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Supported by an unrestricted educational grant from Servier
Welcome

Dear Colleague,

It is our pleasure to welcome you to the Jagiellonian University, Krakow, Poland. Krakow (Poland's capital of culture) has a wealth of outstanding architecture, a beautiful city park, a winding river and fascinating historical attractions its beauty is a sight to behold. It boasts world-class museums and art galleries, a host of lively bars, thumping clubs and sumptuous restaurants. Krakow is without doubt a jewel in Europe’s gleaming crown. Please take the chance to explore the city if you have time.

The Jagiellonian University is a research university founded in 1364 by Casimir III the Great. It is the oldest university in Poland and one of the oldest universities in the world. Its 47,000+ students and 7,000 faculty members make 650-year-old Jagiellonian University a major European institution of higher education.

The 2015 meeting follows on from the previous series of highly successful ARTERY meetings, which have established a tradition in the field. ARTERY 15 will cover an expanded list of topics related to large artery structure and function through guest lectures, abstract presentations, practical demonstrations and posters. This year, special emphasis will be given to large-small artery interactions and to modelling of the arterial tree.

We are keen to support young researchers, who represent nearly half of the presenters of free communications, and invited lectures. Building on the success of previous meetings, we are delighted to announce that we have again received a high number of abstracts this year. The abstracts deal with clinical research, experimental studies, epidemiology, biomechanical, methodological and imaging research related to large artery structure and function.

As in previous years we strongly encourage all attendees to engage in scientific debate and critique with presenters and colleagues during the sessions. Furthermore the presentation of data at this meeting will provide the opportunity for scientific interaction and discussion with a highly informed audience.

The Society will provide prestigious prizes for the best oral presentation by a young investigator and best poster, together with Career Development Awards for more established researchers. All presented abstracts are given the chance to be published in the official journal of the Society – ARTERY Research, later in the year.

On behalf of the Society we would like to thank Servier who has made this event possible through an unrestricted educational donation, also our sponsors Omron and Fukuda and our exhibitors: Alam Medical, Atcor Medical, BPLab, IEM GmbH.

We hope you enjoy the meeting and scientific discussions.

Danuta Czarnecka & Piotr Jankowski on behalf of Local Organising Committee

Charalambos Vlachopoulos
President, ARTERY
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on behalf of Local Organising Committee

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President, ARTERY
<table>
<thead>
<tr>
<th>Time</th>
<th>Thursday 15th October 2015</th>
<th>Friday 16th October 2015</th>
<th>Saturday 17th October 2015</th>
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<tbody>
<tr>
<td>08:00</td>
<td>Refreshments &amp; Exhibition</td>
<td>Oral Session III: Young Investigator Presentations</td>
<td>Invited Lecture: Katarzyna Stolarz-Skrzypek</td>
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<tr>
<td></td>
<td>08:00 – 08:30</td>
<td>08:00 – 10:00</td>
<td>09:00 – 09:30</td>
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<tr>
<td>09:00</td>
<td>Oral Session III: Young Investigator Presentations</td>
<td>Oral Session V: Invited Lecture &amp; Free Communications</td>
<td>Oral Session V: Invited Lecture &amp; Free Communications</td>
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<tr>
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<td>09:00 – 10:00</td>
<td>09:30 – 10:00</td>
<td>09:30 – 10:00</td>
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<tr>
<td>10:00</td>
<td>Special Guest Lecture: Kozaburo Hayashi</td>
<td>Refreshments, Exhibition &amp; Posters</td>
<td>Birth of the Latin American ARTERY</td>
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<tr>
<td></td>
<td>10:00 – 10:30</td>
<td>10:30 – 10:50</td>
<td>10:30 – 10:45</td>
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<tr>
<td>11:00</td>
<td>Registration, Poster Viewing &amp; Light Lunch 11:30 – 13:00</td>
<td>Satellite Symposium: Servier 10:50 – 11:50</td>
<td>McDonald Lecture: John Cockcroft 11:15 – 11:45</td>
</tr>
<tr>
<td>12:00</td>
<td>Welcome Address &amp; Opening Lecture: Gianfranco Parati 13:00 – 13:35</td>
<td>Manufacturer’s Demonstration: OMRON 11:50 – 12:50</td>
<td>Special Guest Lecture: Phil Chowienczyk 11:45 – 12:15</td>
</tr>
<tr>
<td>14:00</td>
<td>Career Development Lectures 14:35 – 15:35</td>
<td>DEBATE: Coen D A Stehouwer &amp; Piotr Jankowski 15:05 – 16:05</td>
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<tr>
<td>15:00</td>
<td>Refreshments, Exhibition &amp; Posters 15:35 – 16:00</td>
<td>Parallel Poster Sessions: V, VI, VII, VIII 16:05 – 17:00</td>
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<tr>
<td>16:00</td>
<td>FOCUS: Retinal microcirculation 16:00 – 16:50</td>
<td>Conference Dinner, Tour &amp; Award Presentations</td>
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<tr>
<td>17:00</td>
<td>Oral Session II: Free Communications 16:50 – 17:50</td>
<td>Wieliczka Salt Mine From 17:15</td>
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<tr>
<td>18:00</td>
<td>Manufacturer’s Presentations: 17:50 – 18:20</td>
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<tr>
<td>19:00</td>
<td>Parallel Poster Sessions: I, II, III, IV &amp; Welcome Reception 18:20 – 19:15</td>
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<tr>
<td>20:00</td>
<td>Young Investigator Network Evening 19:15 – 21:30</td>
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<td>21:00</td>
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ABSTRACTS
Abstracts for ARTERY 15 have been loaded onto a memory stick which you will be handed to you with your delegate pack at the conference registration desk. The submitted abstracts are also available to download from the homepage of the conference website www.arteryconference.org, and on the conference app.

We are pleased to provide laptops adjacent to the Registration Desk to facilitate the viewing of abstracts as well as offering internet access.

Accepted oral and poster abstracts will also be published in an upcoming issue of the Society’s Journal, ARTERY Research.

CONFERENCE APP
The ARTERY 15 Conference App is available to download free from the App Store for Apple users or from the Google Play Store for Android users. Search Artery 2015.


Key features are all accessible from the Home screen, which you can get to at any time:

- Conference programme
- Exhibition guide
- Venue information
- A personal agenda, with built-in notebook
- All conference abstracts

ACCREDITATION
Accreditation from The European Board for Accreditation in Cardiology (EBAC) has been approved for CPD. Details of the points awarded will be updated on site and available from the website post conference.

Delegates wishing to claim CPD Accreditation should sign the Attendance Register on each day they attend.

AWARDS AND PRIZES
The Awards Ceremony will take place during the Conference Dinner on Friday 16th October. Prizes will be awarded for Best Young Investigator Presentation, Career Development Lecture, Best Poster and Best Paper submitted to ARTERY Research over the past year.

The ARTERY Society has also supported 5 full and partial travel grants to young investigators to facilitate their attendance at ARTERY 15.

BADGES
Name badges must be worn at all times throughout the meeting. For reasons of security delegates not wearing a name badge will be denied access to Scientific Sessions.

CLOAKROOM
A staffed cloakroom is available, to the right hand side of the entrance. Delegates may also store luggage in the cloakroom on Thursday and Saturday.
CONFERENCE VENUE – FULL ADDRESS
Auditorium Maximum, The Jagiellonian University, 33 Krupnicza St, 31-123 Kraków, Poland

EXHIBITION
The exhibition is located on the first floor and can be accessed via the stairs adjacent to the main registration area. Please ensure you take time to visit and support the companies exhibiting at ARTERY 15. Further information about the sponsors and exhibitors are available via the conference App.

INSURANCE
The organisers are unable to accept any responsibility for damage or loss of personal property during the conference and participants are advised to ensure that such items are adequately insured.

INTERNET ACCESS
Wi-Fi is provided free of charge for all participants. Please visit the registration desk for log in details.

LUNCH & REFRESHMENTS
Catering stations are located in the exhibition area. Lunch will be provided for all participants on Thursday, Friday and Saturday.

MOBILE/CELL PHONES & ELECTRONIC
As a courtesy to speakers and other delegates, please ensure that mobile/cell phones, tablets and other electronic devices are switched to silent during sessions. Photography and filming during sessions is not permitted.

POSTERS
Posters will be displayed throughout the event but dedicated sessions are allocated on the following days:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Sessions</th>
</tr>
</thead>
</table>
| Thursday 15th Oct   | 18:20 – 19.15 hrs| • Parallel Poster Session I: Basic Science  
                          • Parallel Poster Session II: Clinical Science  
                          • Parallel Poster Session III: Clinical Science  
                          • Parallel Poster Session IV: Epidemiology & Other    |
| Friday 16th Oct     | 16.50 – 18.20 hrs| • Parallel Poster Session V: Modeling, Technology & Interventions  
                          • Parallel Poster Session VI: Clinical Science  
                          • Parallel Poster Session VII: Clinical Science  
                          • Parallel Poster Session VIII: Clinical Science & Therapeutics |

All Poster presenters are asked to attend their poster during the allocated sessions to talk to fellow delegates.
A-Z GENERAL INFORMATION

MOUNTING & REMOVAL OF POSTERS
All posters should be mounted by 12.30hrs on Thursday 15th October. Access will be available from 10.00hrs on the morning of Thursday 16th October.

All posters must be removed by 13.30hrs on Saturday 17th October.

QUESTIONS TO SPEAKERS
During discussion periods delegates who wish to pose a question should raise their hand clearly and wait to be acknowledged by the Chairperson. Please do not ask a question until you have been given a microphone.

REGISTRATION DESK
The conference organisers will be located at the Registration Desk and will be pleased to assist you with queries throughout the conference.

The Registration Desk will be open at the following times:

Thursday 15th October: 11.30 – 19.15 hrs
Friday 16th October: 08.00 – 17.15 hrs
Saturday 17th October: 08.30 – 13.30 hrs

Registration Desk Telephone Number: +44 (0) 07432 731911

ROOMS
All oral sessions accept the following we be presented in the Auditorium (Aula Duża B)
The Exhibition takes place in the Exhibition Hall (Wystawowa)
Registration and Refreshments are located in the Exhibition Hall (Wystawowa)
The Posters will be displayed in the Seminar Room (Seminaryjna)
The Manufacturer’s Demonstration session on Friday 16th October will take place in Conference Room (Konferencyjna)

SPEAKER PREVIEW
All oral presenters should meet with the audio-visual technician in speaker preview room at the earliest opportunity and at the very latest two hours before the start of the session in which the presentation will take place. This is in order to hand over and check their presentations and ensure they are happy with the equipment available for their talk.
WELCOME RECEPTION
A Welcome Reception will be held in the exhibition area. The reception will take place during the Poster Discussion Session on the Thursday from 18:20 until 19:15 and is open to all delegates.

Thursday 15th October @ 18:20 until 19:15
Exhibition Area, Auditorium Maximum, Jagiellonian University

YOUNG INVESTIGATOR NETWORK EVENING
Students, PhD students and Post-docs at ARTERY15, the Young Investigators Meeting is especially for you! This event is a great opportunity to enjoy new company and share ideas, with drinks and buffet included. It is going to be stimulating, engaging and fun – don’t miss it!

Thursday 15th October @ 19:15 until 21:30
Exhibition Area, Auditorium Maximum, Jagiellonian University

CONFERENCE DINNER
The conference dinner is set to take place at Wieliczka salt mine; a great combination of nature and architecture. A chamber of an impressive size, which was exploited in the nineteenth century, with a total of 20,000 tons of salt excavated. This conference dinner organised at the breath taking 125 meters underground will gain a new, unique dimension.

The conference dinner begins with a 1hr 20min tour of the chamber taking place in small groups. This will be followed by a welcome drink upon arrival at the Warsaw Chamber and a sit down meal at 20:00 followed by an awards ceremony.

Coaches are available for transportation from Auditorium Maximum, Jagiellonian University from 17:15, the time of your coach will be specified on your ticket.

Ladies are required to bring comfortable footwear as this is a walking tour consisting of over 700 steps. Please contact the conference secretariat for any disability concerns

Friday 16th October @ 20:00 until late (bus pickups from 17:15)
Wieliczka Salt Mine, Daniłowicza 10, 32-020 Wieliczka, Poland
www.wieliczka-saltmine.com
## MANUFACTURER SESSIONS

### MANUFACTURER PRESENTATION & DEMONSTRATIONS

<table>
<thead>
<tr>
<th>Manufacturer Presentation</th>
<th>Thursday 15th October</th>
<th>17:50 – 18:20</th>
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<tbody>
<tr>
<td><strong>OMRON</strong></td>
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<tr>
<td><strong>Title tbc</strong></td>
<td>Akira Yamashina, Tokyo Medical University, Tokyo, Japan</td>
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| **FUKUDA**               |                      |                |
| **Cardio-Ankle vascular index and arterial stiffness: a new insight into cardiovascular risk** | Giuseppe Schillaci, University of Perugia, Perugia, Italy |

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<thead>
<tr>
<th>Manufacturer Demonstration</th>
<th>Friday 16th October</th>
<th>11:50 – 12:50</th>
</tr>
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<tbody>
<tr>
<td><strong>OMRON</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Title tbc</strong></td>
<td>Hirofumi Tomiyama, Tokyo Medical University, Tokyo, Japan</td>
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</tbody>
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Servier is involved in research and development, manufacture and marketing of ethical pharmaceuticals. It is a private, independent pharmaceutical company.

Cardiovascular diseases represent the most important therapeutic area for Servier. In this area, the Company has developed different drugs for the treatment of hypertension, heart failure, and cardiac ischemia, such as Coversyl (perindopril), Natrilix SR (indapamide), fixed-combination antihypertensives such as Preterax (perindopril/indapamide), Coveram (perindopril/amlodipine), Triplixam (perindopril/amlodipine/indapamide), Natrixam (indapamide/amlodipine), Procoralan (ivabradine), and Vastarel MR (trimetazidine).

