International Symposium on:
URIC ACID AND CARDIOVASCULAR DISEASE:
BACK TO PATHOPHYSIOLOGY

PROGRAM

Salone del Podestà - Palazzo Re Enzo
(Piazza del Nettuno, 1 - Bologna)

Organized by
Department of Medical and Surgical Sciences (DIMEC)
Alma Mater Studiorum University of Bologna, Italy
Division of Renal Diseases and Hypertension University of Colorado
Anschutz Medical Campus - Denver CO, USA

December 1st - 3rd, 2016
Bologna (Italy)
The role of serum uric acid as a risk factor for CV disease has been extensively debated for many years without reaching a final agreement among clinicians and researchers. In particular, most of the evidence about the pathogenetic role of uric acid in CV disease have been achieved in the population of patients with severe hyperuricemia or gout, while its role in patients with mildly elevated serum levels of uric acid is only poorly recognized. Serum uric acid represents an important, independent risk factor for cardiovascular and renal disease in patients with hypertension, heart failure or diabetes. Elevated serum uric acid is highly predictive of mortality in patients with heart failure or coronary artery disease and of cardiovascular events in patients with diabetes.

Although the mechanism(s) by which uric acid may play a pathogenetic role in cardiovascular disease is still unclear, hyperuricemia is associated with deleterious effects on endothelial dysfunction, oxidative metabolism, platelet adhesiveness, hemorheology and aggregation. Whether a reduction in uric acid impacts CV and renal disease remains to be determined, however, recent findings from LIFE suggest the possibility that a treatment-induced decrease in serum uric acid may indeed attenuate cardiovascular risk. Clearly, randomized clinical trials are needed to investigate further the long-term cardioprotective benefits issue of reducing hyperuricemia in hypertensive patients.

The main purpose of the present symposium is twofold. First of all to reinforce the role of uric acid in the pathogenesis of gout and gout-related non-rheumatic diseases including renal involvement. Second to provide an updated review of the evidence supporting a possible and relevant role of (elevated) uric acid as a risk factor for cardiovascular diseases. To fullfil this goal we will present a series of comprehensive lectures mainly focused on the different aspects of the relationship between serum uric acid and cardiovascular diseases with the aim to define whether or not the increase in the amount of our knowledge about uric acid may contribute to decrease the number of major risk factors.

Presidents of the Meeting
Claudio Borghi and Richard J. Johnson
With the patronage of

Regione Emilia-Romagna

Comune di Bologna

SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA
Azienda Ospedaliera Universitaria di Bologna
Policlinico S. Orsola-Malpighi

ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DEPARTAMENTO DI SCIENZE MEDICHE E CHIRURGICHE

European Society of Hypertension

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### Thursday, December 1st, 2016 – Afternoon

**Opening ceremony**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 06.00 p.m. | Welcome addresses  
C. Borghi (Bologna, I) |
| 06.15 p.m. | **MAIN LECTURE**  
**Introduction:**  
M. H. Alderman (New York - NY, USA)  
E. Ambrosioni (Bologna, I)  
R. J. Johnson (Denver - CO, USA)  
*Uric acid and CV disease: from the back to the future* |
| 07.00 p.m. | Welcome cocktail |

### Friday, December 2nd, 2016 – Morning

**SESSION I - Serum uric acid and gout: from the human evolution to mechanism of disease**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 09.00 a.m. | F. M. Galassi (Zurich, CH)  
*Uric acid and CV disease: an historical perspective* |
| 09.30 a.m. | T. Gibson (London, UK)  
*Biochemistry of uric acid in clinical perspective* |
| 10.00 a.m. | E. E. Kelley (Morgantown - WV, USA)  
*Manipulating XOR-Derived Product Identity (Uric Acid, ROS and \( \cdot NO \)) to address metabolic/cardiovascular dysfunction allied to obesity* |
| 10.30 a.m. | H. Sakurai (Tokyo, J)  
*Transporter-centric view of urate (patho)physiology* |
| 11.00 a.m. | Coffee break |
### SESSION II - Serum uric acid, gout and cardio-renal disease: the genetic approach

