortened Modified Look-Locker Inversion Recovery for Myocardial T1 Mapping in Healthy Volunteers: Determination of Reference T1 Relaxation Times at 3 Tesla MR According to Different Contrast Injection Methods**
 Yon Mi Sung
 Gachon University Gil Hospital
- 16:06 - 16:18
96 **1070: Comparison of native T1 values in acute and chronic viral myocarditis**
 Rocío Hinojar¹, MD; Eduardo Arroyo Ucar¹, MD; Darius Dabir¹, MD; Tobias Voigt³, PhD; Nicolas Gaddum⁴, PhD; Tobias Schaeffter⁴, PhD; Eike Nagel¹, MD, PhD; Valentina O. Puntmann¹, MD, PhD
¹ Cardiovascular Imaging Department, King's College London, London, UK, ² Clinical Research Europe, Philips Research, London, UK, ³ Department of biophysics and medical engineering, King's College London, London, UK
- 16:18 - 16:30
97 **961: Age-gender normal values of native and post-contrast myocardial T1 relaxation times on 1.5T and 3T using MOLLI**
 Dabir D, Rogers T, Arroyo Ucar E, Kidambi A, Plein S, Gebker R, Schnackenburg B, Voigt T, Schaeffter T, Nagel E, Puntmann V O
 Department of Cardiovascular Imaging, Division of Imaging Sciences and Biomedical Engineering, St. Thomas' Hospital, King's College London
- 16:30 - 16:42
98 **1083: A comparison of sequences to quantitate myocardial salvage following STEMI**
 McAlindon E., Bucciarelli-Ducci C.
 CMR Unit, NIHR Cardiovascular Biomedical Research Unit, Bristol Heart Institute, Bristol, UK
- 16:42 - 16:54
99 **1040: Myocardial T1 mapping in iron overload. A comparison to the T2* technique.**
¹Daniel Sado, ¹Viviana Maestrini, ²Stefan Piechnik, ¹John Porter, ³Jin Yamamura, ³Roland Fischer, ¹James Moon
¹The Heart Hospital, UK; ²Oxford Centre for CMR research, UK; ³Medical University Center Hamburg, Germany

17:00 - 17:45 ► Coffee Break & CASE POSTER Presentations

Case Poster Presentation I
Chair **Gianluca DI BELLA** | Messina, Italy

Case Poster Presentation II
Chair **Mark WESTWOOD** | London, UK

- 17:00 - 17:45 ► Coffee Break & ABSTRACT POSTER Presentations II** (*Sala Club, Basement*)
 See presentation details in **Appendix I** starting at page 31
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FRIDAY May 24

17:45 - 18:45 ► Didactic Case Session: How to avoid artefacts

Chair **Stefan PIECHNIK** | Oxford, UK
Jeanette SCHULZ-MENGER | Berlin, Germany

17:45 - 18:00 **Basic principles**
 100 Bernhard GERBER | Leuven, Belgium

18:00 - 18:15 **LGE artefacts**
 101 Claudia Christina DELUIGI | Essen, Germany

18:15 - 18:30 **Artefacts at 3T**
 102 Florian VON KNOBELSDORFF | Berlin, Germany

18:30 - 18:45 **Perfusion and artefacts**
 103 Francisco ALPENDURADA | London, UK

19:00 ► Welcome Drinks | Wine & Cheese Reception (Garden & Limonaia)



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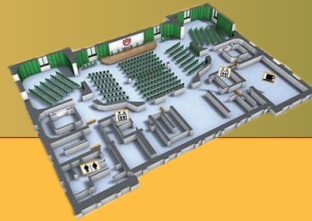
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Save the date and come back for more information soon at
eurocmr2014.medconvent.at

Cardiovascular
Magnetic Resonance
ESC Working Group





SATURDAY May 25

08:30 - 09:30 ► Didactic Case Session: Congenital

Chair **Vivek MUTHURANGU** | London, UK
George BALLARD | Leeds, UK

08:30 - 08:45 **Case Presentation**
 104 Vivek MUTHURANGU | London, UK

08:45 - 09:00 **Case Presentation**
 105 Vivek MUTHURANGU | London, UK

09:00 - 09:15 **Case Presentation**
 106 George BALLARD | Leeds, UK

09:15 - 09:30 **Case Presentation**
 107 George BALLARD | Leeds, UK

09:30 - 09:50 ► Break

09:50 - 11:00 ► Oral Abstracts III: Ischemic Heart Disease

Chair **Ingo EITEL** | Leipzig, Germany
Theo KARAMITSOS | Oxford, UK

09:50 - 10:02 **982: The association of copeptin with myocardial infarct size and myocardial function after ST-segment elevation myocardial infarction**
 108

Reinstadler SJ¹, Klug G¹, Feistritzner HJ¹, Mayr A², Harrasser B¹, Krauter L¹, Mair J¹, Schocke MF¹, Pachinger O¹, Metzler B¹
 University Clinic of Internal Medicine III, Cardiology, Innsbruck Medical University
 University Clinic of Radiology, Innsbruck Medical University

10:02 - 10:14 **1012: Prognostic Value of Adenosine Stress Cardiac Magnetic Resonance Imaging in Patients with Known Coronary Artery Disease**
 109

Marzia Rigolli, Andrew To, Colin Edwards, Patricia Ding, Jonathan Christiansen
 Cardiovascular Division, North Shore Hospital, Waitemata Health

10:14 - 10:26 **944: Impact of CMR infarct severity on regional morphology and function in patients with successfully reperfused STEMI**
 110

Symons R, Doulaptsis C, Masci PG, Goetschalckx K*, Dymarkowski S, Janssens S*, Bogaert J.
 Departments of Radiology and Cardiovascular Diseases(*), University Hospitals Leuven, Herestraat 49, B-3000 Leuven, Belgium

10:26 - 10:38 **1065: Cardiac magnetic resonance predictors of LV remodeling early after STEMI**
 111

Krzysztof Karwat¹, Marek Tomala², Karol Miszalski-Jamka⁴, Sabina Lichołaj³, Wojciech Mazur⁴, Dean J. Kereiakes⁴, Jadwiga Nessler¹, Krzysztof Żmudka², Przemysław Jaźwiec¹, Tomasz Miszalski-Jamka^{5,6}
 1 Department of Coronary Heart Disease, John Paul II Hospital, Institute of Cardiology, Jagiellonian University School of Medicine, Kraków, Poland
 2 Department of Haemodynamics & Angiocardiography, John Paul II Hospital, Institute of Cardiology, Jagiellonian University School of Medicine, Kraków, Poland
 3 Department of Cardiology, Congenital Heart Disease and Electrotherapy, Silesian Center for Heart Disease, Zabrze, Poland
 4 The Christ Hospital Heart and Vascular Center/The Lindner Center for Research and Education, Cincinnati, Ohio, USA
 5 Center for Diagnosis, Prevention and Telemedicine, John Paul II Hospital, Kraków, Poland
 6 Department of Clinical Radiology and Imaging Diagnostics, 4th Military Hospital, Wrocław, Poland

10:38 - 10:49 **1039: Time after contrast injection is crucial to determine infarct transmural and myocardial functional recovery after an acute myocardial infarction.**
 112

José F Rodríguez-Palomares, JT Ortiz, C. Bucciarelli, Dan Lee, Edwin Wu, Robert O Bonow
 Northwestern Memorial Hospital (Chicago, Illinois, USA), Hospital Vall Hebrón (Barcelona, Spain).