Satellite Symposium organised in collaboration with Servier, Friday 16th October @ 10:50

CHARITY PARTNER (EXHIBITING COMPANIES)

Fukuda Denshi
Fukuda Denshi Co. Ltd, 35-8 Hongo 2 Chome, Bunkyo – ku, Tokyo, 113-8420, Japan
W: www.fukuda.com
T: +44 1483 728065
E: office@fukuda.co.uk

Omron Healthcare Co. Ltd
53 Kunotsubo, Terado-CHD, Muko, Kyoto, 617-0002 Japan
W: www.healthcare.omron.co.jp
E: Europe: healthcare_marketing@eu.omron.com

FRIENDS OF ARTERY CHARITY (EXHIBITING COMPANIES)

Alam Medical
112 Avenue de Paris, 94300 Vincennes, France
W: www.complior.com
T: +33 9 52 96 88 10
E: info@complior.com

BP Lab
37, Gagarin Avenue, GSP 1081 603950, Nizhny Novgorod, Russia
W: www.bplab.com
T: 0078312961414
E: impex@bplab.com

AtCor Medical
Suite 11, 1059-1063 Victoria Road, West Ryde, NSW 2114, Australia
W: www.atcormedical.com
T: +61 2 9874 8761
E: contact.europe@atcormedical.com

I.E.M. GmbH
Cockerillstrasse 69, 52222 Stolberg, Germany
W: www.iem.de
T: + 49 (0)2402 9500-0
E: service@iem.de
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THURSDAY 15TH OCTOBER 2015

11:30  Registration, Poster Viewing & Light Lunch

13:00  Welcome Address
Danuta Czarnecka, Chair of Local Organising Committee, Krakow, Poland
Tomasz Grodzicki, Dean of the Medical Faculty, Jagiellonian University, Krakow, Poland
Piotr Hoffman, President of the Polish Cardiac Society, Warsaw, Poland
Krzysztof Narkiewicz, President of the Polish Society of Hypertension, Gdansk, Poland
Charalampos Vlachopoulos, President of the ARTERY Society, Athens, Greece

13:05  Opening Lecture:
Cardiovascular effects of exposure to hypobaric hypoxia at altitude
Gianfranco Parati, Milan, Italy
Chair: Piotr Hoffman, Charalampos Vlachopoulos

13:35  Oral Session I:
Free Communications in association with ESH Working Group on large artery structure and function
Chair: Phil Chowienczyk, Krzysztof Narkiewicz, Tine Willum-Hansen

13:35  1.1  Diastolic left ventricular function in relation to circulating metabolic biomarkers in a general population
Zhen Yu Zhang1, Vannina Marrachelli2, Lutgarde Thijs1, Wen Yi Yang1, Fang Fei Wei1, Daniel Monleon2, Lotte Jacobs1, Tim Nawrot1,4, Peter Verhamme5, Jens-Uwe Voigt6, Tatiana Kuznetsova1, Josep Redón7, Jan Staessen1,8
1Studies Coordinating Centre, Research Unit Hypertension and Cardiovascular Epidemiology, KU Leuven, Leuven, Belgium, 2Metabolomic and Molecular Image Laboratory, Fundación Investigación Clínica de Valencia, Valencia, Spain, 3Centre for Environmental Sciences, University of Hasselt, Diepenbeek, Belgium, 4Research Unit Environment and Health, KU Leuven Department of Public Health and Primary Care, University of Leuven, Leuven, Belgium, 5Centre for Molecular and Vascular Biology, KU Leuven Department of Cardiovascular Sciences, University of Leuven, Leuven, Belgium, 6Research Unit Cardiology, KU Leuven Department of Cardiovascular Sciences, University of Leuven, Leuven, Belgium, 7Hypertension Unit, Division of Internal Medicine, Hospital Clinico, University of Valencia, Valencia, Spain, 8R & D Group VitaK, Maastricht University, Maastricht, The Netherlands

13:45  1.2  Age-dependent association of 24-hour peripheral and central pulse pressures with stroke volume
Giacomo Pucci1,2, Francesca Battista1,2, Fabio Anastasio1,2, Mariano Edoardo Crapa1,2, Leandro Sanesi1,2, Giuseppe Schillaci1,2
1Unit of Internal Medicine, Terni University Hospital, Terni, Italy, 2Department of Medicine, University of Perugia, Perugia, Italy

13:55  1.3  Past smokers decelerate vascular aging in the long term
Dimitrios Terentes-Printzios1, Charalampos Vlachopoulos1, Nikolaos Ioakeimidis1, Athanasios Aggelis1, Panagiotis Xaplanteris1, Panagiota Pietri1, Dimitrios Tousoulis1
11st Department of Cardiology, Hippokration Hospital, Athens Medical School, Athens, Greece
**SCIENTIFIC PROGRAMME**

**THURSDAY 15TH OCTOBER 2015**

14:05  1.4  **Childhood determinants of early adult arterial stiffness in different ethnic groups.**  
K J Cruickshank¹, L Facconti¹, M J Silva¹, O R Molaodi², Z E Enayat¹, A Cassidy², A Karamanos³, U M Read¹, P Dall², B Stansfield², S Harding⁴  
¹Cardiovascular Medicine & Social Epidemiology group, Division of Diabetes & Nutritional Sciences, Kings College London, London, UK, ²Social and Public Health Sciences Unit, Institute of Health and Wellbeing, University of Glasgow, Glasgow, UK

14:15  1.5  **Relation of arterial stiffness with left ventricular diastolic function in general population**  
Wiktoria Wojciechowska¹, Katarzyna Stolarz-Skrzypek¹, Agnieszka Olszanecka¹, Łukasz Klima¹, Jerzy Gasowski¹, Tomasz Grodzicki², Kalina Kawecka-Jaszcz¹, Danuta Czarnecka¹  
¹Department of Cardiology, Interventional Electrocadiology and Hypertension, Jagiellonian University, Medical College, Krakow, Poland, ²Department of Internal Medicine and Gerontology, Jagiellonian University, Medical College, Krakow, Poland

14:25  1.6  **The BODE Index prognostic score is an independent determinant of arterial stiffness in Chronic Obstructive Pulmonary Disease (COPD)**  
Marie Fisk¹, Nichola Gale³, Divya Mohan³, Carmel M McEniry¹, Julia Forman¹, Charlotte E Bolton³, William MacNee³, John R Cockcroft³, Joseph Cherian¹, Ruth Tal-Singer⁴, Michael I Polkey¹, Ian B Wilkinson³  
¹University of Cambridge & Cambridge University Hospital NHS Foundation Trust, Cambridge, UK, ²Imperial College & Royal Brompton & Harefield NHS Foundation Trust, London, UK, ³Wales Heart Research Institute, Cardiff University, Cardiff, UK, ⁴GSK, Pennsylvania, USA, ⁵University of Nottingham, Nottingham, UK, ⁶University of Edinburgh, Edinburgh, UK

14:35  **Career Development Lectures**  
Chair: Stéphane Laurent, Patrick Segers

14:35  CDL1  **Vascular adaptation to extreme conditions**  
Rosa Maria Bruno, *Pisa, Italy*

14:55  CDL2  **Circadian blood pressure profile and target organ damage**  
Agnieszka Bednarek, *Krakow, Poland*

14:15  CDL3  **Aldosteronism, heart and vessels**  
Alesksander Prejbisz, *Warsaw, Poland*

15:35  **Refreshments, Exhibition & Posters**

16:00  **FOCUS: retinal microcirculation**  
Chair: Isabel Ferreira, Tomasz Grodzicki

16:00  **What is the best method to evaluate retinal microcirculation?**  
Joanna Harazy, *Erlangen–Nuremberg, Germany*

16:25  **Retinal arteriolar structure in primary hypertension – review of the data**  
Andrzej Januszewicz, *Warsaw, Poland*

16:50  **Oral Session II: Free communications in association with Pulse of Asia**  
Chair: Alberto Avolio, Jeong Bae Park, James Sharman

16:50  2.1  **A method for the measurement of pressure sensitivity of carotid-femoral pulse wave velocity in humans**  
Mark Butlin¹, Alberto Avolio³  
¹Macquarie University, Sydney, Australia
THURSDAY 15TH OCTOBER 2015

17:00  2.2  Re-reflection of backward propagating waves leads to amplification of the forward pressure wave in wave separation analysis
Patrick Segers1, Liesbeth Taelman1, Joris Degroote1, Jan Vierendeels1
1Ghent University, Gent, Belgium

17:10  2.3  Testing Riva-Rocci’s basic assumptions by systematic review and meta-analysis to determine the true difference between aortic and brachial invasive blood pressure
Dean Picone1, Petr Otahal1, Martin Schultz2, James Sharman1
1Menzies Institute for Medical Research, University of Tasmania, Hobart, Tasmania, Australia

17:20  2.4  Ambulatory aortic stiffness, independently of static, associates with narrower retinal arteriolar calibers in hypertensives: the SAFAR study
Evaggelia K Aissopou1, Antonios A Argyris1, Efthimia G Nasothimiou1, George D Konstantonis1, Konstantinos Tampakis1, Nikolaos Tentolouris1, Miltiadis Papathanassiou1, Panagiotis G Theodossiadis2, Theodoros G Papaioannou2, Coen D.A Stehouwer1,5, Petros P Sfikakis1, Athanassios D Protogerou1,5
1Hypertension Unit and Cardiovascular Research Laboratory, 1st Department of Propaedeutic Internal Medicine, Laiko Hospital, Athens, Greece, 2nd Department of Ophthalmology, Attikon University Hospital, Athens, Greece, 3Biomedical Engineering Unit, 1st Department of Cardiology, Hippokration Hospital, Athens, Greece, 4Department of Medicine, Maastricht, The Netherlands, 5Cardiovascular Research Institute Maastricht (CARIM); Maastricht University Medical Centre, Maastricht, The Netherlands

17:30  2.5  In singletons born at term, lower gestational age is associated with increased aortic pulse wave velocity in young adulthood: The Northern Ireland Young Hearts Project (NIYHP)
Isabel Ferreira1, Alison Gallagher2, Liam Murray3, Colin Boreham4
1School of Public Health, Faculty of Medicine and Biomedical Sciences, The University of Queensland, Brisbane, Queensland, Australia, 2Northern Ireland Centre for Food and Health (NICHE), School of Biomedical Sciences, Ulster University, Belfast, Northern Ireland, UK, 3Department of Epidemiology and Public Health, Queens University Belfast, Belfast, Northern Ireland, UK, 4Institute for Sport and Health, School of Public Health, Physiotherapy & Population Science, University College Dublin, Dublin, Ireland

17:40  2.6  Pulse wave velocity and gait performance in older subjects
Anna Skalska1, Malgorzata Fedyk-Lukasik2, Paulina Fatyga3, Tomasz Grodzicki1
1Department of Internal Medicine and Gerontology; Jagiellonian University Medical College, Krakow, Poland

17:50  Manufacturers Presentations
Chair: Charalampos Vlachopoulos, John Kennedy Cruickshank

17:50  Manufacturers Presentation: OMRON
Title tbc
Akira Yamashina, Tokyo Medical University, Tokyo, Japan

18:05  Manufacturers Presentation: FUKUDA
Cardio-Ankle vascular index and arterial stiffness: a new insight into cardiovascular risk
Giuseppe Schillaci, University of Perugia, Perugia, Italy
THURSDAY 15TH OCTOBER 2015

18:20 Parallel Poster Sessions & Welcome Reception

18:20 Parallel Poster Session I: Basic science
Chair: Alberto Avolio, Pierre Bouthoynie, Ian B Wilkinson

P1.1 Physical activity is associated with flow-mediated dilatation in females
Ulrika Ferberg1, Katya Matusевич1, Gabriella Eliason1, Maria Fernstrom1, Anita Hurtig-Wennlof2
1Orebro University, OREBRO, Sweden

P1.2 Nanomechanical alterations in the adventitial layer of the internal mammary artery of patients with high PWV
Zhuo Chang1, Maria Lyck Hansen2, Lars Melholt Rasmussen2, Riaz Akhtar1
1University of Liverpool, Liverpool, UK, 2Odense University Hospital, Odense, Denmark

P1.3 A new dynamic organ bath setup to assess isobaric stiffness parameters of periodically stretched isolated mouse aortic segments
Arthur JA Leloup1, Cor E Van Hove1, Guido RY De Meyer1, Dorien M Schrijvers1, Gilles W De Keulenaer1, Paul Fransen1
1University of Antwerp, Antwerp, Belgium

P1.4 Hemodynamics of pulmonary hypertension: Application of the Reservoir-Wave approach
Anukul Ghimire1, Mads Andersen1,2,3, Lindsay Burrowes1, I. Christopher Bouwmeester1, Andrew Grant1, Israel Belenkie1, Nowell Fine1, Barry Borlaug4, John Tyberg1
1University of Calgary, Calgary, Alberta, Canada, 2Aarhus University Hospital, Aarhus, Denmark, 3Mayo Clinic, Rochester, Minnesota, USA, 4Yale University, New Haven, Connecticut, USA

P1.5 Age and hypertension strongly reduce aortic visco-elastic properties in rats at basal and matched blood pressure levels
George Lindesay1, Christophe Ragonnet1, Stefano Chimenti1, Nicole Villeneuve1, Christine Vayssettes-Courchay1
1Institut d’Ondulatoire, 91430, France

P1.7 Estimation of central blood pressure using local pulse wave velocity: A proof of concept study in sheep
Sebastian Graf1,2, Damian Craiem1,2, Juan Gabriel Barra1, Ricardo Armentano1
1Favaloro University, Buenos Aires, Argentina, 2CONICET, Buenos Aires, Argentina

P1.8 Development of a technique for determination of pulmonary artery pulse wave velocity in horses
Gonçalo Silva1, Bruce Guest2, Diego Gomez1, Martine McGregor2, John Runciman3, Luis Arroyo1
1Department of Clinical Studies, Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada, 2School of Engineering, University of Guelph, Guelph, Ontario, Canada

P1.9 Platelet-localized FXI promotes a glycoprotein Ibα dependent feedback loop in arterial hypertension and vascular inflammation
Jeremy Lagrange1, Sabine Kossmann1,2, Moritz Ehiken1,2, Brett Monia3, Wolfram Ruf4, Philip Wenzel1
1Center for Thrombosis and Hemostasis, Mainz, Germany, 2Department of Medicine 2 University Medical Center, Mainz, Germany, 3ISIS Pharmaceuticals Inc, Gazelle Court Carlsbad, USA
THURSDAY 15TH OCTOBER 2015

P1.10  Pulse pressure in relation to 24-hour urinary sodium excretion in a sample of high-salt intake population
Adam Bednarski1, Katarzyna Stolarz-Skrzypek1, Grzegorz Kielbasa1, Agata Franczyk1, Malgorzata Kloch-Badelek1, Karina Kawecka-Jaszczyk1, Danuta Czarnecka1
11st Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University Medical College, Krakow, Poland