**Chairpersons:**
- J. Dawson (Glasgow, UK)
- M. Volpe (Rome, I)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title/Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.30 a.m.</td>
<td>T. R. Merriman (Dunedin, NZ)</td>
<td>Genetic aspects of gout</td>
</tr>
<tr>
<td>12.00 a.m.</td>
<td>J. Dawson (Glasgow, UK)</td>
<td>Genes, uric acid and CV diseases</td>
</tr>
<tr>
<td>12.30 p.m.</td>
<td>C. Zoccali (Reggio Calabria, I)</td>
<td>The challenge of Mendelian randomization approach</td>
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<tr>
<td>01.00 p.m.</td>
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<td>Lunch</td>
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</tbody>
</table>

### Friday, December 2nd, 2016 – Afternoon

### SESSION III - Gout and cardio-renal co-morbidities

**Chairpersons:**
- G. Minisola (Rome, I)
- P. Pauletto (Treviso, I)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title/Topic</th>
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</thead>
<tbody>
<tr>
<td>02.00 p.m.</td>
<td>L. Punzi (Padua, I)</td>
<td>The interaction between gout and other rheumatic diseases: current trends</td>
</tr>
<tr>
<td>02.30 p.m.</td>
<td>C. Ferri (L’Aquila, I)</td>
<td>The problem of cardio-renal diseases in patients with gout</td>
</tr>
<tr>
<td>03.00 p.m.</td>
<td>L. M. Ruilope (Madrid, E)</td>
<td>The management of gout in the era of complexity</td>
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<tr>
<td>03.30 p.m.</td>
<td></td>
<td>Coffee break</td>
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### SESSION IV - Serum uric acid and hypertension

**Chairpersons:**
- G. Mancia (Milan, I)
- A. J. Manolis (Athens, GR)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>04.00 p.m.</td>
<td>D. I. Feig (Birmingham - AL, USA)</td>
<td>Uric acid and hypertensive disease at early age</td>
</tr>
<tr>
<td>04.30 p.m.</td>
<td>G. Grassi (Milan, I)</td>
<td>Effects of serum uric acid on blood pressure lowering treatment</td>
</tr>
<tr>
<td>05.00 p.m.</td>
<td>S. Taddei (Pisa, I)</td>
<td>The effect of antihypertensive drugs on serum uric acid: does it matter?</td>
</tr>
<tr>
<td>05.30 p.m.</td>
<td><strong>MAIN LECTURE</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>Introduction:</strong> M. H. Alderman (New York - NY, USA)</td>
<td>Serum uric acid and the endothelium: is this the battlefield?</td>
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<tr>
<td>06.00 p.m.</td>
<td></td>
<td>End of the session</td>
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</tbody>
</table>

**Saturday, December 3rd, 2016 – Morning**

### SESSION V - Uric acid and cardiovascular diseases beyond hypertension

**Chairpersons:**
- P. G. Camici (Milan, I)
- L. M. Ruilope (Madrid, E)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
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<tbody>
<tr>
<td>08.30 a.m.</td>
<td>L. O. Lerman (Rochester - MN, USA)</td>
<td>Hyperuricemia and CV disease: the role of renal impairment</td>
</tr>
<tr>
<td>09.00 a.m.</td>
<td>W. Doehner (Berlin, D)</td>
<td>Complexity of heart failure: the emerging role of hyperuricemia</td>
</tr>
<tr>
<td>09.30 a.m.</td>
<td>A. J. Manolis (Athens, GR)</td>
<td>Serum uric acid and atrial fibrillation: update on epidemiology and disease mechanism</td>
</tr>
<tr>
<td>10.00 a.m.</td>
<td>C. Borghi (Bologna, I)</td>
<td>Hyperuricemia and new onset diabetes/metabolic syndrome</td>
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<tr>
<td>10.30 a.m.</td>
<td></td>
<td>Coffee break</td>
</tr>
<tr>
<td>Time</td>
<td>Speaker</td>
<td>Topic</td>
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<tr>
<td>11.00 a.m.</td>
<td>G. Desideri (L’Aquila, I)</td>
<td>Is there any “J-shaped” curve for serum uric acid?</td>
</tr>
<tr>
<td>11.30 a.m.</td>
<td>Y. Shibagaki (Sugao, J)</td>
<td>Renal protective effects of urate lowering drugs</td>
</tr>
<tr>
<td>12.00 a.m.</td>
<td>R. Pontremoli (Genoa, I)</td>
<td>Does urate lowering treatment reduces CV risk in renal patients?</td>
</tr>
<tr>
<td>12.30 p.m.</td>
<td>T. MacDonald (Dundee, UK)</td>
<td>Cardiovascular effects of urate lowering treatment: the role of drugs</td>
</tr>
<tr>
<td>01.00 p.m.</td>
<td>J. T. Kielstein (Braunschweig, D)</td>
<td>The preventive role of urate lowering treatment: who should be treated?</td>
</tr>
<tr>
<td>01.30 p.m.</td>
<td></td>
<td>Concluding Remarks</td>
</tr>
<tr>
<td>01.45 p.m.</td>
<td></td>
<td>Lunch</td>
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</tbody>
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### GENERAL INFORMATION