10:49 - 11:00 **964: Identification of Arrhythmogenic Substrate by ce-CMR in post-MI patients with relatively preserved left ventricular ejection fraction nonsustained ventricular tachycardia**
 113

Kivanc Yalin, Ebru Golcuk, Cansu Selcan Ozer, Hakan Buyukbayrak, Ravza Yilmaz, Memduh Dursun, Ahmet Kaya Bilge, Kamil Adalet
 Istanbul University, Istanbul Faculty of Medicine, Department of Cardiology



SATURDAY May 25

11:00 - 11:45 ▶ **Coffee Break & ABSTRACT POSTER Presentations III** (*Sala Club, Basement*)
See presentation details in **Appendix I** starting at page 34

The original abstract submissions are published in a special EHJ-CI supplement in print and online

11:45 - 12:55 ▶ **Didactic Case Session: Interactive Cases (audience participation)**

Chair **Mark WESTWOOD** | London, UK
James MOON | London, UK

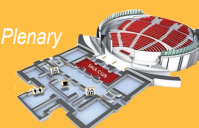
11:45 - 12:00 **Case Presentation**
114 Cyril PELLATON | London, UK

12:00 - 12:15 **Case Presentation**
115 Silvia PICA | London, UK

12:15 - 12:30 **Case Presentation**
116 Graham COLE | London, UK

12:30 - 12:45 **Case Presentation**
117 Charlotte MANISTY | London, UK

Auditorium | Plenary



12:55 - 14:00 ▶ **Closing Plenary: Imaging in Heart Failure**

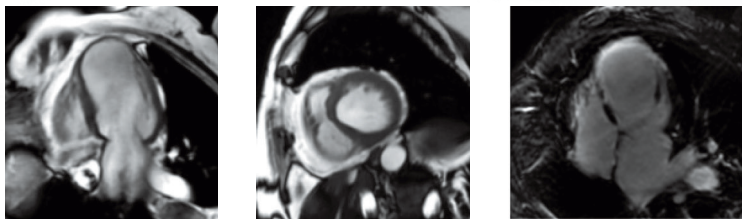
14:00 - 14:15 ▶ **Best Poster/Oral Abstract Awards**

14:15 - 14:20 ▶ **Closing Remarks**
Heiko MAHRHOLDT | Stuttgart, Germany

15:00 - 18:00 ▶ **European CMR Exam**
(*Università degli Studi di Firenze, Viale Morgagni 44*)
Bus shuttle leaving at 14:15 outside the venue

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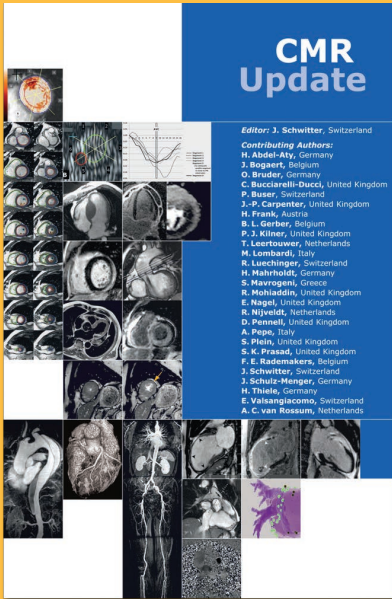


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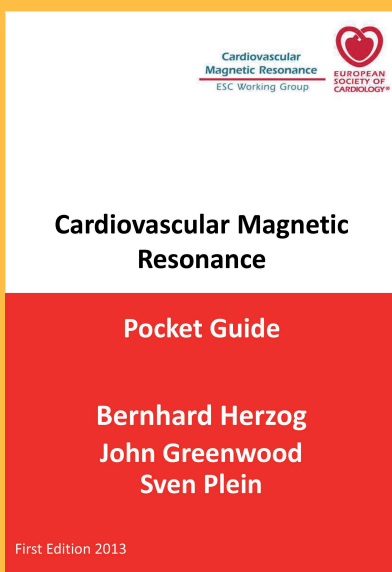
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► Schedule POSTER Presentations

Selected POSTERS will be presented at the SALA CLUB in the basement, next to the main AUDITORIUM during the COFFEE BREAKS as indicated in the main program.

Please find a detailed schedule for these POSTER PRESENTATIONS on the following pages.

The original submitted abstracts have been published in a special EHJ-CI supplement in print (freely available at the meeting) and online at the EHJ-CI website, free to view for all.

How to find abstracts or authors:

The ABSTRACT POSTER PRESENTATIONS are ordered by session according to their place in the overall schedule, and by subject.

The **green numbers** indicate the original number under which each abstract has been registered in the system upon submission. These numbers refer to the EHJ-CI supplement where all abstracts have been published, also in their order by session/presentation.

The consecutively ordered **red P-numbers** only serve as a reference to the AUTHORS LIST in **Appendix II** of this program.

FRIDAY May 24

10:45 - 11:30 ▶ **Coffee Break & POSTER Presentations I**

10:45 - 11:30 **Poster Session I/I | Congenital heart disease and flow imaging**

Chair **Ana ALMEIDA** | Lisbon, Portugal

- 10:45 - 10:50
P1 **936: Left ventricular stroke volume measurement accordance between magnetic resonance volumetry and phase contrast flow methods**
J. Peltonen, T. Kaasalainen, S. Kivistö, M. Holmström, K. Lauerma
Helsinki Medical Imaging Center, Helsinki University Hospital, Helsinki, Finland
- 10:50 - 10:55
P2 **942: Normal values of right pulmonary to left pulmonary perfusion ratio in healthy individuals determined by cardiovascular magnetic resonance**
Tobias Rutz, MD ^(a); Christian Meierhofer, MD ^(a); Stefan Martinoff, MD ^(b); Peter Ewert, MD, PhD ^(a); John Hess, MD, PhD, FESC ^(a); Heiko Stern, MD, PhD ^(a); Sohrab Fratz, MD, PhD, FESC ^(a)
^(a) Department of Paediatric Cardiology and Congenital Heart Disease, Deutsches Herzzentrum München an der Technischen Universität München, Germany, ^(b) Department of Radiology, Deutsches Herzzentrum München an der Technischen Universität, Munich, Germany
- 10:55 - 11:00
P3 **946: Free breathing 3D-navigator-guided, gadolinium-enhanced magnetic resonance angiography of pulmonary veins and the impact of heart rate and rhythm on image quality.**
John D. Groarke, Alfonso H. Waller, Ron Blankstein, Raymond Y. Kwong, Michael Steigner
Cardiovascular Imaging, Department of Medicine (Division of Cardiology) and Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts
- 11:00 - 11:05
P4 **966: Using Carotid-subclavian artery Index and Isthmus-descending Aorta ratio with cardiac MR for detection of coarctation**
Zahara Alizadeh. M. D., Abolfath Alizadeh. M. D., Zahara Khajali. M. D., Ali Mohammadzadeh. M. D. Ala Kaykhavani. M. D., Mona Heidarali. M. D.
Cardiac Electrophysiology Research Centre, Rajaie Cardiovascular Medical and Research Center, Tehran University of Medical Sciences Niayesh highway, Valiasr St, Tehran, Iran
- 11:05 - 11:10
P5 **1022: No difference in aortic distensibility and pulse wave velocity between bicuspid and tricuspid aortic stenosis.**
Singh A, Bekele S, Gunaratne A, Khan J, Nazir SN, Steadman CD, Kanagala P, Horsfield MA, McCann GP
University of Leicester, UK
- 11:10 - 11:15
P6 **1029: MRI phase-encoded tissue velocity mapping for the non-invasive estimation of left ventricular diastolic filling pressure: A MRI-cardiac catheterisation comparison study**
Duncan RF,^{1,2} Dundon BK,² Nelson AJ,² Williams K,² Carbone A,² Worthley MI,² Zaman A,¹ Worthley SG.²
¹ Department of Cardiology, Cardiothoracic Centre, Freeman Hospital, Newcastle-Upon-Tyne, UK
² Cardiovascular Research Centre, Royal Adelaide Hospital, Adelaide, Australia
- 11:15 - 11:20
P7 **1037: Self-navigated free-breathing isotropic 3D whole heart MRI for the characterization of complex congenital heart malformations: first experience with 52 patients.**
Pierre Monney^a, Davide Piccini^{b, c}, Tobias Rutz^a, Gabriella Vincenti^a, Simon Koestner^a, Matthias Stuber^b, Jürg Schwittr^a
^a Division of Cardiology, Cardiac MR Center, University Hospital Lausanne (CHUV), ^b Center for Biomedical Imaging (CIBM) & Center for Cardiovascular Magnetic Resonance Research (CVMR), University of Lausanne (UNIL), and ^c Advanced Clinical Imaging Technology, Siemens Healthcare IM S AW, Lausanne, Switzerland
- 11:20 - 11:25
P8 **1042: Three-dimensional assessment of tricuspid annulus: sensitivity analysis and feasibility**
P Gripari¹, F Maffessanti¹, G Pontone¹, D Andreini¹, E Bertella¹, S Mushtaq¹, EG Caiani¹, M Pepi¹
¹ Centro Cardiologico Monzino IRCCS, Milan, Italy
- 11:25 - 11:30
P9 **1053: Pulse wave velocity in patients with dilatation of aorta**
Anna Kociemba, Katarzyna Katulska, Magdalena Lanocho, Andrzej Sinawski, Magdalena Janus, Malgorzata Pyda
1st Clinic of Cardiology, University of Medical Science in Poznan, Poland