P1.11  Soluble IL-6 Receptor concentrations are associated with augmentation index in healthy young males
Matthew Armstrong1, Cat Singh1, Laura Watkeys1, Linnet Thekkemuriyil1, Jordan Tucker1, Zoe Marshall1, Richard Webb1, Barry McDonnell1
1Cardiff Metropolitan University, Cardiff, UK

P1.12  In idiopathic pulmonary arterial hypertension arterial narrowing is limited and heterogeneous
Nina Ro1, Esther Timmer1, Theo Faes1, Harm Jan Bogaard1, Anton Vonk Noordegraaf1, Katrien Grünberg1, Nico Westerhof1
1VU University Medical Center, Amsterdam, The Netherlands

P1.13  Changes in pulse wave velocity alone cannot predict the pulse pressure increase with age
Berend Westerhof1,2, Thomas Weber3, Siegfried Wassertheurer4, Bernhard Hametner4, Nico Westerhof4
1Edwards Lifesciences, Amsterdam, The Netherlands, 2Academic Medical Center, Amsterdam, The Netherlands, 3Klinikum Wels-Grieskirchen, Wels, Austria, 4Austrian Institute of Technology, Vienna, Austria

P1.14  Analysis of left ventricular filling dynamics
Lindsay Burrowes1, Alessandro Satriano1, Richard Thompson2, Nigel Shrive1, John Tyberg1
1University of Calgary, Calgary, Alberta, Canada, 2University of Alberta, Calgary, Alberta, Canada

P1.15  Conditional inactivation of integrin av subunit in vascular smooth muscle cells regulates fibrosis in vessels
Ekaterina Belozertsyeva1, Melusine Didelot1, Amel Mohamadi1, Zhenlin Li2, Huguette Louis3, Jean-Baptiste Michel1, Véronique Regnault1, Patrick Lacolley1
1UMR_S 1116, Vandoeuvre-les-Nancy, France, 2UMR 8256, Paris, France, 3UMR_S 1148, Paris, France

P1.17  The Ventricle’s prominent role in pressure amplification; an incremental experimental study
Nicholas Gaddum1, Jordi Alastruey1, Tobias Schaeffter2, Phil Chowienczyk2
1King’s College London, Division of Imaging Sciences and Biomedical Engineering, St. Thomas’ Hospital, London, UK, 2Medical Physics and Metrological Information Technology at Physikalisch-Technische Bundesanstalt (PTB), Berlin, Germany, 3King’s College London British Heart Foundation Centre, St Thomas’ Hospital, London, UK
P2.1 Aging and structural alterations of subcutaneous small resistance arteries in hypertensive patients

Carolina De Ciuceis¹, Claudia Rossini³, Claudia Agabiti Rosei¹, Enzo Porteri¹, Alice Gavazzi¹, Stefano Caletti¹, Paola Pileri¹, Maria Antonietta Coschignano¹, Enrico Agabiti Rosei¹, Damiano Rizzoni¹

¹Clinica Medica, Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy

P2.2 Resistant hypertension and structural alterations of subcutaneous small resistance arteries

Claudia Agabiti Rosei¹, Carolina De Ciuceis¹, Claudia Rossini³, Maria Lorenza Muiesan¹, Massimo Salvetti¹, Enzo Porteri¹, Alice Gavazzi¹, Anna Paini², Stefano Caletti¹, Maria Antonietta Coschignano¹, Paola Pileri¹, Enrico Agabiti Rosei¹, Damiano Rizzoni¹

¹Clinica Medica, Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy

P2.3 Polymorphic variants in ADIPOQ gene and coronary artery disease risk in Bulgarian population

Galya Naydenova¹

¹Department of Internal Medicine Propaedeutics, University Hospital “Dr. Georgi Stranski”, Pleven, Bulgaria

P2.4 The influence of antihypertensive treatment on arterial stiffness, shear stress and activity of chosen matrix metalloproteinases

Tomasz Pizon¹, Marek Rajzer², Marta Rojek¹, Danuta Czarnecka²

¹Department of Observation and Internal Medicine, University Hospital, Cracow, Poland, ²1st Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University Medical College, Cracow, Poland

P2.5 Sex-dependent differences in obesity indices and inflammatory markers in non-diabetic obese patients

Mariusz Stepień¹, Anna Stepień¹, Rafal N. Wlazel¹, Marek Paradowski¹, Maciej Banach¹, Jacek Rysz²

¹Medical University of Lodz, Lodz, Poland

P2.6 PWV is an independent determinant of cognitive dysfunction in CKD patients

Despina Karasavvidou¹,², Dimitrios Stagkas³, Kosmas Pappas², Stylianos Lampropoulos¹, Cristos Katsinas¹, Rigas Kalaitzidis²

¹Department of Nephrology, General Hospital of Ptolemaida, Ptolemaida, Greece, ²Department of Nephrology, University Hospital of Ioannina, Ioannina, Greece

P2.7 Amelioration of cognitive function in hemodialysis patients in absent of hypotensive episodes

Despina Karasavvidou¹, Eleni Triantafiliidou¹, Dimitrios Valoukas³, Dimitrios Makridis³, Sygliti-Errieta Pelidou³, Cristos Katsinas³

¹Department of Nephrology, General Hospital of Ptolemaida, Ptolemaida, Greece, ²Department of Neurology, University of Ioannina, Ioannina, Greece

P2.8 Acute kidney infarction in elderly woman - case report

Beata Franczyk-Skóra¹, Anna Gluba-Brzózka¹,², Bożena Sosnowska²,³, Jacek Rysz¹,³

¹Department of Nephrology, Hypertension and Family Medicine, WAM University Hospital, Lodz, Poland, ²Department of Hypertension, Medical University of Lodz, Lodz, Poland, ³Healthy Ageing Research Centre, Medical University of Lodz, Lodz, Poland
P2.9  A novel speckle tracking technique for investigating regional motion of the carotid wall: spatio-temporal variation in distension associates with presence of calcified plaque
Benyu Jiang1, Jing Wang2, Tim Spector3, Phil Philip J Chowienczyk1
1King’s College London British Heart Foundation Centre, Department of Clinical Pharmacology, London, UK, 2Department of Twin Research, King’s College, London, UK

P2.10  Exaggerated exercise blood pressure independently predicts incident hypertension: a systematic review and meta-analysis.
Martin Schultz1, Petr Otahal1, Dean Picone1, James Sharman1
1Menzies Institute for Medical Research, University of Tasmania, Hobart, Australia

P2.11  Exercise reveals differential coupling between aortic haemodynamics and left ventricular twist mechanics
Martin Schultz1, Justin Davies2, Eric Stöhr3
1Menzies Institute for Medical Research, University of Tasmania, Hobart, Australia, 2International Centre for Circulatory Health, Imperial College London, London, UK, 3Discipline of Physiology & Health, Cardiff Metropolitan University, Cardiff, UK

P2.12  A novel marker expresses the effect of the nonlinearity in the arterial pressure-volume relationship on the pulse pressure: Characteristics and prognostic significance in hypertensive patients
Benjamin Gavish1, Michael Bursztyn2
1Yazmonit Ltd., Eshtaol, Israel, 2Hadassah-Hebrew Univ Medical Ctr. Mount-Scopus, Jerusalem, Israel

P2.13  Blood pressure profile changes between 7th and 11th year of life in children born prematurely with extremely low birth weight in comparison to children born on time.
Maja Gilarska1, Malgorzata Klimek1, Dorota Drozdź2, Andrzej Grudzien1, Przemko Kwinta1
1Department of Pediatrics, Jagiellonian University Medical College, Cracow, Poland, 2Department of Pediatric Nephrology, Jagiellonian University Medical College, Cracow, Poland

P2.14  Parameters of arterial stiffness in osteoarthritis patients and in healthy controls
Kaspar Tootsi1, Aare Märtston1,2, Mihkel Zilmer1, Kaido Paapstel1, Jaak Kals1,3
1Department of Traumatology and Orthopaedics, University of Tartu, Tartu, Estonia, 2Clinic of Traumatology and Orthopaedics, Tartu University Hospital, Tartu, Estonia, 3Institute of Biomedicine and Translational Medicine, Department of Biochemistry, Centre of Excellence for Translational Medicine, University of Tartu, Tartu, Estonia

P2.15  Irritable affective temperament is a predictor of pulse wave velocity, whereas hypothyamic affective temperament determines augmentation index in chronic hypertension
János Nemcsik1, Andrea László2, Péter Torzsa1, Beáta Körösi1, Dániel Eörsyi1, Orsolya Cseprekáti2, András Tisler2, Zsófia Nemcsik-Bence2, Xénia Gonda4,5, Zoltán Rihmer4,6
1Department of Family Medicine, Semmelweis University, Budapest, Hungary, 21st Department of Internal Medicine, Semmelweis University, Budapest, Hungary, 3Department of Radiology and Oncotherapy, Semmelweis University, Budapest, Hungary, 4Department of Clinical and Theoretical Mental Health, Semmelweis University Budapest, Budapest, Hungary, 5MTA-SE Neurochemistry Research Group, Budapest, Hungary, 6Department of Psychiatry and Psychotherapy, Semmelweis University, Budapest, Hungary
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P2.16 Effect of statin treatment on arterial stiffness in individuals with newly-diagnosed familial hypercholesterolemia
Marco Canepa\textsuperscript{1,2}, Nathan Artom\textsuperscript{1}, Andrea Telchime\textsuperscript{1}, Pietro Ameri\textsuperscript{1}, Claudio Brunelli\textsuperscript{1}, Franco Dallegr\textsuperscript{1}, Aldo Pende\textsuperscript{1}, Livia Pisciotta\textsuperscript{1}
\textsuperscript{1}University of Genova, Genova, Italy, \textsuperscript{2}National Institute on Aging / NIH, Baltimore, MD, USA

P2.17 Feasibility of using Complior Analyse to measure central systolic blood pressure during dialysis.
Mabrouk Brahim\textsuperscript{1}, Martine Catherine\textsuperscript{1}, Nathalie Stocard\textsuperscript{1}, Rachid Moja\textsuperscript{1}, Charles Chazot\textsuperscript{1}, Sandrine Millasseau\textsuperscript{2}, Denis Chemla\textsuperscript{3}
\textsuperscript{1}Montferron hospital, Montferron, France, \textsuperscript{2}Pulse Wave Consulting, St Leu la Foret, France, \textsuperscript{3}APHP, Paris, France

P2.18 Impact of cardiovascular risk factors on carotid stiffness and carotid intima media thickness – gender differences.
Maria Loboz-Rudnicka\textsuperscript{1}, Joanna Jaroch\textsuperscript{1}, Zbigniew Bociaga\textsuperscript{1}, Barbara Ryzczewska\textsuperscript{1}, Ewa Kruszynska\textsuperscript{1}, Krystyna Loboz-Grudzien\textsuperscript{1,2}, Andrzej Szuba\textsuperscript{3}
\textsuperscript{1}Department of Cardiology, T. Marcinia Hospital, Wroclaw, Poland, \textsuperscript{2}Faculty of Health Science, Medical University of Wroclaw, Wroclaw, Poland, \textsuperscript{3}Department of Internal Medicine, 4th Military Hospital in Wroclaw, Wroclaw, Poland

P2.19 Comparison of brachial and central blood pressures from 2 SphygmoCor XCEL systems equipped with a 2m and 6m-long hose.
S Stoor\textsuperscript{1}, G Soulait\textsuperscript{1}, S Tavolarto\textsuperscript{1}, S Millasseau\textsuperscript{2}, H Khettab\textsuperscript{1}, P Boutouyrie\textsuperscript{1}, S Laurent\textsuperscript{1}, E Mousseaux\textsuperscript{1}
\textsuperscript{1}APHP, Paris, France, \textsuperscript{2}Pulse Wave Consulting, St Leu la Foret, France

P2.20 Peripheral artery disease detected by ankle-brachial index is associated to cardiac and carotid abnormalities in patients with arterial hypertension and diabetes.
José Pompeu Filho\textsuperscript{1}, Ricardo Silva\textsuperscript{2}, Rachel Andrade\textsuperscript{3}, Leiria Andrade Neto\textsuperscript{4}, João Falcão\textsuperscript{1}, Sandra Falcão\textsuperscript{1}, Luiz Bortolotto\textsuperscript{3}
\textsuperscript{1}Messejana Hospital, Fortaleza, Ceará, Brazil, \textsuperscript{2}Federal University of Ceara, Fortaleza, Ceará, Brazil, \textsuperscript{3}Heart Institute (InCor), São Paulo University, São Paulo, São Paulo, Brazil, \textsuperscript{4}Eye Hospital Leiria Andrade, Fortaleza, Ceará, Brazil

18:20 Parallel Poster Session III: Clinical science
Chair: Patrick Segers, Siegfried Wasertheurer, Wiktoria Wojciechowska

P3.1 Sub-maximal exercise blood pressure relates to left ventricular mass index, but is dependent on low aerobic capacity.
Martin Schultz\textsuperscript{1}, Dean Picone\textsuperscript{1}, Rachel Clime\textsuperscript{1}, Costan Magnussen\textsuperscript{1,2}, Leah Wright\textsuperscript{1}, Thomas Marwick\textsuperscript{1}, Alison Venn\textsuperscript{1}, James Sharman\textsuperscript{1}
\textsuperscript{1}Menzies Institute for Medical Research, University of Tasmania, Hobart, Australia, \textsuperscript{2}Research Centre of Applied and Preventive Cardiovascular Medicine, University of Turku, Turku, Finland

P3.2 Rogoza index in healthy volunteers as a function of age
Igor Posokhov\textsuperscript{1}
\textsuperscript{1}Hemodynamic Laboratory Ltd, Nizhniy Novgorod, Russia
P3.3 The CKD273 urinary proteomic biomarker for early diagnosis of diabetic nephropathy does not indicate generalised subclinical vascular disease in normoalbuminuric type 2 diabetic patients. Gemma Currie1, Joanne Flynn1, Morten Lindhardt2, Harald Mischak1, Peter Rossing2, Christian Delles1
1University of Glasgow, Glasgow, UK; 2Steno Diabetes Center, Gentofte, Denmark