| **Meeting venue** | The venue of the Symposium will be Salone del Podestà, Palazzo Re Enzo – Piazza del Nettuno, 1 - Bologna (Italy) |
| **Secretariat during the Meeting** | The Secretariat will be open at the following times:  
- Thursday, December 1st, from 04.00 p.m. to 07.00 p.m.  
- Friday, December 2nd, from 08.00 a.m. to 06.00 p.m.  
- Saturday, December 3rd, from 08.00 a.m. to 01.30 p.m. |
| **Official language** | The official language of the Symposium will be English. |
| **Registration** | The Symposium is free to attend. |
| **Technical facilities speakers** | Facilities will be available for computer presentations and overhead projections.  
A slide center with PC (Powerpoint for Windows) will be available to check and preview presentations. It is essential that speakers take their presentations to the slide center at least one hour before the session starts.  
The slide center will be open at the following times:  
- Thursday, December 1st, from 04.00 p.m. to 07.00 p.m.  
- Friday, December 2nd, from 08.00 a.m. to 06.00 p.m.  
- Saturday, December 3rd, from 08.00 a.m. to 01.30 p.m. |
| **Lunches and coffee breaks** | Lunches and coffee breaks will be served at Palazzo Re Enzo. |
| **Abstract book** | Participants will receive the Abstract book in the congress kit. |
| **Certificate of attendance** | The certificate of attendance will be available, on request, at the Secretariat Desk. |
Italian CME Credits

Italian credits for Italian Physicians have been requested for **December 2nd – 3rd only.**
Provider Italian CME Credits:
I&C srl: 5387
ID CME ITALIAN CREDITS: 5387 - 168136
CME CREDITS N. 5,5
I&C srl is responsible for the content, the quality and the ethical honesty of the CME activity. The meeting is accredited for the following specialties: Nurse, Pharmacist, Biologist, Physician and Surgeon (Cardiology, Internal Medicine, Metabolic and Diabetes Diseases, Nephrology, Rheumatology, Endocrinology, Neurology, Clinical Biochemistry, Hygiene). The physicians belonging to other disciplines will not get the credits. The attendance to the meeting is partially on sponsor companies invitation.

**METHODOLOGY**
Residential.

**COURSE OBJECTIVES**
Clinical, Diagnostic, Therapy, Treatment Path.

**LEARNING TEST**
The credits will be obtained by attending both days of the meeting (100% of attendance), by answering correctly to the 75% of the CME test questions and by filling the CME forms delivered at the meeting.

European CME Credits

EBAC and EACCME credits have been requested for **December 1st - 2nd - 3rd** for the following disciplines:
Cardiology, Internal Medicine, Metabolic and Diabetes Diseases, Nephrology, Rheumatology, Endocrinology, Neurology, Clinical Biochemistry, Hygiene.
‘URIC ACID CARDIOVASCULAR DISEASE: BACK TO PATHOPHYSIOLOGY’ (Event code: 14792) was granted 10 European CME credits (ECMEC) by the European Accreditation Council for Continuing Medical Education (EACCME).

‘URIC ACID CARDIOVASCULAR DISEASE: BACK TO PATHOPHYSIOLOGY’ is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS), www.uems.net. ‘URIC ACID CARDIOVASCULAR DISEASE: BACK TO PATHOPHYSIOLOGY’ is designated for a maximum of 10 hours of European external CME credits. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME credit to AMA credit can be found at www.ama-assn.org/go/internationalcme.

Live educational activities, occurring outside of Canada, recognized by the UEMS-EACCME for ECMEC credits are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.

**EACCME credits**
Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity. The EACCME credit system is based on 1 ECMEC per hour with a maximum of 3 ECMECs for half a day and 6 ECMECs for a full-day event.
The event “URIC ACID CARDIOVASCULAR DISEASE: BACK TO PATHOPHYSIOLOGY” is accredited by the European Board for Accreditation in Cardiology (EBAC) for 12 CME credit hours of External CME credits.

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

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