FRIDAY May 24

10:45 - 11:30 ▶ Coffee Break & POSTER Presentations I

10:45 - 11:30 Poster Session I/II | Cardiomyopathies

Chair **Ralf WASSMUTH** | Berlin, Germany

- 10:45 - 10:50 **915: Left ventricular involvement in arrhythmogenic right ventricular cardiomyopathy - A cardiac magnetic resonance imaging study**
P10
Soraya El Ghannudi^{1,2}, Anthony Nghiem³, Philippe Germain¹, Mi-Joung Jeung¹, Catherine Roy¹, Afshin Gangi¹
1, Radiology department, pôle d'Imagerie, Nouvel Hôpital Civil, Strasbourg, France, 2, Nuclear medecin, pôle d'Imagerie, Nouvel Hôpital Civil, Strasbourg, France, 3, Cardiology department, pôle cardiovasculaire, Nouvel Hôpital Civil, Strasbourg, France
- 10:50 - 10:55 **937: Concealed Structural Abnormalities in Patients with Left Ventricular Arrhythmias of Unknown Aetiology**
P11
Gaetano Nucifora,¹ Daniele Muser,¹ Pier Giorgio Masci,² Andrea Barison,² Gianluca Piccoli,¹ Luca Rebellato,¹ Michela Puppato,¹ Daniele Gasparini,¹ Massimo Lombardi,² Alessandro Proclemer¹
(1) University Hospital "Santa Maria della Misericordia", Udine, Italy and (2) Fondazione CNR/Regione Toscana G. Monasterio, Pisa, Italy
- 10:55 - 11:00 **945: Relation Between Site of Origin of Monomorphic Ventricular Arrhythmias and Myocardial Tissue Characteristics In Non-Ischemic Left Ventricular Heart Disease**
P12
Gaetano Nucifora,¹ Daniele Muser,¹ Pier Giorgio Masci,² Andrea Barison,² Gianluca Piccoli,¹ Luca Rebellato,¹ Michela Puppato,¹ Daniele Gasparini,¹ Massimo Lombardi,² Alessandro Proclemer¹
(1) University Hospital "Santa Maria della Misericordia", Udine, Italy and (2) Fondazione CNR/Regione Toscana G. Monasterio, Pisa, Italy
- 11:00 - 11:05 **956: Diagnostic outcome and prognosis of patients with suspected non-ischemic cardiomyopathy examined with CMR**
P13
Pauli Pöyhönen, MD, M.Sc. (Tech.); Sari Kivistö, MD, PhD; Miia Holmström, MD, PhD; Helena Hänninen, MD, PhD.
Helsinki University Central Hospital, Department of Cardiology
- 11:05 - 11:10 **963: Cardiovascular Magnetic Resonance (CMR) imaging of right ventricular function in patients with fabry disease**
P14
Thorning C¹, Bickelhaupt S⁵, Kampmann C², Wentz KU⁴, Widmer U⁴, Juli CF¹
1 St. Mary's Hospital, Imperial College NHS Trust, London, United Kingdom; 2 Centre for Ped. Cardiology - University Childrens Hospital Mainz, Germany; 3 Cantonal Hospital Münsterlingen, Department of Radiology, Switzerland; 4 Dept. of Medicine, Zurich University Hospital, Switzerland; 4 Dept. of Radiology, Zurich University Hospital, Switzerland
- 11:10 - 11:15 **969: Prognostic value of cardiac magnetic resonance imaging in patients with suspected or known left ventricular non-compaction**
P15
Karol Miszalski-Jamka, Jan Kłyś, Jan Głowacki, Monika Kijas, Tomasz Miszalski-Jamka, Tomasz Adamczyk, Radosław Kwieciński, Justyna Bogucka-Czapska, Małgorzata Ozaist, Wojciech Mazur, Ewa Kluczevska, Zbigniew Kalarus, Tomasz Kukulski
Department of Cardiology, Congenital Heart Disease and Electrotherapy, Silesian Center for Heart Disease, Zabrze, Poland
- 11:15 - 11:20 **1019: Hypertrophy of right ventricular septomarginal trabeculation by CMR imaging predicts presence and severity of pulmonary hypertension and outcome**
P16
G. Karakus, B. Marzluf, D. Bonderman, C. Tufaro, S. Pfaffenberger, J. Babyev, G. Maurer, J. Mascherbauer
Department of Cardiology, Medical University of Vienna
- 11:20 - 11:25 **1030: Role of cardiac magnetic resonance and echocardiography prior to cardiac resynchronization therapy**
P17
R. Kockova, J. Tintera, D. Kautznerova, D. Cerna, K. Sedlacek, L. Kryze, W. El-Husseini, V. Sikula, M. Segetova, J. Kautzner
Department of Cardiology, Institute for Clinical and Experimental Medicine, Prague, Czech Republic
- 11:25 - 11:30 **1031: Papillary muscle mass and area predict left ventricular hypertrophy in hypertrophic cardiomyopathy**
P18
M. Vasconcelos¹, A. Lebreiro¹, E. Martins¹, J. Silva Cardoso², A.J. Madureira², I. Ramos³, M.J. Maciel¹
Sao Joao Hospital, Department of Cardiology, Porto, Portugal (2) University of Porto, Faculty of Medicine, Porto, Portugal (3) Sao Joao Hospital, Department of Radiology, Porto, Portugal