P3.4 Pulse wave reflections and their diurnal changes in patients with Marfan syndrome compared to healthy controls
Bernhard Hametner1, Matthias Hillebrand2, Ghazaleh Nouri2, Stephanie Parragh1,5, Jelena Kost1,2, Sebastian Obregon1,2
1Institut für Herz-Kreislauf- und Angiologie, Johann Wolfgang Goethe-Universität Frankfurt am Main, Frankfurt am Main, Germany; 2Division of Cardiology, Department of Internal Medicine, Universitätsklinikum Schleswig-Holstein, Lübeck, Germany; 3Institute of Cardiology, University Hospital of Tartu, Tartu, Estonia; 4Universitäres Herzzentrum Hamburg, Hamburg-Eppendorf, Germany; 5Institute of Cardiology, University Hospital of Tartu, Tartu, Estonia

P3.5 Type 2 diabetes exacerbates carotid artery echogenicity and central artery stiffness in middle-aged and older individuals
Kunihiko Aizawa1,2, Francesco Casanova1,2, Dave Mawson1,2, Salim Elyas1,2, Damilola Adingupu1,2, Kim Gooding1,2, David Strain1,2, Angela Shore1,2, Phillip Gates1,2
1University of Exeter Medical School, Exeter, UK; 2NIHR Exeter Clinical Research Facility, Exeter, UK

P3.6 Evaluation of different methods for determining the time delay of the arterial pulse wave: application to the pOptimetr®
Akin Obeid1,2, Hakim Khettab1, Magid Hallab1,4, Pierre Boutouyrie1,2, Stéphane Laurent1,2
1Inserm U970, Paris, France; 2Paris Descartes University, Paris, France; 3Department of Gerontology, University hospital Nantes, Nantes, France; 4Axelife, SAS, Nantes, France

P3.7 Arterial stiffness is associated with lower performance on the cognitive tests at different domains in hypertensive patients.
Henrique Muela1, Valéria Costa-Hong1, Michel Machado1, Natalia Moraes1, Claudia Memoria1, Monica Yasuda1, Ricardo Nogueira1, Ayrton Massaro2, Edson Shu1, Ricardo Nitrini1, Luiz Bortolotto1
1Heart Institute (Incor), University of São Paulo Medical School, São Paulo, São Paulo, Brazil; 2Department of Neurology, University of São Paulo Medical School, São Paulo, São Paulo, Brazil; 3Department of Psychology, University of São Paulo Medical School, São Paulo, São Paulo, Brazil

P3.8 Arterial stiffness and left atrial volume in hypertensive and normotensive subjects
Marta Rojek1,2, Marek Rajzer1, Danuta Czarnecka1
1Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University Medical College, Krakow, Poland; 2Medical Faculty, Dresden University of Technology, Dresden, Germany

P3.9 Progression of arterial stiffness and vascular lesions according to the degree of glycemic abnormalities. A warning in patients with metabolic syndrome
Pédro Forcada1, Carlos Castellaro1,3, Jorge Chiabaut1,3, Sergio Gonzalez1,3, Carol Kotre2,3, Sebastián Obregon1,3
1Hospital Universitario Austral, Pilar. Buenos Aires, Argentina; 2Santa María de la Salud, San Isidro. Buenos Aires, Argentina; 3Centro Champagnat, Pilar. Buenos Aires, Argentina
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P3.10 Regional carotid mechanics is significantly impaired in patients on hemodialysis.
Oleg Kerbikov1, Ekaterina Borskaya2, Irina Kaloshina3, Anna Kaloshina3, Olga Telnova1, Natalia Ustyantseva1, Maria Agakina2
1Federal Research Clinical Center FMBA of Russia, Moscow, Russia, 2Federal State Clinical Hospital #86 of Russia, Moscow, Russia, 3I.M. Sechenov First Moscow State Medical University, Moscow, Russia

P3.12 Urinary liver-type fatty acid-binding protein is associated with aortic stiffness in male coronary artery disease patients.
Kaido Paapstel1, Mihkel Zilmer1, Jaan Eha1, Kaspar Tootsi1, Anneli Piir1, Jaak Kals1,2
1University of Tartu, Tartu, Estonia, 2Tartu University Hospital, Tartu, Estonia

P3.13 Arterial stiffness assessed by ultrafast imaging in healthy subjects
Zoubir Mourad Bensalah1
1Hospital of Perpignan, Perpignan, France

P3.14 Association of carotid intima-media thickness, endothelial function and aortic stiffness with cardiovascular events in metabolic syndrome patients
Ligita Ryliskyte1,2, Jurate Balsyte1,2, Jolita Badariene1,2, Roma Puronaite1, Rokas Navickas1,2, Svetlana Solovjova1,2, Kristina Ryliskiene1,2, Jurigta Kuzmickiene1,2, Aleksandas Laucevicius1,2
1Vilnius University Hospital Santariskiu Klinikos, Santariskiu Str. 2, LT-08661, Vilnius, Lithuania, 2Faculty of Medicine, Vilnius University, M.K. Ciurlionio Str. 25, LT-03101, Vilnius, Lithuania

P3.15 Cardiac performance vascular physiology and erectile status; a question of a healthy diet
Athanassios Angelis1, Nikolaos Ioakeimidis1, Mahmoud Abderasoul1, Ioanna Gourgouli1, Konstantinos Aznaouridis1, Dimitrios Terentes-Printzios1, Konstantinos Rokkas1, Charalambos Vlachopoulos1, Dimitrios Tousoulis1
1Hippocration Hospital, 1st Department of Cardiology, University of Athens, Athens, Greece

P3.16 Central arterial stiffness and systemic vascular resistance influence on left ventricular geometry and diastolic function in essential hypertension
Athanassios Angelis1, Charalambos Vlachopoulos1, Nikolaos Ioakeimidis1, Konstantinos Aznaouridis1, Mahmoud Abderasoul1, Christos Georgakopoulos1, Ioannis Felekos1, Konstantina Aggeli1, Dimitrios Tousoulis1
1Hippocration Hospital, 1st Department of Cardiology, University of Athens, Athens, Greece

P3.17 The effects of alpha 1-adrenoceptor-blockade by doxazosin and angiotensin converting enzyme-inhibition by Ramipril on central and brachial blood pressure and vascular reactivity in mild-to-moderate hypertension: the Doxazosin Ramipril Study
Andreas Jekell1, Majid Kalani1, Thomas Kahan1
1Karolinska Institutet, Department of Clinical Sciences, Danderyd Hospital, Division of Cardiovascular Medicine, Stockholm, Sweden

P3.18 Comparison of structural and functional carotid and aortic changes in diabetes mellitus and hypertension
Zbigniew Bociaga1, Joanna Jaroch1, Ewa Kruszyńska1, Maria Łoźbo-Rudnicka1, Barbara Ryczewska1, Krystyna Łoźbo-Grudzięń2,3
1T Marcinik Hospital; Department of Cardiology, Wroclaw, Poland, 2Wroclaw Medical University; Health Science Faculty, Wroclaw, Poland
P3.19 Assessment of cardiovascular risk in hypertensives with white coat effect vs. patients with masked uncontrolled hypertension.
Anna Szyndler1, Beata Graff1, Jacek Wolf1, Katarzyna Polonis1, Ewa Swierblewska1, Katarzyna Kunicka1, Marzena Chrostowska1, Krzysztof Narkiewicz1
1Hypertension and Diabetology Department, Medical University of Gdansk, Gdansk, Poland

P3.20 Effect of obesity and diabetes mellitus type 2 on vascular stiffness
Olga Bourko1, Irina Bourko2
1Scientific and practical center of Cardiology, Minsk, Belarus, 2Republican Academy of postgraduate education, Minsk, Belarus

P3.21 Associations of insulin-like growth factor and its binding protein-2 and 3 with blood pressure and arterial structure and function in hypertensive perimenopausal women
Agnieszka Olszanecka1, Kalina Kawecka-Jaszcz1, Danuta Czarnecka1
1Jagiellonian University Medical College, 1st Department of Cardiology, Interventional Electrophysiology and Hypertension, Krakow, Poland

18:20 Parallel Poster Session IV: Epidemiology and Other
Chair: Jan Filipovský, Athanase D Protogerou, Tine Willum-Hansen

P4.1 Arterial stiffness in inflammatory bowel disease: a systematic review
Luca Zanoli1, Stefania Rastelli1, Jean-Philippe Empana2, Pierre Boutouyrie2, Stephane Laurent2, Pietro Castellino1
1University of Catania, Catania, Italy, 2HEGP, AP-HP, INSERM U970, Paris, France

P4.2 Coronary risk in relation to genetic variation in MEOX2 and TCF15 in a Flemish population
Wen-Yi Yang1, Thibault Petit1, Lutgard Thijs1, Zhen-Yu Zhang1, Lotte Jacobs1, Azusa Hara1, Fang-Fei Wei1, Erika Salvi2, Lorena Citterio1, Yu-Mei Gu1, Judita Knez1, Nicholas Cauwenberghs1, Verhamme1, Aernout Luttun1, Jan Staessen1,4
1University of Leuven, Leuven, Belgium, 2University of Milan, Milan, Italy, 3University Vita-Salute Raffaele, Milan, Italy, 4Maastricht University, Maastricht, The Netherlands

P4.3 Physical activity is associated with lower arterial stiffness in older adults: Results of the SAPALDIA 3 Cohort study
Simon Endes1, Emmanuel Schaffner2,3, Seraina Caviezel2,3, Julia Dratva2,3, Christine S. Autenrieth2,3, Miriam Wanner1, Brian Martin3, Daiana Stolz2, Marco Pons4, Alexander Turk7, Robert Bettschart8, Christian Schindler2,3, Nino Künnli2,3, Nicole Probst-Hensch2,3, Arno Schmidt-Trucksass1
1Department of Sport, Exercise and Health, Div. Sports and Exercise Medicine, University of Basel, Basel, Switzerland, 2Swiss Tropical and Public Health Institute, Basel, Switzerland, 3University of Basel, Basel, Switzerland, 4Physical Activity and Health Working Unit, Institute of Social and Preventive Medicine, University of Zurich, Zurich, Switzerland, 5Clinic of Pneumology and Respiratory Cell Research, University Hospital, Basel, Switzerland, 6Division of Pulmonary Medicine, Regional Hospital Lugano, Lugano, Switzerland, 7Zürcher Höhenklinik, Wald-Faltigberg, Faltigberg-Wald, Switzerland, 8Lungenpraxis Hirslanden Klinik Aarau, Aarau, Switzerland
P4.4 Inhibition of arterial calcification by matrix Gla protein as determinant of renal function in the general population
Fangfei Wei1, Nadja E A Drummen2, Lotgarde Thijs1, Lotte Jacobs3, Marjo H J Knappen4, Thibaut Petit3, Wenyi Yang2, Zhenyu Zhang1, Yumei Gu1, Tatiana Kuznetsova3, Peter Verhamme2, Pieter Evenepoel1, Cees Vermeer6, Jan A Staessen1,4
1Research Unit Hypertension and Cardiovascular Epidemiology, KU Leuven Department of Cardiovascular Sciences, University of Leuven, Leuven, Belgium, 2Centre for Molecular and Vascular Biology, KU Leuven Department of Cardiovascular Sciences, University of Leuven, Leuven, Belgium, 3Laboratory of Nephrology, Department of Microbiology and Immunology, University of Leuven, Leuven, Belgium, 4R&D Group VitaK, Maastricht University, Maastricht, The Netherlands

P4.5 Vascular health assessment of the Hypertensive Patients (Vasotens) Registry: Rationale, design and methods of an international registry for ambulatory blood pressure and arterial stiffness telemonitoring
Stefano Omboni1,3, Igor N Posokhov2,3, Gianfranco Parati3, Anatoli Rogoza4, Alberto Avolio5, Ernesto Cardona Muñoz2, Lorenzo Ghiadoni1, Vladimir Gorbunov6, Elena Grigorieva6, Alexandra Konradi7, Viktoria Korneva4, Yulia Kotovskaya4, Natalya Kulikova4, Maria Lorensa Muiesan3, Giuseppe Mulà3, Iana Orlova4, Carmine Savoia3, Giuseppe Schillaci3, Parounak Zelveian7, Elena Zheleznyak4
1Italian Institute of Telemedicine, Varese, Italy, 2Hemodynamic Laboratory, Nizhniy Novgorod, Russia, 3VASOTENS Registry Study Group Italy, Italy, Italy, 4VASOTENS Registry Study Group Russia, Russia, Russia, 5VASOTENS Registry Study Group Australia, Australia, Australia, 6VASOTENS Registry Study Group Mexico, Mexico, Mexico, 7VASOTENS Registry Study Group Armenia, Armenia, Armenia

P4.6 Greater carotid circumferential wall stress is associated with incident cardiovascular disease in individuals with type 2 diabetes - The Hoon Study
Veronica Onete1, Ronald Henry1, Miranda Schram1, Jacqueline Dekker2, Giel Niijpels3, Coen Stehouwer1
1MUMC+ (CARIM), Maastricht, The Netherlands, 2VUMC (EMGO), Amsterdam, The Netherlands

P4.7 Plasma copper and Ceruloplasmin in relation to carotid-femoral pulse wave velocity
Katarzyna Stolarz-Skrypek1, Joanna Platek1, Halina Mrowiec2, Stanislaw Walas4, Wiktoria Wojciechowska1, Łukasz Klima1, Szczerban Zapotoczny1, Kalina Kawecka-Jaszcz3, Danuta Czarnecka1
1Department of Cardiology, Interventional Electrocardiography and Hypertension, Jagiellonian University Medical College, Krakow, Poland, 2Faculty of Chemistry, Jagiellonian University, Krakow, Poland

P4.8 Associations of mid-life cardiovascular risk factors with later life cognitive function
Chloe Park1, Therese Tillin1, Nish Chaturvedi3, Alun Hughes1
1University College London, London, UK, 2Kings College London, London, UK

P4.9 Endothelin-1 is linked with arterial stiffness and interleukin-6 in black South African women: The SABPA study.
Christine Du Plooy1, Ruan Kruger1, Carina Mels1, Hugo Huismam1
1Hypertension in Africa Research Team. North-West university, Potchefstroom, South Africa
P4.10 Association of arterial stiffness with blood pressure variability
Wiktoria Wojciechowska¹, Katarzyna Stolarz-Skrzypek¹, Agnieszka Olszanecka¹, Kalina Kawecka-Jaszcz¹, Danuta Czarnecka¹
¹Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University, Medical College, Krakow, Poland