FRIDAY May 24

10:45 - 11:30 ▶ Coffee Break & POSTER Presentations I

10:45 - 11:30 Poster Session I/III | Ischemic heart disease

Chair **Anja WAGNER** | Stamford, USA

- 10:45 - 10:50
P19 **931: Beneficial effect of intravenous iron administration on left ventricular remodelling in patients with acute ST-elevation myocardial infarction – a cardiovascular magnetic resonance (CMR) study**
 Anca Florian, Anna Ludwig, Sabine Rösch, Udo Sechtem and Ali Yilmaz
 Division of Cardiology, Robert-Bosch-Krankenhaus, Stuttgart, Germany
- 10:50 - 10:55
P20 **948: Right ventricular repercussion in patients with acute ST-segment elevation myocardial infarction. Characterization with cardiovascular magnetic resonance.**
 Monmeneu JV, López-Lereu MP, Bonanad C, Sanchis J, Chaustre F, Merlos P, Valero E, Bodí V, Chorro FJ
 Cardiac Imaging Unit, ERESA Clinic, and Cardiology Department, University Clinic Hospital, Valencia, Spain
- 10:55 - 11:00
P21 **965: Relationship between scar size and characteristics by ce-CMR and Tpeak-Tend interval in post-MI patients**
 Kivanc Yalin, Ebru Golcuk, Cansu Selcan Ozer, Hakan Buyukbayrak, Ravza Yilmaz, Memduh Dursun, Ahmet Kaya Bilge, Kamil Adalet
 Istanbul University, Istanbul Faculty of Medicine, Department of Cardiology
- 11:00 - 11:05
P22 **1008: Cardiac index after acute ST- segment elevation myocardial infarction measured with phase-contrast cardiac magnetic resonance imaging**
 Klug G, Reinstadler SJ, Feistritzer HJ, Mayr A, Riegler N, Schocke M, Esterhammer R, Kremser C, Pachinger O, Metzler B
 University Clinic of Internal Medicine III, Cardiology, Innsbruck Medical University
 University Clinic of Radiology, Innsbruck Medical University
- 11:05 - 11:10
P23 **1015: Assessment of Myocardial Area at Risk: A Comparison of T1 Mapping, T2-SPAIR, Endocardial Surface Area and Angiography**
 N Siddiqi, D Cameron, C Neil, B Jagpal, S Singh, K Schwarz, S Papadopoulou, M P Frenneaux, D Dawson
 University of Aberdeen
- 11:10 - 11:15
P24 **1050: The reperfused myocardial infarct core shows extensive hemorrhage with loss of vascular integrity. A comparison of findings from cardiovascular magnetic resonance imaging with histology.**
 Lourens FHJ Robbers MD and Elise S Eerenberg MD, Paul FA Teunissen MD, Matthijs F Jansen BSc, Maurits R Hollander BSc, Anton JG Horrevoets MD PhD, Paul Knaapen MD PhD, Robin Nijveldt MD PhD, Marcel M Levi MD PhD, Albert C van Rossum MD PhD, Hans WM Niessen MD PhD, C Bogdan Marcu MD, Aernout M Beek MD PhD and Niels van Royen MD PhD.
 VU University medical center – Academic Medical Center, Amsterdam, the Netherlands
- 11:15 - 11:20
P25 **1051: Segmental Circumferential strain values in reperfused infarcted myocardial segments are mainly influenced by the transmural of infarction, not by MVO.**
 Henk Everaars, Lourens FHJ Robbers, Robin Nijveldt, Aernout M Beek, Paul FA Teunissen, Alexander Hirsch, Niels van Royen, Felix Zijlstra, Jan J Piek, Albert C van Rossum.
 VU University medical center – Academic Medical Center, Amsterdam, the Netherlands
- 11:20 - 11:25
P26 **1061: Microvascular Obstruction in Patients with ST segment elevation MI-What is it relation to the clinical or presenting symptoms?**
 O. Goitein, A. Grupper, A. Hamdan, Y. Eshet, R. Beigel, D. Medvedofsky, R. Herscovici, E. Konen, H. Hod, S. Matetzky
 Sheba Medical Center, Ramat Gan, Israel
- 11:25 - 11:30
P27 **1069: Cardiovascular Magnetic Resonance: a trial to assess its utility for “infarction with normal coronary arteries”.**
 Cadenas R; Iniesta AM, Refoyo E, Antorrena I; Guzman G, Cuesta E, Salvador O, López T, Moreno M, López-Sendon JL
 University hospital La Paz Madrid España

FRIDAY May 24

17:00 - 17:45 ▶ Coffee Break & POSTER Presentations II

17:00 - 17:45 Poster Session II/I | Novel methods

Chair **Bernhard GERBER** | Leuven, Belgium

- 17:00 - 17:05**
P28 **912: Nanoparticle Enhanced CMR – A Novel Method Of Investigating Myocardial Inflammation & Dysfunction**
 S R Alam, N Spath, J Richards, M Dweck, A Shah, N Lang, S Semple, T MacGillivray, G Mckillop, S Mirsadraee, R Pessotto, V Zamvar, D E Newby, P Henriksen.
 The University of Edinburgh & NHS Lothian
- 17:05 - 17:10**
P29 **952: Mean pulmonary arterial pressure estimated from vortical blood flow in the main pulmonary artery: Definition of cut-off criteria for the diagnosis of pulmonary hypertension**
 Gert Reiter¹, Ursula Reiter², Gabor Kovacs³, Horst Olschewski³, Michael Fuchsjäger²
 1 Siemens AG, Healthcare Sector, Graz, Austria, 2 Department of Radiology, Medical University of Graz, Austria, 3 Department of Pulmology, Medical University of Graz, Austria & LBI for Lung Vascular Research Graz, Austria
- 17:10 - 17:15**
P30 **962: Comparison of Myocardium and Blood Pool Null Points as determined by a Breathhold Single Slice Multiphase Inversion Recovery Acquisition Predicts the Presence of Cardiac Amyloidosis**
 Saad Ahmad, Umara Raza, Adnan Malik, Jing Ping Sun, Robert Eisner, Wojchiech Mazur, Robert O'Donnell
 University of Cincinnati
- 17:15 - 17:20**
P31 **983: An automatic method for myocardial T2* curve fitting in thalassemia patients with severe iron overload**
 V. Positano¹, A. Meloni¹, M. F. Santarelli¹, L. Landini¹, C. Tassi², S. Grimaldi³, L. Gulino¹, D. De Marchi¹, E. Chiodi⁴, S. Renne⁵, M. Lombardi¹, and A. Pepe¹.
 1 CMR Unit, Fondazione G. Monasterio CNR-Regione Toscana and Institute of Clinical Physiology, Pisa, Italy; 2 Servizio di Immunematologia, Policlinico S. Orsola "L. e A. Seragnoli", Bologna, Italy; 3 Serv. Microcitemia, Presidio Ospedaliero ASL 5, Crotona, Italy; 4 Servizio Radiologia Ospedaliera-Universitaria, Arcispedale "S. Anna", Ferrara, Italy; 5 Struttura Complessa di Cardioradiologia-UTIC, P.O. "Giovanni Paolo II", Lamezia Terme, Italy.
- 17:20 - 17:25**
P32 **999: The accuracy of cardiovascular magnetic resonance feature tracking versus tissue tagging for segmental strain analysis**
 L. Wu, MD; T. Germans, MD, PhD; A. Güçlü, MD; C.P. Allaart, MD, PhD; A.C. van Rossum, MD, PhD
 VU University Medical Center, Department of Cardiology, Amsterdam, The Netherlands
- 17:25 - 17:30**
P33 **1033: Left Ventricular Myocardial Strain at Cardiac MRI using Velocity Vector Imaging: A feasibility study**
 Kevin Kalisz, Kyle Lehenbauer, Daniel Katz, Xiaoming Bi, Marius Cordts, Christoph Guetter, Marie-Pierre Jolly, Benjamin Freed, Sanjiv Shah, Michael Markl, Jacob Flukiger, James Carr, Jeremy Collins
 Northwestern University, Department of Radiology, Chicago, Illinois, United States
- 17:30 - 17:35**
P34 **1041: Early changes in regional heart function in Tgalphaq*44 murine model of dilated cardiomyopathy as assessed by CMR Tagging**
 Anna Osiak⁽¹⁾, Urszula Tyrankiewicz⁽¹⁾, Magdalena Jablonska^(1,2), Krzysztof Jasinski⁽¹⁾, Pawel T. Jochym⁽³⁾, Stefan Chlopicki^(4,5), Tomasz Skorka⁽¹⁾
 (1) Department of Magnetic Resonance Imaging, Institute of Nuclear Physics Polish Academy of Sciences, Krakow, Poland.
 (2) Dept of Medical Physics & Biophysics, Faculty of Physics & Applied Computer Sciences, AGH University of Science & Technology, Krakow, Poland.
 (3) Department of Materials Research by Computers, Institute of Nuclear Physics Polish Academy of Sciences, Krakow, Poland.
 (4) Department of Experimental Pharmacology, Jagiellonian University Medical College, Krakow, Poland.
 (5) Jagiellonian Centre for Experimental Therapeutics, Krakow, Poland.
- 17:35 - 17:40**
P35 **1047: Cardiac MR left ventricular myocardial strain derived from deformation fields using balanced steady state free precession cine imaging in patients with cardiac amyloidosis**
 K Kalisz, E Semaan, D Katz, X Bi, M Cordts, C Guetter, MP Jolly, B Freed, J Flukiger, D Lee, P Kansal, S Shah, M Markl, J Carr, J Collins
 Northwestern University and Siemens MR R&D, Chicago, Illinois, United States; Siemens Corp, Princeton, NJ
- 17:40 - 17:45**
P36 **1049: Left atrial volume quantification by cardiac magnetic resonance imaging: 2-dimensional biplane area-length method versus 3-dimensional chamber reconstruction technique.**
 JD Groarke, RV Shah, AH Waller, SA Abbasi, RY Kwong, R Blankstein, M Steigner.
 Department of Cardiovascular Imaging, Brigham & Women's Hospital, Harvard Medical School, Boston, MA.

FRIDAY May 24

17:00 - 17:45 ► **Coffee Break & POSTER Presentations II**

17:00 - 17:40 **Poster Session II/II | T1-mapping and more**

Chair **Alberto ROGHI** | Milano, Italy

- 17:00 - 17:05
P37 **970: Optimization of T1 Mapping at 3T in Patients with Aortic Stenosis**
Calvin WL Chin, Scott Semple, Tamir Malley, Audrey White, Sanjay Prasad, David E Newby, Marc Dweck
University of Edinburgh, United Kingdom
- 17:05 - 17:10
P38 **989: CMR survey in a large cohort of TI patients categorized in different transfusional regimens.**
A. Pepe¹, A. Meloni¹, M. E. Lai², S. Vaquer², L. Gulino¹, D. De Marchi¹, L. Cuccia³, M. Midiri⁴, A. Vallone⁵, V. Positano¹, M. Lombardi¹.
1 CMR Unit, Fondazione G. Monasterio CNR-Regione Toscana and Institute of Clinical Physiology, Pisa, Italy; 2 Ospedale microcitmico, Centro Talassemici Adulti, Cagliari, Italy; 3 U.O.C. Ematologia con Talassemia, ARNAS Ospedale Civico, Palermo, Italy; 4 Istituto di Radiologia, Policlinico "Paolo Giaccone", Palermo, Italy; 5 Istituto di Radiologia Az. Osp. "Garibaldi", Catania, Italy.
- 17:10 - 17:15
P39 **1013: Myocardial tissue characterization using T1 mapping in normals, phenotype negative relatives and hypertrophic cardiomyopathy patients**
Patrizia Pedrotti, Angela Milazzo, Giuseppina Quattrocchi, Alberto Roghi, Ornella Rimoldi
CMR Unit Ospedale Niguarda, and IBFM CNR Milan Italy
- 17:15 - 17:20
P40 **1027: T1-mapping measurement with a multi-breathhold delayed enhancement sequence and a single-breathhold cine inversion-recovery spoiled gradient echo sequence: comparison between two techniques**
Andrea Barison, MD, Daniele De Marchi, RT, Piergiorgio Masci, MD, Matteo Milanese, MA, Giovanni Donato Aquaro, MD, Petra Keilberg, RT, Vincenzo Positano, MA, Massimo Lombardi, MD
Fondazione Toscana Gabriele Monasterio and Scuola Superiore Sant'Anna
- 17:20 - 17:25
P41 **1028: How is cardiac T1 mapping affected by the analysis method? Comparison of different signal relaxation models**
Vincenzo Positano, MS, Andrea Barison, MD, Nicola Riccardo Pugliese, MD, Piergiorgio Masci, MD, Annamaria Del Franco, MD, Giovanni Donato Aquaro, MD, Luigi Landini, MS, Massimo Lombardi, MD
Fondazione Toscana Gabriele Monasterio and Scuola Superiore Sant'Anna
- 17:25 - 17:30
P42 **1045: Blood/myocardium contrast-to-noise ratio for cardiac morphology and function imaging increases with field strength**
M.A. Dieringer, M. Deimling, K. Fuchs, L. Winter, O. Kraus, F.v. Knobelsdorff-Brenkenhoff, J. Schulz-Menger, T. Niendorf
Berlin Ultrahigh Field Facility (MDC Berlin) and WG on Cardiac MRI (ECRC/Charité Berlin), Berlin, Germany
- 17:30 - 17:35
P43 **1060: Comparison of native T1 values in systemic inflammatory diseases**
Rocio Hinojar¹, MD; Eduardo Arroyo Ucar¹, MD; David D'Cruz², MD; Shirin Sangle², MD; Darius Dabir¹, MD; Tobias Voigt³, PhD; Nicolas Gaddum⁴, PhD; Tobias Schaeffter⁴, PhD; Eike Nagel¹, MD, PhD; Valentina O. Puntmann¹, MD, PhD
1 Cardiovascular Imaging Department, King's College London, London, UK
2 Louise Coote Lupus Unit, St Thomas's Hospital, London, UK
3 Clinical Research Europe, Philips Research, London, UK
4 Department of biophysics and medical engineering, King's College London, London, UK
- 17:35 - 17:40
P44 **1074: Myocardial T1 and T2 Mappings with Automatic Motion Correction at 3 Tesla MR: Comparison of T1 and T2 Measurements by Breathhold, Free-Breathing and Cardiac Cycle**
Yon Mi Sung
Gachon University Gil Hospital