P4.11 Endothelial dysfunction in urbanized Africans with low plasma renin levels: The Sabpa Study
Johannes van Rooyen¹, Rijane Swart¹, Carina Mels¹
¹North-West University and HART, North West Province, South Africa

P4.12 Reference values of central blood pressure in adults using a validated non-invasive oscillometric method
Bela Benczur¹, Renata Bocski², Attila Cziraki³, Miklos Illyes³
¹Hetényi Geza County Hospital, Dept. of Cardiology, Szolnok, Hungary, ²Semmelweis Medical University, Department of Pulmonology, Budapest, Hungary, ³University of Pecs, Heart Institute, Division of Interventional Cardiology, Pecs, Hungary

P4.13 Heritability and other determinants of left ventricular diastolic function in the family-based population study.
M. Klocz-Badelek¹, V. Tikhonoff², L. Thijs², W. Sakiewicz³, K. Stolarz-Skrzypek⁴, K. Narkiewicz⁵, J. Staessen⁶, T. Kuznetsova⁷, K. Kawecka-Jaszcz⁸, D. Czarnecka⁹
¹Studies Coordinating Centre, Division of Hypertension, University of Leuven, Leuven, Belgium, ²The First Department of Cardiology and Hypertension, Cracow, Poland, ³Hypertension Unit, Department of Hypertension and Diabetology, Medical University of Gdansk, Gdansk, Poland, ⁴The Department of Clinical and Experimental Medicine, University of Padova, Padova, Italy

P4.14 Prevalence of diastolic left ventricular dysfunction in European populations based on cross-validated diagnostic thresholds.
M. Klocz-Badelek¹, T Kuznetsova¹, W Sakiewicz³, V Tikhonoff², A Ryabikov⁴, M Loster¹, K Stolarz-Skrzypek¹, L Thijs³, K Narkiewicz³, J Staessen², K Kawecka-Jaszcz³, D Czarnecka⁴
¹The First Department of Cardiology and Hypertension, Jagiellonian University, Krakow, Poland, ²The Studies Coordinating Centre, Division of Hypertension, University of Leuven, Leuven, Belgium, ³Hypertension Unit, Department of Hypertension and Diabetology, Medical University of Gdansk, Gdansk, Poland, ⁴The Institute of Internal Medicine, Novosibirsk, Russia, ⁵The Department of Clinical and Experimental Medicine, University of Padova, Padova, Italy

P4.15 Blood pressure, body mass index and arterial elastic properties in young people.
Vasyl Yagensky¹
¹National Medical O O Bogomolets University, Kyiv, Ukraine

P4.16 The myotrophoblast of the rat placenta: Ex Vivo study of nitric oxide synthase inhibition
Ilana Ariel¹, Galina Skarzinski², Vitali Belzer³, Wiessam Abu-Ahmad⁴, Zaid Abassi⁵, Michael Bursztyn¹
¹Hadassah-Hebrew University Medical Center, Mount-Scopus, Jerusalem, Israel, ²Rappaport Faculty of Medicine, Technion, Haifa, Israel

P4.17 Arterial stiffness in young patients with peripheral arterial disease
Mariella Catalano¹, Giovanni Scandale², Gabriel Dimitrov¹, Marzio Minola¹, Martino Recchia³, Francesca Galli³, Gianni Carzaniga³, Maria Carotta¹
¹Research Center on Vascular Diseases and Angiology Unit, University of Milan, Milan, Italy, ²Laboratory of Clinical Research, Department of Oncology, IRCCS—Istituto di Ricerche Farmacologiche Mario Negri, Milan, Italy, ³Medistat s.a.s, Milan, Italy
THURSDAY 15TH OCTOBER 2015

P4.18 The assumption that blood pressure decreases over consecutive measurements is false: Major implications for hypertension diagnosis and guidelines
Panagiota Veloudi1, Leigh Blizzard1, Velandai Srikanth2, Martin Schultz1, James E. Sharman1
1Menzies Institute for Medical Research, University of Tasmania, Hobart, Tasmania, Australia,
2Dept. of Medicine, School of Clinical Sciences at Monash Health, Monash University, Melbourne, Victoria, Australia

P4.19 Cardiovascular risk factors and left ventricular hypertrophy in children with chronic kidney disease.
Dorota Drozd1, Przemko Kwinta2, Zbigniew Kordon3, Katarzyna Zachwieja3, Monika Miklaszewska1, Krystyna Szefko3, Andrzej Rudzinski3, Jacek Antoni Pietrzyk1
1Dialysis Unit, Jagiellonian University Medical College, Krakow, Poland, 2Dpt. of Pediatrics, Jagiellonian University Medical College, Krakow, Poland, 3Dpt. of Pediatric Cardiology, Jagiellonian University Medical College, Krakow, Poland

P4.20 Assessment of body composition using bioelectrical impedance analysis and blood pressure in healthy school children.
Monika Latka1, Dorota Drozd2, Tomasz Drozd2, Kinga Wojtowicz1, Przemko Kwinta1, Jacek Antoni Pietrzyk2
1Students’ Scientific Group by the Dialysis Unit, Department of Pediatrics, Jagiellonian University Medical College, Krakow, Poland, 2Dialysis Unit, Department of Pediatrics, Jagiellonian University Medical College, Krakow, Poland

P4.21 Microcirculation effects of obesity and/or diet: a preliminary study in mice
Nicole Di Lascio1,2, Francesca Lenzarini4,2, Cristina Barsanti1, Francesco Stea3,2, Claudia Kusmic2, Francesco Faita1
1Institute of Life Science, Scuola Superiore Sant’Anna, Pisa, Italy, 2Institute of Clinical Physiology, National Research Council, Pisa, Italy, 3Department of Internal Medicine, University of Pisa, Pisa, Italy, 4Fondazione G. Monasterio CNR, Regione Toscana, Pisa, Italy

19:15 Young Investigator Network Evening
FRIDAY 16TH OCTOBER 2015

08:00  Registration, Refreshments & Exhibition

08:30  Oral Session III: Young Investigator presentations in association with Gesellschaft für Arterielle Gefäßsteifigkeit:

Chair: Johannes Baulmann, Arno Schmidt-Trucksäss, Luc Van Bortel

3.1  Prediabetes is associated with impaired retinal vasodilation: The Maastricht Study
Francisco Londoño1, Jelle Bossuyt1, Patrick Segers1, Luc Van Bortel1
1Dept. of Neurology for Adults, Medical University of Gdansk, Gdansk, Poland, 2Dept. of Hypertension and Diabetology, Medical University of Gdansk, Gdansk, Poland

3.2  Origins of the backward traveling wave in the arterial tree
Ye Li1, Henry Fok1, Benyu Jiang1, Sally Epstein1, Marie Willemet1, Jordi Alastruey1, Kim Parker2, Phil Chowienczyk1
1King’s College London, London, UK, 2Imperial College London, London, UK

3.3  An easy and intuitive web interface for the assessment of measurements of carotid-femoral pulse wave velocity and local arterial stiffness relative to the reference values database
Francisco Londoño1, Jelle Bossuyt1, Patrick Segers1, Luc Van Bortel1
1Ghent University, Gent, Belgium

3.4  Evaluation of the mutual relationships among the development of hypertension, arterial stiffening and renal function decline based on repeated longitudinal measurements
Hirofumi Tomiyama1, Akira Yamashina1
1Tokyo Medical University, Tokyo, Japan

3.5  Association of vascular risk factors with brain structure and function
Chloe Park1, Therese Tillin1, Robert Stewart2, Nish Chaturvedi1, Alun Hughes1
1University College London, London, UK, 2Kings College London, London, UK

3.6  Aortic stiffness is related to cerebral lesion growth in patients with acute ischemic stroke
Dariusz Gasecki1, Mariusz Kwarciany1, Kamil Kowalczyk2, Anna Gójska-Grymajlo2, Tomasz Nowicki2, Edyta Szurowska2, Pierre Boutouyrie3, Stephane Laurent3, Krzysztof Narkiewicz4, Bartosz Karaszewski1
1Dept. of Neurology for Adults, Medical University of Gdansk, Gdansk, Poland, 2Dept. of Radiology, Medical University of Gdansk, Gdansk, Poland, 3Dept. of Pharmacology, HEGP, APHP, Université Paris-Descartes, INSERM U970, Paris, France, 4Hypertension Unit, Dept. of Hypertension and Diabetology, Medical University of Gdansk, Gdansk, Poland

10:00  Special Guest Lecture: Arterial elasticity, Stiffness Parameter β and the cardio-ankle vascular index
Kozaburo Hayashi, Osaka, Japan
Chair: John Kennedy Cruickshank, Lorenzo Ghiadoni

10:30  Refreshments, Exhibition & Posters
**SCIENTIFIC PROGRAMME**

**FRIDAY 16TH OCTOBER 2015**

10:50  **Satellite Symposium: Organised in collaboration with Servier**
Systolic-diastolic midlife hypertension to isolated systolic hypertension in the elderly: is it a continuum?
Chair: Stéphane Laurent, Charalambos Vlachopoulos

**Introduction**
Charalambos Vlachopoulos, Athens, Greece

**Time-course of vascular aging**
Pierre Boutouyrie, Paris, France

*From hypertension to target-organ damage: a vascular disease progression model?*
Kennedy Cruickshank, London, UK

*Are there any therapeutic implications?*
Charalambos Vlachopoulos, Athens, Greece

**Conclusion**
Stéphane Laurent, Paris, France

11:50  **Manufacturer Demonstration:**
OMRON
Title tbc
Hirofumi Tomiyama, Tokyo Medical University, Tokyo, Japan

12:50  **Lunch, Exhibition and Posters**

13:35  **Oral Session IV: Young Investigator Presentations**
Chair: Jan Filipovsky, Kalina Kawecka-Jaszcz, Carmel McEniery

**Effect of aliskiren on vascular remodeling in small retinal circulation**
Christian Ott1, Agnes Jumar1, Joanna Harazny1,2, Stephanie Schmidt1, Roland Schmieder1
1Department of Nephrology and Hypertension, Friedrich-Alexander University (FAU) Erlangen-Nürnberg, Erlangen, Germany, 2Department of Pathophysiology, University of Warmia and Mazury, Olsztyn, Poland

**The inhomogeneity of diastolic-systolic rise time of the distension waveform distribution in the common carotid artery is associated with lipid presence of distal plaques.**
J. Steinbuch1,2, F.H.B.M. Schreuder3,4, M.T.B. Truijman3,4, A.A.J. de Rotte6, M.I. Liem7, E. Hermeling1,2, A.P.G. Hoeks1,2, W.H. Mess3
1Department of Biomedical Engineering, Maastricht University, Maastricht, The Netherlands, 2Cardiovascular research institute (CARIM), Maastricht University, Maastricht, The Netherlands, 3Department of Neurology, Maastricht University Medical Center, Maastricht, The Netherlands, 4Department of Clinical Neurophysiology, Maastricht University Medical Center, Maastricht, The Netherlands, 5Department of Radiology, Maastricht University Medical Center, Maastricht, The Netherlands, 6Department of Radiology, University Medical Center Utrecht, Utrecht, The Netherlands, 7Department of Radiology, Academic Medical Center, Amsterdam, The Netherlands

**The effect of glycaemic state transition on accelerated aortic stiffening: a longitudinal study in the Whitehall II cohort**
Nanna B. Johansen1,2, Martin Shipley3, Daniel R. Witte3,4, Adam G. Tabak3,5, Eric J. Brunner3
1Clinical Epidemiology, Steno Diabetes Center A/S, Gentofte, Denmark, 2Danish Diabetes Academy, Odense, Denmark, 3UCL Research Department of Epidemiology and Public Health, London, UK, 4Department of Public Health, University of Aarhus, Aarhus, Denmark, 5Semmelweis University Faculty of Medicine, 1st Department of Medicine, Budapest, Hungary
FRIDAY 16TH OCTOBER 2015

4.4 Forward and backward waves at the aortic root: steady-state and wave re-reflection considerations
Timothy Phan¹, John Li¹, Vandann Panchal², Amer Syed³, Ejaz Shah³, Julio Chirinos²
¹Rutgers University, Piscataway, New Jersey, USA, ²University of Pennsylvania, Philadelphia, Pennsylvania, USA

4.5 A systematic review and meta-analysis of central to brachial blood pressure amplification in patients type 2 diabetes mellitus
Rachel Climie¹, Petr Otahal¹, Martin Schultz¹, James Fell², Velandai Srikanth³, James Sharman¹
¹Menzies Institute for Medical Research, University of Tasmania, Hobart, Tasmania, Australia, ²School of Human Life Sciences, University of Tasmania, Launceston, Tasmania, Australia, ³Monash Medical Centre, Monash University, Melbourne, Victoria, Australia

4.6 Relationship of carotid arterial functional and structural changes to left atrial volume in untreated hypertension
Joanna Jaroch¹, Barbara Ryczkowska¹, Zbigniew Bociaga¹, Olga Vriz¹, Caterina Driussi³, Maria Loboz-Rudnicka¹, Krzysztof Dudek³, Krystyna Loboz-Grudzien²,¹
¹T. Marciniak Hospital, Department of Cardiology, Wroclaw, Poland, ²Wroclaw Medical University; Health Science Faculty, Wroclaw, Poland, ³Division of Cardiology, San Antonio Hospital, San Daniele del Friuli, Udine, Italy, ¹Institute of Machine Design and Operation, Technical University of Wroclaw, Wroclaw, Poland

15:05 DEBATE: Ankle-brachial index and aortic pulse wave velocity should be used to improve cardiovascular risk assessment.
Pro - Coen D.A. Stehouwer, Maastricht, The Netherlands
Contra - Piotr Jankowski, Krakow, Poland
Chair: Athanase D. Protoperou, Siegfried Wassertheurer

16:05 Parallel Poster Session V: Modeling, Technology and Interventions
Chair: Lorenzo Ghiadoni, Aleksander Prejbisz, Marek Rajzer

P5.1 From aortic flow velocity to central pressure: a non-invasive proof of concept
Samuel Vennin¹, Jordi Alastruey¹, Phil Chowienczyk¹
¹King’s College London, London, UK

P5.2 From the wave propagation model to a transfer function: a possibility for personalisation
Bernhard Hametner¹, Stephanie Parragh¹,², Anita Gerstenmayer¹,², Thomas Weber³, Siegfried Wassertheurer¹
¹AIT Austrian Institute of Technology, Vienna, Austria, ²Vienna University of Technology, Vienna, Austria, ³Klinikum Wels-Grieskirchen, Wels, Austria