FRIDAY May 24

17:00 - 17:45 ▶ Coffee Break & POSTER Presentations II

17:00 - 17:35 Poster Session II/III | Valvular heart disease and interventions

Chair Florian VON KNOBELSDORFF | Berlin, Germany

- 17:00 - 17:05
P45 **906: Accuracy of Aortic Root Annulus Assessment with Cardiac Magnetic Resonance in Patients referred for Transcatheter Aortic Valve Implantation: A Comparison with Multi-Detector Computed Tomography**
 Gianluca Pontone, Daniele Andreini, Erika Bertella, Saima Mushtaq, Paola Gripari, Sarah Cortinovis, Monica Loguercio, Andrea Baggiano, Edoardo Conte, Mauro Pepi
 Centro Cardiologico Monzino, IRCCS Milan, Italy
- 17:05 - 17:10
P46 **914: Assessment of aortic stiffness by cardiovascular magnetic resonance in coronary artery disease and its value in prediction of myocardial infarction size**
 Soraya El Ghannudi ^{1,2}, Oslem Hop ³, Philippe Germain ¹, Mi-Joung Jeung ¹, Alain De Cesare ⁴, Catherine Roy ¹, Afshin Gangi ¹
 1, Radiology department , pôle d'Imagerie , Nouvel Hôpital Civil, Strasbourg, France
 2, Nuclear Medecin , pôle d'Imagerie , Nouvel Hôpital Civil, Strasbourg, France
 3, Cardiology department, pôle cardiovasculaire, Nouvel Hôpital Civil, Strasbourg, France
 4, Laboratoire d'Imagerie Fonctionnelle, UMR_S 678 - UPMC / INSERM CHU la Pitié -Salpêtrière
- 17:10 - 17:15
P47 **974: Independent Predictor CMR of Mortality in Patient with Surgical Aortic Stenosis**
 Gilles Barone-Rochette MD, Sophie Pierard MD, Stéphanie Seldrum MD, Christophe De Meester de Ravensteen MS; Julie Melchior MD; Frederick Maes MD, Anne-Catherine Pouleur MD PhD, David Vancraeynest MD PhD, Agnes Pasquet MD PhD, Jean-Louis Vanoverschelde MD PhD FESC FACC, Bernhard L Gerber MD PhD FESC FACC
 Valvular Heart Disease Clinic Division of Cardiology, Department of Cardiovascular Diseases, Cliniques Universitaires St. Luc And Pôle de Recherche Cardiovasculaire (CARD) Institut de Recherche Expérimentale et Clinique (IREC) Université Catholique de Louvain, Brussels, Belgium
- 17:15 - 17:20
P48 **1016: Determinants of exercise capacity in patients with asymptomatic aortic stenosis**
 Bekele S, Singh A, Khan JN, Nazir SA, Kanagala P, McCann GP
 University of Leicester, Leicester, UK
- 17:20 - 17:25
P49 **1021: Inter-study reproducibility of Feature Tracking, Single and Multi-breath-hold Tagging in severe Aortic Stenosis.**
 Singh A, Steadman CD, Bekele S, Khan JN, Nazir SA, Kanagala P, McCann GP
 University of Leicester, Leicester, UK
- 17:25 - 17:30
P50 **1038: CMR assessment of left ventricular remodeling after percutaneous edge-to-edge repair using MitraClip. A case series.**
 Bernard P. Paelinck, Tom Vandendriessche, Dina De Bock, Catherine De Maeyer, Paul M. Parizel, Christiaan J. Vrints, Marc J. Claeys
 Antwerp University Hospital
- 17:30 - 17:35
P51 **1056: Stented Bioprostheses And Transcatheter Aortic Valve Implantation Reveal Similar Flow Characteristics Using 4D Flow MRI**
 R.F. Trauzeddel¹, C. Gelsinger², C. Butter², A. Barker^{3,4}, M. Mark^{3,4}, J. Schulz-Menger^{3,4}, F. von Knobelsdorff¹
 1 Working Group Cardiovascular Magnetic Resonance, Charité University Berlin, and HELIOS Klinikum Berlin-Buch, Dept. of Cardiology and Nephrology, Berlin, Germany
 2 Immanuel Klinikum Bernau Heart Center Brandenburg, Dept. of Cardiology, Bernau, Germany
 3 Department of Radiology, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA
 4 Department of Biomedical Engineering, McCormick School of Engineering, Northwestern University, Chicago, IL, USA

SATURDAY May 25

11:00 - 11:45 ► **Coffee Break & POSTER Presentations III**

11:00 - 11:45 **Poster Session III/I | Cardiomyopathies - inflammatory diseases**

Chair **Piergiorgio MASCI** | Pisa, Italy

- 11:00 - 11:05 **932: Diagnostic yield of CMR for the work-up of suspected acute myocarditis in young patients is determined by the presence of elevated cardiac enzymes**
P52
 Anca Florian, Tim Schäufele, Anna Ludwig, Sabine Rösch, Ina Wenzelburger, Udo Sechtem and Ali Yilmaz
 Division of Cardiology, Robert-Bosch-Krankenhaus, Stuttgart, Germany
- 11:05 - 11:10 **947: Clinical and cardiac magnetic resonance characteristics at admission and follow-up in acute myocarditis**
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 López-Lereu MP, Bonanad C, Monmeneu JV, Sanchís J, Estornell J, Igual B, Maceira A, Chorro FJ.
 Cardiac Imaging Unit, ERESA Clinic, and Cardiology Department, University Clinic Hospital, Valencia, Spain
- 11:10 - 11:15 **953: Left ventricular function by speckle tracking analysis correlates with the presence and the percentage of delayed enhancement in patients with myocarditis and preserved ejection function**
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 Focardi M., Cameli M., Bennati E., Massoni A., Solari M., Carbone F., Banchi B., Mondillo S.
 Department of Cardiovascular Diseases, University of Siena
- 11:15 - 11:20 **990: Late gadolinium score in cardiac magnetic resonance in patients with suspected inflammatory heart disease - one year follow up**
P55
 Holmström Miia, Lauerma Kirsi, Hänninen Helena, Heliö Tiina, Lommi Jyri, Pöyhönen Pauli, Kivistö Sari
 Helsinki University Central Hospital, Department of Radiology, University of Helsinki and HUS Radiology (Medical Imaging Center)
- 11:20 - 11:25 **1014: Risk stratification by CMR in patients with suspected myocarditis**
P56
 J. Schumm, S. Greulich, S. Grün, P. Ong, K. Klingel, R. Kandolf, U. Sechtem, H. Mahrholdt
 Robert-Bosch-Krankenhaus, Stuttgart, Germany
- 11:25 - 11:30 **1025: Cardiac Magnetic Resonance in Children with Acute Myocarditis**
P57
 Raimondi F, Ou P, Boudjemline Y, Bajolle F, Iserin F, Bonnet D.
 Centre de Référence Malformations Cardiaques Congénitales Complexes – M3C Necker-Enfants Malades, Assistance Publique des Hôpitaux de Paris, Université Paris Descartes, Sorbonne Paris Cité
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 Jeremy Collins, Kevin Kalisz, Brandon Benefield, Roberto Samari, Daniel Katz, Xiaoming Bi, Marius Cordts, Christoph Guetter, Marie-Pierre Jolly, Benjamin Freed, Jacob Flukiger, Preeti Kansal, Daniel Lee, Sanjiv Shah, Michael Markl, James Carr.
 Northwestern University and Siemens MR R&D, Chicago, Illinois, United States; Siemens Corp, Princeton, NJ
- 11:35 - 11:40 **1054: Cardiac magnetic resonance evidence of heart involvement in females with hypereosinophilic syndrome of undefined etiology.**
P59
 Barbara Sokołowska¹, Tomasz Miszański-Jamka^{1,2,3}, Wojciech Szczekliak¹, Krzysztof Karwat³, Karol Miszański-Jamka⁴, Katarzyna Belzak³, Wojciech Mazur⁵, Dean J. Kereiakes⁵, Przemysław Jaźwiec², Jacek Musiał²
 1 Department of Internal Medicine, Jagiellonian University of Cracow, Kraków, Poland.
 2 Department of Clinical Radiology and Imaging Diagnostics, 4th Military Hospital, Wrocław, Poland
 3 Center for Diagnosis, Prevention and Telemedicine, John Paul II Hospital, Kraków, Poland
 4 Department of Cardiology, Congenital Heart Disease and Electrotherapy, Silesian Center for Heart Disease, Zabrze, Poland
 5 The Christ Hospital Heart and Vascular Center/The Lindner Center for Research and Education, Cincinnati, Ohio, USA
- 11:40 - 11:45 **1067: Myocardial fibrosis in systemic sclerosis: impact in ventricular function and clinical presentation**
P60
 Gustavo Silva, Ana G. Almeida, Catarina Resende, João S. Marques, Doroteia Silva, Claudio David, Conceição Amaro, Paula Costa, J A Pereira Silva, A Nunes Diogo
 Cardiology Dept and Rheumatology Dept, University Hospital Santa Maria, Lisbon

SATURDAY May 25

11:00 - 11:45 ▶ Coffee Break & POSTER Presentations III

11:00 - 11:45 Poster Session III/II | Thalassemia and more

Chair Ingo EITEL | Leipzig, Germany

- 11:00 - 11:05 **903: NT-proBNP as a marker of effectiveness of cardiac rehabilitation after myocardial infarction**
P61
 Tsokolov A.V., Senchilo V.G., Vertelkin A.V.
 Federal State Agency «1409 Naval hospital of the Baltic Sea fleet», Kaliningrad, Russia
- 11:05 - 11:10 **938: Myocardial mass and function in extreme hypobaric hypoxia**
P62
 Pavel Hoffmann¹, Geir Mykjåland², Helge Wangberg², Theis Tønnessen³, Ivar Sjaastad⁴, Lars Nordsetten⁵, Ulla Hjørnholm⁶, Are Løset⁶ and Morten Rostrup⁶
 1 Section for Interventional Cardiology, Department of Cardiology, Division of Cardiovascular and Pulmonary Diseases 2 Faculty of Medicine, 3 Department of Cardiothoracic Surgery, Division of Cardiovascular and Pulmonary Diseases, 4 Department of Cardiology, Medical Division, 5 Department of Orthopaedic Surgery, Division of Surgery and Clinical Neuroscience, 6 Section for Cardiovascular and Renal research, Department of Cardiology, Medical Division, all Oslo University Hospital, Ullevaal.
- 11:10 - 11:15 **984: Left ventricular wall motion, iron, function, and iron in thalassemia major.**
P63
 A Meloni¹, L. Gulino¹, P. Keilberg¹, G. Palazzi², D. Maddaloni³, C. Ascioti⁴, M. Missere⁵, C. Salvatori¹, V. Positano¹, M. Lombardi¹, A. Pepe¹.
 1 CMR Unit, Fondazione G. Monasterio CNR-Regione Toscana and Institute of Clinical Physiology, Pisa, Italy; 2 Oncoematologia Pediatrica, Policlinico, Modena, Italy; 3 Dip. Materno/Infantile Osp. "Engles Profili", Fabriano, Italy; 4 Struttura Complessa di Cardiologia-UTIC, P.O. "Giovanni Paolo II", Lamezia Terme, Italy; 5 Department of Radiology, Catholic University of the Sacred Heart, Campobasso, Italy.
- 11:15 - 11:20 **985: Myocardial fibrosis by CMR LGE in a large cohort of pediatric thalassemia major patients.**
P64
 A. Meloni¹, A Filosa², L. Gulino¹, S. Pulini³, C. Salvatori¹, E. Chiodi⁴, C. Ascioti⁵, P. Keilberg¹, V. Positano¹, M. Lombardi¹, A. Pepe¹.
 1 CMR Unit, Fondazione G. Monasterio CNR-Regione Toscana and Institute of Clinical Physiology, Pisa, Italy; 2 UOC Pediatria - DH Talassemia, AORNA. Cardarelli, Napoli, Italy; 3 U.O. Ematologia Clinica, Osped. Civile "Spirito Santo", Pescara, Italy; 4 Servizio Radiologia Ospedaliera-Universitaria, Arcispedale "S. Anna", Ferrara, Italy; 5 Struttura Complessa di Cardiologia-UTIC, P.O. "Giovanni Paolo II", Lamezia Terme, Italy.
- 11:20 - 11:25 **987: Reference ranges for biventricular volumes and ejection fraction and for left ventricular mass in adult thalassemia intermedia patients without myocardial iron overload.**
P65
 A. Meloni¹, L. Gulino¹, A. Pietrapertosa², G. Izzi³, D. De Marchi⁴, G. Valeri⁴, P. Preziosi⁵, V. Positano¹, M. Lombardi¹, A. Pepe¹.
 1 CMR Unit, Fondazione G. Monasterio CNR-Regione Toscana and Institute of Clinical Physiology, Pisa, Italy; 2 Servizio Regionale Talassemie, Policlinico, Bari, Italy; 3 Dipartimento Materno-Infantile, U.O. Pediatria Oncoematologia, Parma, Italy; 4 Dipartimento di Radiologia, Ospedali Riuniti "Umberto I-Lancisi-Salesi", Ancona, Italy; 5 U.O.C. Diagnostica per Immagini e Interventistica, Policlinico "Casilino", Roma, Italy.
- 11:25 - 11:30 **988: Myocardial iron overload in sickle/thalassemia patients of Italian origin.**
P66
 A. Meloni¹, G. B. Ruffo², P. Keilberg¹, L. Gulino¹, C. Gerardi³, G. Sallustio⁴, C. Tudisca⁵, V. Positano¹, M. Lombardi¹, A. Pepe¹.
 1 CMR Unit, Fondazione G. Monasterio CNR-Regione Toscana and Institute of Clinical Physiology, Pisa, Italy; 2 U.O.C. Ematologia con Talassemia, ARNAS Ospedale Civico, Palermo, Italy; 3 P.O. "Giovanni Paolo II", ASP Agrigento, Sciacca, Italy; 4 Department of Radiology, Catholic University of the Sacred Heart, Campobasso, Italy; 5 Istituto di Radiologia, Policlinico "Paolo Giaccone", Palermo, Italy.
- 11:30 - 11:35 **1026: Incidence and influence of extra-cardiac findings in clinical CMR**
P67
 S. Greulich¹, M. Backes², J. Schumm¹, S.Grün¹, U. Sechtem¹, H. Mahrholdt¹
 1 Division of Cardiology, Robert- Bosch-Medical Center Stuttgart, Germany
 2 Division of Radiology, Robert- Bosch-Medical Center Stuttgart, Germany
- 11:35 - 11:40 **1068: Referral priorities and impact on management in a recently established CMR facility**
P68
 Karolina Dorniak MD⁽¹⁾, Agnieszka Sabisz MSc⁽²⁾, Edyta Szurowska MD, PhD⁽²⁾, Marcin Fijałkowski MD⁽³⁾, Dorota Rawicz-Zegrzda, MD⁽¹⁾, Maria Dudziak MD, PhD⁽¹⁾, Grzegorz Raczak MD PhD⁽³⁾
 Dept of Noninvasive Cardiac Diagnostics(1), Dept of Radiology(2), Dept of Cardiology(3), Medical University of Gdansk, Poland
- 11:40 - 11:45 **1081: Constrictive Pericarditis in the Modern Cardiology Era Quantitative Analysis of Constrictive Physiology using Four-Dimensional MRI**
P69
 Gustavo Silva, Ana G. Almeida, Catarina Resende, João S. Marques, Doroteia Silva, Claudio David, Conceição Amaro, Paula Costa, J A Pereira Silva, A Nunes Diogo
 Cardiology Dept and Rheumatology Dept, University Hospital Santa Maria, Lisbon