P5.3 Characterization of the biomechanics of the rat xenograft model of abdominal aortic aneurysm by ring test
Louise Marais¹, Jianping Dai¹, Eric Allaire¹, Mustapha Zidi¹, ¹Bioengineering Tissues and Neuroplasticity, EA 7377, Paris Est Créteil University, Créteil, France

P5.4 Central pressure appraisal: clinical validation of a subject-specific mathematical model
Francesco Tosello¹, Andrea Guala¹, Dario Leone³, Carlo Camporeale¹, Giulia Bruno², Luca Ridolfi¹, Franco Veglio³, Alberto Milan³
¹Politecnico di Torino, Torino, Italy, ²University of Torino, Torino, Italy

P5.5 Compensatory effect between aortic stiffening and remodelling during ageing
Andrea Guala¹, Carlo Camporeale¹, Luca Ridolfi¹
¹Politecnico di Torino, Torino, Italy
**FRIDAY 16\textsuperscript{TH} OCTOBER 2015**

P5.6 Coronal fluid mechanics in an ageing cardiovascular system  
Andrea Guala\textsuperscript{1}, Michele Scalseggi\textsuperscript{1}, Luca Ridolfi\textsuperscript{0}  
\textsuperscript{1}Politecnico di Torino, Torino, Italy  

P5.7 A database of virtual healthy subjects as a new tool to assess physiological indexes and algorithms based on wave propagation  
Marie Willemet\textsuperscript{1}, Phil Chowienczyk\textsuperscript{1}, Samuel Vennin\textsuperscript{1}, Jordi Alafruguey\textsuperscript{0}  
\textsuperscript{1}King's College London, London, UK  

P5.8 Towards \textit{in vivo} biaxial characterisation of carotid artery mechanics  
Robert Holtackers\textsuperscript{1}, Bart Spronck\textsuperscript{1}, Maarten Heusinkveld\textsuperscript{1}, Geneviève Crombag\textsuperscript{1}, Jos Op ‘t Roodt\textsuperscript{1}, Tammo Delhaas\textsuperscript{1}, Eline Kooi\textsuperscript{1}, Evelien Hermeling\textsuperscript{1}, Koen Reesink\textsuperscript{1}  
\textsuperscript{1}CARIM School for Cardiovascular Diseases, Maastricht University, Maastricht, The Netherlands  

P5.9 Cardiac and arterial contribution to blood pressure changes with age  
Elira Maksuti\textsuperscript{1}, Nico Westerhof\textsuperscript{2}, Berend Westerhof\textsuperscript{1,3,4}, Michael Broom\textsuperscript{1,5}, Nikos Stergiopulos\textsuperscript{6}  
\textsuperscript{1}KTH Royal Institute of Technology, Stockholm, Sweden, \textsuperscript{2}VU University Medical Center, Amsterdam, The Netherlands, \textsuperscript{3}Edwards Lifesciences BM-EYE, Amsterdam, The Netherlands,  
\textsuperscript{4}Academic Medical Center, Amsterdam, The Netherlands, \textsuperscript{5}Karolinska University Hospital, Solna, Sweden, \textsuperscript{6}Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland  

P5.10 Changes in mechanical properties of femoral artery walls in pig model of arteriosclerosis  
Robert Paslawski\textsuperscript{1}  
\textsuperscript{1}Medical University Wroclaw, Wroclaw, Poland  

P5.11 Role of pressure-dependent arterial compliance in modulating the phase of wave reflections: Implications for LV-AS coupling  
Timothy Phan\textsuperscript{1}, John Li\textsuperscript{1}  
\textsuperscript{1}Rutgers University, Piscataway, New Jersey, USA  

P5.12 Predictors of high aorta blood pressure in young men with isolated systolic hypertension  
Ganna Radchenko\textsuperscript{1}, Yuriy Sirenko\textsuperscript{1}, Olena Torbas\textsuperscript{1}  
\textsuperscript{1}Institute of Cardiology, Kyiv, Ukraine  

P5.13 Estimation of central systolic pressure: Are peripheral waveforms and transfer function necessary?  
Denis Chemla\textsuperscript{1}, Sandrine Millasseau\textsuperscript{2}, Edmund Lau\textsuperscript{3}, P Attal\textsuperscript{1}, Alain Nittenberg\textsuperscript{1}  
\textsuperscript{1}APHP, Kremlin-Bicetre, France, \textsuperscript{2}Pulse Wave Consulting, St Leu La Foret, France, \textsuperscript{3}Sydney Medical School, Camperdown NSW, Australia, \textsuperscript{4}Shaare-Zedek Medical Center and Hebrew University Medical School, Jerusalem, Israel  

P5.14 Thigh-cuff based measurement of aortic pulse wave velocity: Initial testing of a novel VaSera prototype device  
Francisco Londoño\textsuperscript{1}, Daime Campos\textsuperscript{1}, Shigeo Horinaka\textsuperscript{1}, Julio Chirinos\textsuperscript{2}, Patrick Segers\textsuperscript{1}  
\textsuperscript{1}Ghent University, Gent, Belgium, \textsuperscript{2}University of Philadelphia, Pennsylvania, USA  

P5.15 Evaluation of aortic \textsuperscript{18}F-NaF tracer uptake detected using PET/CT in predicting aortic calcification over a 4-year follow-up period.  
Marina Cecelja\textsuperscript{1}, Amelia Moore\textsuperscript{1}, Ignac Fogelman\textsuperscript{1}, Michelle Frost\textsuperscript{1}, Phillip Chowienczyk\textsuperscript{1}  
\textsuperscript{1}King’s College London, London, UK
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P5.16 Arterial stiffness estimation using isobaric local pulse wave velocity
Sebastian Grai1,2, Damian Craiem1,2, Gustavo Staffieri3, Diego Nannini3
1Favaloro University, Buenos Aires, Argentina, 2CONICET, Buenos Aires, Argentina, 3Arterium, Rosario, Argentina

P5.17 Carotid pulse pressure assessment by means of an accelerometric sensor
Nicole Di Lascio1,4, Vincenzo Gemignani2, Rosa Maria Bruno4, Elisabetta Bianchini2, Francesco Stea2,3, Lorenzo Ghiadoni3, Francesco Faita2
1Institute of Life Science, Scuola Superiore Sant’Anna, Pisa, Italy, 2Institute of Clinical Physiology, National Research Council, Pisa, Italy, 3Department of Internal Medicine, University of Pisa, Pisa, Italy

P5.18 Transradial approach for vertebral artery stenting: single-center experience.
Damian Maciejewski1, Lukasz Tekieli1, Anna Kablak-Ziembicka1, Karolina Dzierwa1, Piotr Paluszek2, Andrzej Brzychczy2, Grzegorz Lewinski2, Magdalena Wojcik-Pedziwiatr3, Roman Machnik2, Piotr Pieniazek1
1Department of Interventional Cardiology, Institute of Cardiology, Collegium Medicum, Jagiellonian University, John Paul II Hospital, Krakow, Poland, 2Department of Vascular Surgery and Endovascular Interventions, John Paul II Hospital, Krakow, Poland, 3Department of Neurology, John Paul II Hospital, Krakow, Poland

P5.19 Transradial approach for carotid artery stenting: single-center experience.
Damian Maciejewski1, Lukasz Tekieli1, Anna Kablak-Ziembicka1, Piotr Paluszek2, Mariusz Trystula1, Karolina Dzierwa1, Magdalena Wojcik-Pedziwiatr3, Roman Machnik2, Grzegorz Lewinski2, Piotr Pieniazek1
1Department of Interventional Cardiology, Institute of Cardiology, Collegium Medicum, Jagiellonian University, John Paul II Hospital, Krakow, Poland, 2Department of Vascular Surgery and Endovascular Interventions, John Paul II Hospital, Krakow, Poland, 3Department of Neurology, John Paul II Hospital, Krakow, Poland

P5.20 Measure of change in carotid-radial pulse wave velocity after reactive hyperaemia
Hakim Khettab1, Benjamin Nayagom1, Sandrine Millasseau1, Stephane Laurent2, Pierre Boutouvery1
1HEGP, APHP, Paris, France, 2Pulse Wave Consulting, St LEu la foret, France

P5.21 Percutaneous coronary interventions of chronic total occlusions: gender differences - single center experience.
Leszek Bryniarski1, Sławomir Surowiec1, Lukasz Klima2, Michał Terlecki2, Piotr Jankowski3, Marek Rajzer1, Piotr Kusak1, Tadeusz Krolikowski1, Adam Curyło1, Dariusz Dudek2, Danuta Czarnecka3
11st Department of Cardiology, Interventional Electrophrocardiology, and Arterial Hypertension, Jagiellonian University, Medical College, University Hospital, Krakow, Poland, 22nd Department of Cardiology and Cardiovascular Interventions, Jagiellonian University, Medical College, University Hospital, Krakow, Poland
FRIDAY 16TH OCTOBER 2015

16:05  Parallel Poster Session VI: Clinical science
   Chair: Johannes Baulmann, Bo Fernhall, Isabel Ferreira

P6.1  Diurnal changes in pulse pressure amplification in normotensive, hypertensive dipper and hypertensive non-dipper patients
   Sandrine Millasseau¹, Yulia Kotovskaya², Jirar Topouchian³, Igor Posokhov⁴
   ¹Pulse Wave Consulting, Saint Leu la Foret, France, ²Russian Peoples Friendship University, Moscow, Russia, ³Diagnostic and Therapeutic Center, Hotel Dieu Hospital, Paris, France, ⁴Hemodynamic Laboratory Ltd, Nizhny Novgorod, Russia

P6.2  Aortic-to-brachial stiffness gradient independently predicts kidney function: case-control comparison between patients with type 2 diabetes and non-diabetic controls
   Dean Picone¹, Martin Schultz², Rachel Clime³, Velandai Srikanth⁴, James Sharman¹
   ¹Menzies Institute for Medical Research, University of Tasmania, Hobart, Tasmania, Australia, ²Stroke and Ageing Research Group, Monash Medical Centre, Dept. of Medicine, Southern Clinical School, Monash University, Melbourne, Victoria, Australia

P6.3  Platelet activity in teen girls with primary arterial hypertension
   Indre Bauzieien¹, Kazys Simanauskaien², Virginijus Sapoka³, Vytautas Kasiulevičien³, Kristina Ryliškiene³, Reda Matuzevičien³, Augustina Jankauskiene³, Tomas Rekausien²
   ¹Faculty of Medicine Vilnius University, Vilnius, Lithuania, ²Department of Mathematical Statistics, Gediminas Technical University, Vilnius, Lithuania

P6.4  Platelet activity in teenage boys with primary arterial hypertension
   Indre Bauzieien¹, Kazys Simanauskaien², Virginijus Sapoka³, Vytautas Kasiulevičien³, Reda Matuzevičien³, Kristina Ryliškiene³, Augustina Jankauskiene³, Tomas Rekausien²
   ¹Faculty of Medicine Vilnius University, Vilnius, Lithuania, ²Department of Mathematical Statistics, Gediminas Technical University, Vilnius, Lithuania

P6.5  Effectiveness of Facebook for participant recruitment into a blood pressure randomised controlled clinical trial
   Erin Nash¹, James Sharman¹
   ¹Menzies Institute for Medical Research, University of Tasmania, Hobart, Tasmania, Australia

P6.6  Nitroglycerin improves systolic myocardial efficiency
   Haotian Gu¹, Henry Fok², Benyu Jiang³, Manish Sinha³, John Simpson², Phil Chowienczyk¹
   ¹King’s College London, London, UK, ²Evelina London Children’s Hospital, London, UK

P6.7  Determinants for differences in central systolic blood pressure caused by different calibration methods
   Christopher Mayer¹, Martin Bauhofer², Bernhard Hametner³, Christoph Schmaderer³, Uwe Heemann⁴, Siegfried Wassertheurer⁵, Marcus Baumann⁶
   ¹AIT Austrian Institute of Technology GmbH, Vienna, Austria, ²Technische Universität München, Munich, Germany

P6.8  Comparison of central blood pressure estimated by upper-arm cuff-based device with radial tonometry
   Xiaoping Peng¹, Martin Schultz¹, Walter Abhayaratna², Michael Stowasser², James Sharman¹
   ¹Menzies Institute for Medical Research, University of Tasmania, Hobart, TAS, Australia, ²Australia National University, Canberra, ACT, Australia, ³The University of Queensland, Brisbane, QLD, Australia
P6.9 Measuring arterial stiffness using pOpmetre® in the african heterozygous and homozygous sickle cell disease
Valentine Ouédraogo1, Hasan Obeid2, Magid Hallab3, Isabelle Signolet4, Mor Diaw1, Amadou Ba1,
Georges Lethériotis1
1Hospital of Dakar, Senegal, Dakar - Senegal, Senegal, 2Georges Pompidou European Hospital, Paris - France, France, 3Hospital of Nantes, Nantes - France, France, 4Hospital of Angers, Angers - France, France

P6.10 Alcohol intake is associated with 24-hour aortic blood pressure in a young healthy student cohort
James Thomas1, Niamh Chapman1, Laura Watkeys1, Maria Kearney1, Sue King1, Eric Stohr1, John Cockcroft2, Margaret Munnery2, Carmel McEniery3, Barry McDonnell1
1Cardiff School of Health Sciences, Cardiff Metropolitan University, Cardiff, UK, 2Wales Heart Research Institute, Cardiff University, Cardiff, UK, 3Division of Experimental Medicine and Immunotherapeutics, University of Cambridge, Cambridge, UK

P6.11 The Framingham Risk Score in chronic obstructive pulmonary disease
Nichola Gale1, Margaret Munnery1, Ali Albaratti1, Dennis Shale1, John Cockcroft1
1Cardiff University, Cardiff, UK

P6.12 Aortic and local carotid stiffness: relationship with cardiac and vascular organ damage in a general population sample in northern italy
Anna Paini1, Massimo Salvetti1, Claudia Agabiti Rosei1, Fabio Bertacchini1, Giulia Maruelli1, Giulia Rubagotti1, Efrem Colonetti1, Carlotta Donini1, Elisa Casella1, Enrico Agabiti Rosei1, Maria Lorenza Muiesan1
1Internal Medicine, University of Brescia, Italy