SATURDAY May 25

11:00 - 11:45 ▶ **Coffee Break & POSTER Presentations III**

11:00 - 11:40 **Poster Session III/III | Perfusion**

Chair **Robin NIJVELDT** | Amsterdam, Netherlands

- 11:00 - 11:05
P70 **913: Dual Bolus Dynamic Contrast Enhanced Cardiac Perfusion Imaging: Comparison of Turbo FLASH and True FISP**
Bernd Müller-Bierl, Kaoru Tanaka, Nico Buls, Yves Fierens, Toon van Cauteren, Inneke Willekens, Sigrid van Laere, Robert Luybaert, Johan de Mey
Universitair Ziekenhuis Brussel, Radiologie, Laarbeeklaan 101, BE-1090 Jette-Brussel, België
- 11:05 - 11:10
P71 **1020: Stress-perfusion CMR at 3.0 Tesla: diagnostic accuracy and appropriateness of CMR-driven coronary angiography. A single center experience**
Muzzarelli S, Faragasso E, Pedrazzini G, Sürder D, Pasotti E, Moccetti T, Faletta F
Fondazione Cardiocentro Ticino, Lugano, Switzerland
- 11:10 - 11:15
P72 **1023: Absolute quantification of cardiac magnetic resonance myocardial perfusion correlates significantly to positron emission tomography on a global and territorial basis in patients with chronic ischemic heart disease**
¹Abbas A. Qayyum MD, ²Philip Hasbak, MD, ²Henrik B. Larsson MD, PhD, DMSc, ¹Anders B. Mathiasen MD, ¹Niels G. Vejlstrup MD, PhD, ²Andreas Kjaer MD, PhD, DMSc, Professor, ¹Jens Kastrup MD, DMSc, Professor
1 Department of Cardiology & Cardiac Catheterization Laboratory 2014, The Heart Centre, Rigshospitalet, University Hospital of Copenhagen and Faculty of Health Sciences, Copenhagen University, Blegdamsvej 9, 2100, Copenhagen, Denmark.
2 Department of Clinical Physiology, Nuclear Medicine & PET, Rigshospitalet, University Hospital of Copenhagen and Faculty of Health Sciences, Copenhagen University, Blegdamsvej 9, 2100, Copenhagen, Denmark.
- 11:15 - 11:20
P73 **1035: Comparative cost-effectiveness analyses of cardiac magnetic resonance imaging versus invasive coronary angiography combined with fractional flow reserve testing to diagnose ischemia in coronary artery disease**
K. Moschetti^{1,2}, D. Favre¹, C. Pinget², G. Pilz⁴, S. Petersen⁵, A. Wagner⁶, J.B. Wasserfallen^{1,2}, J. Schwitter³
1 Institute of Health Economics and Management (IEMS), University of Lausanne, Switzerland
2 Technology Assessment Unit (UET), University Hospital (CHUV), Lausanne, Switzerland
3 Division of Cardiology and Cardiac MR Center, University Hospital (CHUV), Lausanne, Switzerland
4 Akademisches Lehrkrankenhaus der LMU ,München, DE, 5 Queen Mary University of London, UK
6 Departement of cardiology, Hahnemann University Hospital, Drexel University College of Medicine, Philadelphia, USA
- 11:20 - 11:25
P74 **1043: Role and cost-effectiveness of a stress imaging guided strategy in patients with non-culprit lesion at primary percutaneous coronary intervention**
Ghosh Dastidar A, Cengarle M, McAlindon E, Augustine D, Nightingale AK, Bucciarelli-Ducci C
Bristol Heart Institute, Bristol, UK
- 11:25 - 11:30
P75 **1059: Assessment of global myocardial perfusion reserve (MPR) using coronary sinus flow measurements during Regadenoson stress CMR: Initial Results**
Vineet K. Dandekar, MD; Andrew W. Ertel, MD; Carolyn Dickens, MSN, NP; Rosalia C. Gonzalez, DNP, APRN; Afshin Farzaneh-Far, MD, PhD
Section of Cardiology, University of Illinois Hospital and Health Sciences System, Chicago, USA
- 11:30 - 11:35
P76 **1064: Heart Rate Adaptive Maximal Resolution Cardiovascular Magnetic Resonance Myocardial Stress Perfusion Imaging at 3.0T.**
David P Ripley, David Higgins, Adam K McDiarmid, Gavin J Bainbridge, Akhlaque Uddin, Ananth Kidambi, Bernhard Herzog, John P Greenwood, Sven Plein
Multidisciplinary Cardiovascular Research Centre (MCRC) & Leeds Institute of Genetics, Health and Therapeutics, University of Leeds, Leeds, UK & Philips Medical Systems
- 11:35 - 11:40
P77 **1071: Age and Gender Patterns of Referral for Stress Perfusion MRI . A 5 Year Comparison.**
M.Khanji, T. Newton, M. Westwood, N Sekhri, S.E.Petersen
Barts Health NHS Trust, Queen Mary University of London

► **List of Authors**

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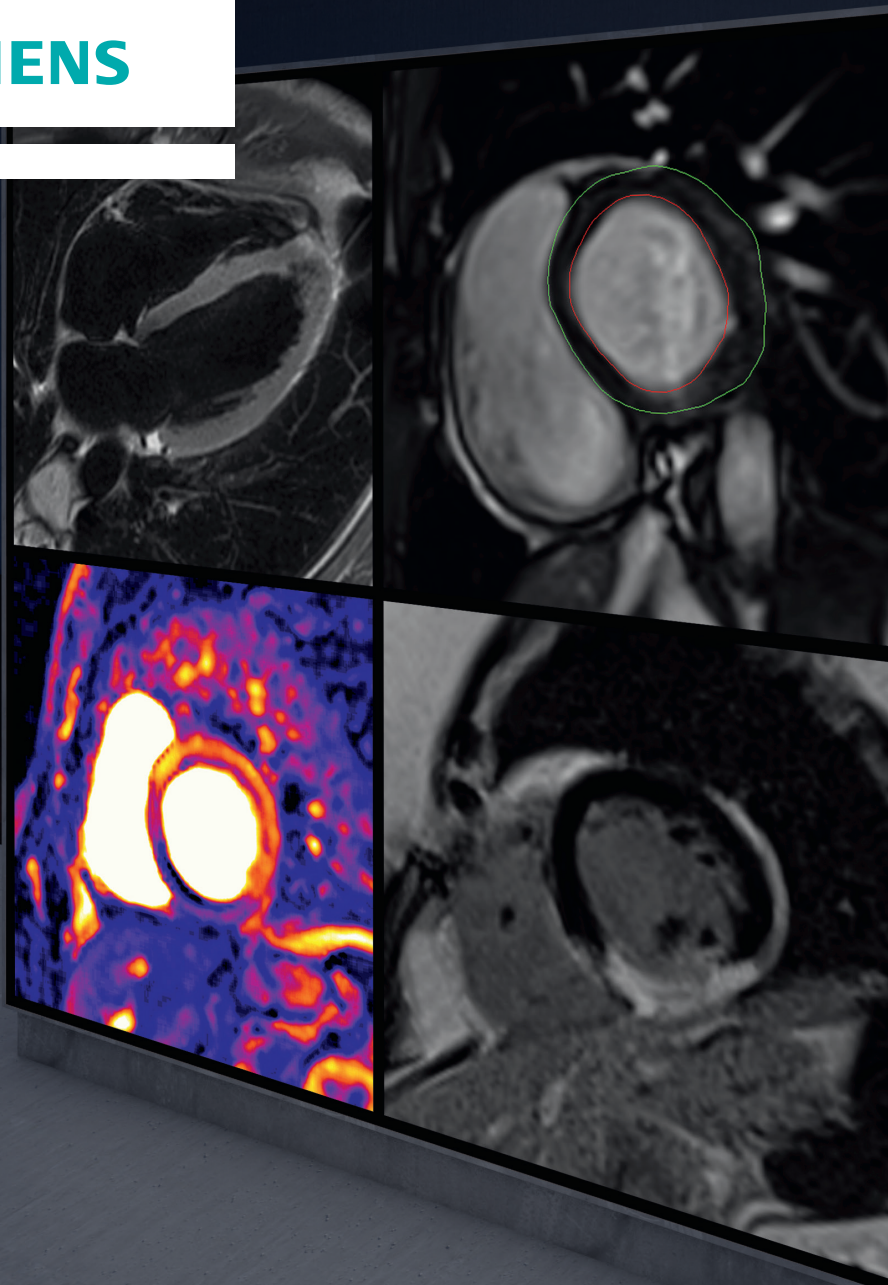
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