P6.13 Ambulatory and office central systolic blood pressure is more closely associated with left ventricular mass than ambulatory and office peripheral systolic blood pressure in a young normotensive population
Maria Kearney1, James Thomas3, Niamh Chapman1, Laura Watkeys3, Margaret Munnery2, John Cockcroft2, Rob Shave1, Carmel McEniery2, Eric Stöhr3, Barry McDonnell4
1Cardiff Metropolitan University, Cardiff, UK, 2Wales Heart Research Institute, Cardiff University, Cardiff, UK, 3University of Cambridge, Cambridge, UK

P6.14 The effect of physical activity on 24-hour Augmentation Index.
Niamh Chapman1, James Thomas3, Maria Kearney1, Laura Watkeys3, Margaret Munnery2, John R Cockcroft2, Carmel M McEniery3, Eric J Stohr4, Barry J McDonnell1
1Cardiff Metropolitan University, Cardiff, UK, 2Wales Heart Research Institute, Cardiff University, Cardiff, UK, 3Division of Experimental Medicine and Immunotherapeutics, University of Cambridge, Cambridge, UK

P6.15 Attenuation of arterial stiffness gradient with age and its impact on central pulse wave profile in dialysis patients
Catherine Fortier1,2, Marie-Pier Desjardins1,2, David Turgeon1,2, Karine Marquis1, Marcel Lebel1, Mohsen Agharazii1,2
1Université Laval, Québec,QC, Canada, 2Chu de Québec Research Center, Québec,QC, Canada
P6.16  Left ventricular geometry and carotid vascular damage in patients undergoing coronary angiography
M Salvetti1, A Paini1, MF Cesana2, A Moreo3, R Facchetti2, P Faggiano2, S Careri4, GF Mureddu4, N Gaibazzi5, F Rigo5, C Giannattasio2,3, ML Muiesan1
1Internal Medicine, University of Brescia, Italy, 2Department Scienze della Salute, Bicocca University, Milano, Italy, 3Departement Cardiovascolare De Gasperi, Bicocca University, Milano, Italy, 4Cardiology, University of Messina, Italy, 5Hospital San Giovanni-Addolorata, Rome, Italy, 6University of Parma, Parma, Italy, 7Cardiology, Ospedale dell’Angelo, Mestre-Venezia, Italy, 8Cardiology, University of Brescia, Italy

P6.17  Cardiovascular risk factors contribute to the variance of wall-to-lumen ratio
Rytis Masilniunas1, Kristina Ryliskiene1,2, Ligita Ryliskyte3,4, Rokas Navickas3,4, Jurgita Kuzmickiene1,2, Jolita Badariene12, Dalius Jatuzis1,2, Aleksandras Laucevicius12
1Department of Neurology, Vilnius University Hospital Santariskiu klinikos, Vilnius, Lithuania, 2Clinic of Neurology and Neurosurgery, Faculty of Medicine, Vilnius University, Vilnius, Lithuania, 3Department of Cardiovascular Medicine, Vilnius University Hospital Santariskiu klinikos, Vilnius, Lithuania, 4Clinic of Cardiac and Vascular Diseases, Faculty of Medicine, Vilnius University, Vilnius, Lithuania

P6.18  Cardiovascular target organ damage in premenopausal systemic lupus erythematosus patients and in controls; are there any differences?
A Paini1, L Andreoli2, M Salvetti1, F Dall’Ara2, S Piantoni2, C Donini1, C Agabiti Rosei1, F Bertacchini1, D Stassaldi1, E Agabiti Rosei1, A Tincani2, ML Muiesan1
1Internal Medicine, University of Brescia, Italy, 2Rheumatology, University of Brescia, Italy

P6.19  Gender differences of arterial stiffness and central blood pressure in patients with arterial hypertension and the influence of menopause.
Valéria Costa-Hong1, Henrique Muela1, Allan Sales2, Luiz Bortolotto1
1Heart Institute (Incor), University of São Paulo Medical School, Hypertension Unit, São Paulo, São Paulo, Brazil, 2Heart Institute (Incor), University of São Paulo Medical School, Cardiovascular Rehabilitation and Exercise Physiology Unit, São Paulo, São Paulo, Brazil

P6.20  Role of altered vascular reactivity in the pathophysiology of acute mountain sickness
Rosa Maria Bruno1, Guido Giardini1, Sandro Malacadra2, Bruna Catuzzo1, Sabina Armenia3, Lorenzo Ghiadoni4, Raffaele Brustia5, Paolo Laveder2, Paolo Salvetti6, Emmanuel Cauchy7, Lorenza Pratali1
1Institute of Clinical Physiology, CNR, Pisa, Italy, 2University of Padua, Padua, Italy, 3Valle d’Aosta Regional Hospital, Aosta, Italy, 4University of Pisa, Pisa, Italy, 5Hôpital Saint-Antoine, Paris, France, 6Istituto Auxologico Italiano, Milano, Italy, 7IFREMMONT, Chamonix, France

16:05  Parallel Poster Session VII: Clinical science
Chair: Carmel McEniery, James Sharman, Arno Schmidt-Trucksäss

P7.1  Increased platelet reactivity is responsible of modifications of thrombin generation in patients with uncontrolled arterial hypertension.
Jeremy Lagrange1, Yvonne Weiher1, Susanne Karbach1,2, Philip Wenzel1,2
1Center for Thrombosis and Hemostasis, Mainz, Germany, 2Department of Medicine 2 University Medical Center, Mainz, Germany
FRIDAY 16TH OCTOBER 2015

P7.2 Very early clinical vascular and heart markers of newly recognized hypertension in middle age adults
Olga Siga³, Jarosław Królczyk¹, Anna Dzieża-Grudnik¹, Jolanta Walczewska³, Barbara Wizner¹, Tomasz Grodzicki¹
¹Department of Internal Medicine and Gerontology, Jagiellonian University Medical College/University Hospital, Cracow, Poland

P7.3 Risk factors control in elderly patients with peripheral artery disease
Barbara Gryglewska³, Dorota Studzinska³, ¹Department of Internal Medicine and Gerontology, Medical College, Jagiellonian University, Kraków, Poland, ²Department of Internal Medicine and Angiology, Hospital of the Order of Brothers Hospitallers, Kraków, Poland

P7.4 Morning central blood pressure surge does not differ between men and women.
Agnieszka Bednarek¹, Piotr Jankowski¹, Agnieszka Olszanecka¹, Adam Windak², Kalina Kawecka-Jaszczyk¹, Danuta Czarnecka¹
¹Jagiellonian University, 1st Department of Cardiology, Interventional Electrocadiotherapy and Hypertension, Krakow, Poland, ²Jagiellonian University Medical College, Department of Internal Medicine and Gerontology, Krakow, Poland

P7.5 Relationships between 24 hour urinary cortisol metabolites and structural cardiac and arterial indices in people with or at risk of type 2 diabetes
Charlotte Mills¹,³, Luca Facconti¹,³, Hannah Crickmore¹, Fahad Iqbal¹, Anne Risser¹, Doina Bobeica³, Lea Ghataore³, Virginia Govoni¹,³, Maria-Linda Casagrande¹,³, Andrew Webb²,³, Norman Taylor², Kennedy Cruickshank³
¹King’s College London, Division of Diabetes and Nutritional Sciences, London, UK, ²King’s College London, British Heart Foundation Centre, Cardiovascular Division, Department of Clinical Pharmacology, London, UK, ³Guy’s and St Thomas’ NHS Foundation Trust, NIHR Biomedical Research Centre, London, UK, King’s College Hospital, Viapath, Department of Clinical Biochemistry, London, UK

P7.7 Testosterone levels in hypertensive patients with vascular organ damage
Dimitrios Terentes-Printzios³, Charalampos Vlachopoulos³, Nikolaos Ioakeimidis³, Athanasios Angelis¹, Panagiota Pietri¹, Mahmoud Abdelrasoul¹, Christos Georgakopoulos¹, Dimitris Tousoulis¹
¹1st Dep of Cardiology, Athens, Greece

P7.8 The relationship between renal and cerebral blood flow pulsatility
Laura Watkeys¹, James Pearson¹,², Barry McDonnell³
¹Cardiff Metropolitan University, Cardiff, UK, ²University of Colorado, Colorado, USA

P7.9 Correlation between aortic pulse wave velocity and asymptomatic carotid atherosclerosis in apparently healthy individuals.
Renáta Marietta Bócskei¹, Béla Benczúr¹, Miklós Illyés¹, Erzsébet Valéria Hidvégi¹, Thomas Kahan¹, Attila Cziráki¹
¹University of Pécs Heart Institute and 1st Department of Internal Medicine, Pécs, Hungary, ²Karolinska Institut, Department of Clinical Sciences, Danderyd Hospital, Stockholm, Sweden

P7.10 Multi-site ultrasound assessment of arterial remodeling and distensibility in marathon runners
Rosa Maria Bruno¹, Elisabetta Bianchini¹, Nicole Di Lascio¹, Francesco Stea², Kristian Ujka¹, Alberto Marabotti¹, Erik Stroeken¹, Lorenzo Ghidoni¹, Lorenza Pratali¹
¹Institute of Clinical Physiology, CNR, Pisa, Italy, ²University of Pisa, Pisa, Italy, ³Radboud University, Nijmegen, The Netherlands
P7.11 Predictive value of endothelial dysfunction assessed by flow mediated vasodilatation and arterial stiffness parameters in thrombotic events of primary antiphospholipid syndrome

Agnes Dioszegi1, Katalin Veres2, Beata Kovacs1, Viktor Banhegyi1, Pal Soltesz2
1University of Debrecen, Clinical Center, Department of Internal Medicine, Division of Angiology, Debrecen, Hungary

P7.12 Pulse pressure and intima-media thickness in relation to serum vitamin D concentration in a sample of general population.

Agata Franczyk1, Katarzyna Stolarz-Skrzypek2, Agnieszka Olszanecka2, Wiktoria Wojciechowska2, Anna Wesolowska3, Kalina Kawecka-Jaszcz3, Danuta Czarnecka2
1Department of Clinical Pharmacy, Jagiellonian University Medical College, Krakow, Poland, 21st Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University Medical College, Krakow, Poland

P7.13 Relation of parameters of vascular stiffness to cardiac structure and function in patients at risk of or with type 2 diabetes

Luca Facconti1,2, Charlotte E. Mills1,2, Virginia Govoni1,3, Maria L. Casagrande1,3, Andrew J. Webb2,3, Kennedy J. Cruickshank1,3
1King’s College London, Division of Diabetes and Nutritional Sciences, London, UK, 2King’s College London, British Heart Foundation Centre, Cardiovascular Division, Department of Clinical Pharmacology, London, UK, 3Guy’s and St Thomas’ NHS Foundation Trust, NIHR Biomedical Research Centre, London, UK

P7.14 Serum inflammatory markers are poor predictors of vascular inflammation and vascular inflammation does not determine aortic stiffness in Chronic Obstructive Pulmonary Disease (COPD)

Marie Fisk1, Divya Mohan4, Joseph Cherian1, Julia Forman1, Carmel M McEniery1, John R Cockcroft2, Ruth Tal-Singer3, Michael I Polkey1, Ian B Wilkinson1
1University of Cambridge and Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK, 2Wales Heart Research Institute, Cardiff University, Cardiff, UK, 3GSK, Pennsylvania, USA, 4Imperial College and Royal Brompton & Harefield Hospital NHS Foundation Trust, London, UK

P7.15 Reactive Hyperemia Index and flow mediated dilation with upper- and lower-arm cuff occlusion: Are they measuring the same?

Lorenzo Ghiadoni1, Rosa Maria Bruno2, Francesco Regoli1, Giuseppe Penno3, Stefano Taddei1
1University of Pisa, Pisa, Italy, 2Institute of Clinical Physiology, CNR, Pisa, Italy

P7.16 Validation of an oscillometric brachial cuff method to derive central blood pressure using different calibration modes

Martin Schultz1, Ahmad Qasem2, Xiaqing Peng1, Dean Picone1, J.Andrew Black3, Nathan Dwyer3, Phillip Roberts-Thomson3, James Sharman3
1Menzies Institute for Medical Research, University of Tasmania, Hobart, Australia, 2University of New South Wales, Sydney, Australia, 3Royal Hobart Hospital, Hobart, Australia

P7.17 Disassociation of blood pressure from aortic reservoir characteristics between the aorta and radial arteries

Xiaqing Peng1, Martin Schultz2, Justin Davies2, Dean Picone1, Andrew Black3, Nathan Dwyer3, Phil Roberts-Thomson3, James Sharman3
1Menzies Institute for Medical Research, University of Tasmania, Hobart, TAS, Australia, 2International Centre for Circulatory Health, Imperial College, London, W2 1LA, UK, 3Royal Hobart Hospital, Hobart, TAS, Australia
FRIDAY 16TH OCTOBER 2015

P7.18 Validation testing for the non-invasive measurement of aortic reservoir characteristics from brachial cuff oscillometric pressure waveforms
Xiaojing Peng1, Martin Schultz1, Justin Davies2, Dean Picone1, Andrew Black3, Nathan Dwyer3, Phil Roberts-Thomson3, James Shuman3
1Menzies Institute for Medical Research, University of Tasmania, Hobart, TAS, Australia, 2International Centre for Circulatory Health, Imperial College, London, W2 1LA, UK, 3Royal Hobart Hospital, Hobart, TAS, Australia

P7.19 Arterial stiffness and disease-related organ damage in systemic lupus erythematosus
Giacomo Pucci1,2, Francesca Battista1,2, Elena Bartoloni Bocci1,2, Fabio Anastasio1,2, Mariano Crapa1,2, Leandro Sanesi1,2, Roberto Gerli1,2, Giuseppe Schillaci1,2
1Unit of Internal Medicine, Terni University Hospital, Terni, Italy, 2Department of Medicine, University of Perugia, Perugia, Italy, 3Rheumatology Unit, Perugia Hospital, Perugia, Italy

P7.20 The impact of obstructive sleep apnea on arterial stiffness is independent of gender in patients with hypertension
Raimundo Jenner1, Luiz Bortolotto1, Valéria Costa-Hong1, Silvia Souza1, Sandra Teixeira1, Heno Lopes1, Geraldo Lorenzi1, Eduardo Krieger3, Luciano Drager1
1Unity of Hypertension, Heart Institute (InCor), São Paulo, São Paulo, Brazil

16:05 Parallel Poster Session VIII: Clinical science and therapeutics
Chair: Dariusz Gąscecki, Giuseppe Schillaci, Krystyna Łoboz-Grudzień

P8.1 Central hemodynamics in systemic sclerosis: A case-control study
Francesca Battista1,2, Giacomo Pucci1,2, Elena Bartoloni Bocci1,2, Francesca Cannarile1,2, Alessia Alunno1,2, Fabio Anastasio1,2, Roberto Gerli1,2, Giuseppe Schillaci1,2
1Department of Medicine University of Perugia, Perugia, Italy, 2Unit of Internal Medicine Terni University Hospital, Terni, Italy, 3Unit of Rheumatology Perugia University Hospital, Perugia, Italy

P8.2 Arterial wave reflections: looking beyond the first harmonic and pressure inflection points to assess late-systolic ventricular loading
Timothy Phan1, John Li1, Zoubair Ahmed2, Ejaz Shah2, Vandana Panchal2, Julio Chirinos2
1Rutgers University, Piscataway, New Jersey, USA, 2University of Pennsylvania, Philadelphia, Pennsylvania, USA, 3Philadelphia VA Medical Center, Philadelphia, Pennsylvania, USA

P8.3 Relationship between pulse wave velocity and biopsy proven renal microvascular lesions
Rania Kheder-Ellekh1, Hela Jebali1, Lamia Rais1, Fatma Ben Moussa1, Karim Zouaghi1
1La Rabta hospital, Tunis, Tunisia

P8.4 Ventricular-arterial coupling at rest and after handgrip isometric exercise in hypertensive patients
Anna Bogomaz1, Yuliya Kotovskaya1, Zhanna Kobalava1, Roman Akhmetov1
1PEOPLES FRIENDSHIP UNIVERSITY OF RUSSIA, MOSCOW, Russia

P8.5 Morning central blood pressure surge is related to age.
Agnieszka Bednarek1, Piotr Jankowski1, Agnieszka Olszanecka1, Adam Windak2, Kalina Kawecka-Jaszcz1, Danuta Czarnecka1
1Jagiellonian University, 1st Department of Cardiology, Interventional Electrocardiology and Hypertension, Krakow, Poland, 2Jagiellonian University Medical College, Department of Internal Medicine and Gerontology, Krakow, Poland
FRIDAY 16TH OCTOBER 2015

P8.6 Pulsatile component of central blood pressure and the risk of stroke in coronary patients. Results from the Aortic Blood Pressure and Survival Study.
Piotr Jankowski\textsuperscript{1}, Agnieszka Bednarek\textsuperscript{1}, Małgorzata Kloth-Badelek\textsuperscript{1}, Magdalena Loster\textsuperscript{1}, Leszek Bryniarski\textsuperscript{2}, Kalina Kawecka-Jaszcz\textsuperscript{1}, Danuta Czarnecka\textsuperscript{3}
\textsuperscript{1}Jagiellonian University, 1st Department of Cardiology, Interventional Electrocardiology and Hypertension, Krakow, Poland

P8.7 Vascular endothelial senescence and metabolic syndrome
Dimitrios Terentes-Printzios\textsuperscript{1}, Charalambos Vachopoulos\textsuperscript{1}, Nikolaos Ioakeimidis\textsuperscript{1}, Athanasios Aggelis\textsuperscript{1}, Panagiota Xaplanteris\textsuperscript{1}, Panagiota Pietri\textsuperscript{1}, Dimitrios Tousoulis\textsuperscript{1}
\textsuperscript{1}1st Department of Cardiology, Hippokration Hospital, Athens Medical School, Athens, Greece

P8.8 Central Arterial Stiffness in COPD
Ali Albarrati\textsuperscript{1,2}, Nichola Gale\textsuperscript{2}, Maggie Munnery\textsuperscript{2}, Sujoy Saikia\textsuperscript{2}, Dennis Shale\textsuperscript{2}, John Cockcroft\textsuperscript{2}
\textsuperscript{1}King Saud University, Riyadh, Saudi Arabia, \textsuperscript{2}Cardiff University, Cardiff, UK

P8.9 Effect of cardiac resynchronisation therapy on the arterial stiffness.
Anna Przybyla\textsuperscript{1}, Danuta Czarnecka
\textsuperscript{1}1 Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University, Medical College, Cracow, Poland

P8.10 Effects of bariatric surgery on endothelial function in extremely obese patients.
Anna Dzieja-Grudnik\textsuperscript{1}, Anna Gloszewksa\textsuperscript{1}, Krzysztof Rewiuk\textsuperscript{1}, Aleksander Kwater\textsuperscript{1}, Bartosz Zarzycki\textsuperscript{1}, Małgorzata Fedyk-Łukasik\textsuperscript{1}, Barbara Gryglewska\textsuperscript{1}, Tomasz Grodzicki\textsuperscript{1}
\textsuperscript{1}Department of Internal Medicine and Gerontology, Jagiellonian University, Medical College/University Hospital, Kraków, Poland

P8.11 Effect of cardiac resynchronisation therapy on the autonomic nervous system function.
Anna Przybyla\textsuperscript{1}, Danuta Czarnecka\textsuperscript{1}
\textsuperscript{1}1 Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University, Medical College, Cracow, Poland

P8.12 Carotid artery wave intensity analysis in healthy humans during exercise
Nicola Pomella\textsuperscript{1}, Eurico Wilhelm Neto\textsuperscript{1}, Christina Kolyva\textsuperscript{1}, Mark Rakobowchuk\textsuperscript{1}, Jose Gonzalez-Alonso\textsuperscript{1}, Ashraf William Khir\textsuperscript{1}
\textsuperscript{1}Brunel University London, Uxbridge, London, UK

P8.13 The role of hyaluronan in aortic stiffening in patients with rheumatoid arthritis.
Kathleen Connolly\textsuperscript{1}, Kaisa Maki-Petaja\textsuperscript{1}, Elizabeth Ribey\textsuperscript{1}, Chen Yen Ooi\textsuperscript{1}, Sarah Cleary\textsuperscript{1}, Ian Wilkinson\textsuperscript{1}
\textsuperscript{1}University of Cambridge, Cambridge, UK

P8.14 Elastic modulus of human aortas as a measure of stiffness
Kathleen Connolly\textsuperscript{1}, Ashraf Khir\textsuperscript{2}, Ye Li\textsuperscript{2}, Yasmin Yasmin\textsuperscript{2}, Ian Wilkinson\textsuperscript{1}
\textsuperscript{1}University of Cambridge, Cambridge, UK, \textsuperscript{2}Brunel University, London, UK

P8.15 The relation between arterial stiffness-related, and steady blood pressure components and left atrial volume in the context of left ventricular mass index
Marta Rojek\textsuperscript{1,2}, Jerzy Gasowski\textsuperscript{3}, Marek Rajzer\textsuperscript{1}, Tomasz Pizon\textsuperscript{4}, Danuta Czarnecka\textsuperscript{1}
\textsuperscript{1}1st Department of Cardiology, Interventional Electrocardiology and Arterial Hypertension, Jagiellonian University Medical College, Cracow, Poland, \textsuperscript{2}Medical Faculty, Dresden University of Technology, Dresden, Germany, \textsuperscript{3}Department of Internal Medicine and Gerontology, Jagiellonian University Medical College, Cracow, Poland, \textsuperscript{4}Department of Observational and Internal Medicine, University Hospital, Cracow, Poland
SCIENTIFIC PROGRAMME

FRIDAY 16TH OCTOBER 2015

P8.16 White matter lesions are associated with a significant decrease in the metabolism of the brain grey-matter from older hypertensive patients
Antoine Verger¹, Anna Kearney-Schwartz¹, Serge Bracard¹, Veronique Roch¹, Gabriela Hossu¹, Renaud Fay¹, Athanase Benetos¹, Pierre-Yves Marie¹, Laure Joly¹
¹Université de Lorraine, Nancy, France

P8.17 Higher on-treatment visit-to-visit systolic blood pressure variability is associated with higher baseline aortic systolic blood pressure in patients with controlled arterial hypertension
Elena Troitskaya¹, Yuliya Kotovskaya¹, Zhanna Kobalava¹
¹Peoples’ friendship university of Russia, Moscow, Russia

P8.18 Fixed dose bisoprolol/amlopidine combination diminishes bisoprolol-induced changes of aortic pulse pressure augmentation in hypertensive patients
Anna Bogomaz², Yuliya Kotovskaya³, Zhanna Kobalava³
²PEOPLES FRIENDSHIP UNIVERSITY OF RUSSIA, MOSCOW, Russia

17:15 Coach pickups for Conference Dinner
20:00 Conference Dinner
White matter lesions are associated with a significant decrease in the metabolism of the brain grey-matter from older hypertensive patients
Antoine Verger1, Anna Kearney-Schwartz1, Serge Bracard1, Veronique Roch1, Gabriela Hossu1, Renaud Fay1, Athanase Benetos1, Pierre-Yves Marie1, Laure Joly1
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Elena Troitskaya1, Yulia Kotovskaya1, Zhanna Kobalava1
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Fixed dose bisoprolol/amlodipine combination diminishes bisoprolol-induced changes of aortic pulse pressure augmentation in hypertensive patients
Anna Bogomaz1, Yuliya Kotovskaya1, Zhanna Kobalava1
1PEOPLES FRIENDSHIP UNIVERSITY OF RUSSIA, MOSCOW, Russia

Salt intake in relation to cardiovascular outcome and arterial stiffness
Katarzyna Stolarz-Skrzypek, Kraków, Poland
Chair: Pierre Boutouyrie, Ian B Wilkinson, Cambridge, UK

Oral Session V: Invited Lecture & Free Communications in Association with North American Artery Society
Chair: John Cockcroft, Bo Fernhall

Inertial-viscoelastic minimal model of the arterial system reconciles arterial compliance estimations
Timothy Phan1, John Li1, Maheshwara Koppula2, Izzah Vasim3, Swapna Varakantam3, Julio Chirinos1
1Rutgers University, Piscataway, New Jersey, USA, 2University of Pennsylvania, Philadelphia, Pennsylvania, USA, 3Philadelphia VA Medical Center, Philadelphia, Pennsylvania, USA

Soluble receptor for advanced glycation end-products and aortic stiffness in general population
Otto Mayer1, Jan Filipovsky1, Jitka Seidlerova1, Petra Karnosova1, Peter Wohlfahrt3, Renata Cifkova3, Jindra Windrichova1, Ondrej Topolcan1
1Charles University Medical School, Pilsen, Czech Republic, 2Charles University 1st Medical School, Prague, Czech Republic

The influence of sex and age on arterial function in response to an acute inflammatory stimulus.
Alexander Rosenberg1, Abbi Lane-Cordova2, Kanokwan Bunsawat1, Sang Ouk Wee3, Tracy Baynard1, Bo Fernhall1
1University of Illinois at Chicago, Chicago, II, USA, 2University of Iowa, Iowa City, IA, USA

Matrix Gla Protein in relation to left ventricular diastolic function
Thibault Petit1, Zhen-Yu Zhang1, Wen-Yi Yang2, Fang-Fei Wei2, Yu-Mei Gu2, Juditha Knez1, Nicholas Cauwenberghs2, Yan-Ping Liu1, Nadja Drummen1, Lutgarde Thijs1, Tatiana Kuznetsova1, Stefan Janssens2, Cees Vermeer3, Jan A Staessen1,2
1Studies Coordinating Centre, Research Unit Hypertension and Cardiovascular Epidemiology, KU Leuven Department of Cardiovascular Sciences, University of Leuven, Leuven, Belgium, 2R & D VitaK Group, Maastricht University, Maastricht, The Netherlands, 3Centre for Molecular and Vascular Biology, KU Leuven Department of Cardiovascular Sciences, University of Leuven, Leuven, Belgium

Measurement of arterial stiffness by ultrafast echo: comparison with echotracking in normotensive subjects and hypertensive patients
Louise Marais1,2, Mathieu Pernot3, Hakim Khettab1, Mickael Tanter1, Emmanuel Messas1,4, Mustapha Zidi2, Stéphane Laurent1,4, Pierre Boutouyrie1,4
1PARCC Inserm U970, Georges Pompidou European Hospital, Paris, France, 2Bioengineering Tissues and Neuroplasticity, EA 7377, Paris Est Créteil University, Créteil, France, 3Institut Langevin, ESPCI-ParisTech, CNRS UMR 7587, Inserm U979, Paris, France, 4Paris Descartes University, Paris, France

Association between endogenous serum testosterone concentrations and aortic pressures and pulse wave amplification indices in erectile dysfunction patients
Athanasios Angelis1, Dimitrios Terentes-Printzios1, Charalampos Vlachopoulos3, Nikolaos Ioakeimidis1, Panagiota Pietri1, Ioanna Gourgouli1, Christos Georgakopoulos1, Christodoulos Stefanidis1, Dimitrios Tousoulis1
11st Dep of Cardiology, Athens, Greece
SATURDAY 17TH OCTOBER 2015

10:30  Birth of the Latin-American ARTERY
Pedro Forcada, Luis Maria Pupi
Chair: Charalambos Vlachopoulos

10:45  Refreshments, Exhibition and Posters

11:15  McDonald Lecture
From COPD to Stroke: Past, Present, and Future
John Cockcroft, Cardiff, UK
Chair: Luc Van Bortel, Charalambos Vlachopoulos

11:45  Special Guest Lecture:
Systolic hypertension: more than just arterial stiffness?
Phil Chowienczyk, London, UK
Chair: Piotr Jankowski, Grzegorz Styczynski

12:15  Concluding Remarks:
Piotr Jankowski, Krakow, Poland, Charalambos Vlachopoulos, Athens, Greece

12:15  ARTERY Society Business Meeting (Members Only)

12:15  Light Lunch
SATURDAY 17 OCTOBER 2015

10:30 Birth of the Latin-American ARTERY
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12:15 Concluding Remarks:
Piotr Jankowski, Krakow, Poland, Charalambos Vlachopoulos, Athens, Greece

12:15 ARTERY Society Business Meeting (Members Only)

12:15 Light Lunch
Over 21,400 employees. Over 3,000 researchers preparing tomorrow’s medicines. 25% of turnover invested in Research and Development in 2014. 29 drug candidates currently under development in the following therapeutic fields: cardiovascular diseases, central nervous system and psychiatry, cancer, diabetes and metabolism, and rheumatology. Present in 146 countries over 5 continents.  
92% of SERVIER’s medicines are prescribed internationally.  
A turnover of 4 billion euros for 2014. SERVIER is the 8TH European R&D investor in the pharmaceutical sector.