HOT OFF THE PRESS

A Aliskiren trial stopped

The ALTITUDE trial was recently stopped prematurely for safety reasons. During the last few years, concerns have been raised about combining two Renin-Angiotensin-Aldosterone inhibitors in patients with hypertension. In particular, a decreased glomerular filtration has been shown when ACE-inhibitors and ARB’s were combined.

The ALTITUDE trial is a placebo-controlled trial investigating the effects of the renin inhibitor aliskiren on top of ACE or ARB treatment in 21000 patients with diabetic nephropathy. The study was stopped by the safety committee, not only because of an increased risk for renal complication, but also because of higher risk for stroke. The European Medicines Agency, no longer recommends the use of aliskiren together with ACE-inhibitors or ARB’s.


Chlortalidone prolongs life

Many randomized controlled trials of antihypertensive drugs have shown positive effects on the incidence of stroke and myocardial infarction. However, very few studies show a positive effect on total mortality. The Systolic Hypertension in the Elderly Program (SHEP) randomized elderly patients (Mean age 72 years) to chlortalidone or placebo. After 4.5 years, the risk for stroke and coronary artery disease decreased significantly. However, total mortality did not decrease.

A long-time follow-up 22 years after the trial ended has now been published. It showed that, for every month a patient was treated with chlortalidone within the trial, life was prolonged with one day during the long-time follow-up after the trial.


Measuring blood pressure in both arms

A difference in systolic blood pressure between the arms is related to stenosis in the subclavian artery. This in turn, is also related to stenosis in other arteries. In a recent systematic review, the prognostic value of a systolic blood pressure difference between arms was investigated. Data from 20 studies were included in the analyses.

A systolic blood pressures difference of ≥ 10 mmHg was related to the existence of peripheral artery disease (RR 2.4). A systolic blood pressure difference of ≥ 15 mm Hg was associated with peripheral vascular disease (RR 2.5), cerebrovascular disease (RR 1.6), cardiovascular mortality (HR 1.7) and all-cause mortality (HR 1.6). The authors suggest that patients with blood pressure difference between the arms could be targeted for aggressive risk factor management.

Clark CE, Taylor RS, Shore AC, Ukoumunne OC, Campbell JL. Association of a difference in systolic blood pressure between arms with vascular disease and mortality. a systematic review and meta-analysis. Lancet 2012;379:905-14
Dear readers,

Would you like to contribute to Hypertension (HT) News?

Eight years ago, when we launched HT News, one of our goals was to publish short reports from our ISH members. Over the years, we have done so a few times with a reassuring acceptance rate (close to 100%).

There is, however, room for more contributions and I would like to encourage you to submit short papers if and when you have something to share. Please contact Helen Horsfield at the Secretariat to express an interest in submitting an article.

As per previous issues, the March HT News features ‘Hot off the Press’ news on the cover page, this time with a summary of three papers. One of these papers was published in The Lancet by C.E. Clark and co-workers a week ago on the risks of having a difference in SBP in the arms of 10 mm Hg or more.

You will also see that there is an interesting paper on Renal Denervation in Resistant Hypertension written by M. Caulfield (and colleagues) based in London.

Our aim is that at least half our ISH members should open the email sent with HT News. Sorry to say, we are not there yet. Therefore we have decided to send out a first email in my name informing you that HT News is on its way and then send the Newsletter a week later (also with me as the sender). Let us see if this helps.

The next issue will focus heavily on the forthcoming ISH meeting in Sydney in September. Please look out for our email in mid-June!

Have a good read!

Lars H. Lindholm

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PRESIDENT’S MESSAGE

How quickly time moves. Here we are a quarter of the way into 2012! The London ESH meeting is imminent and our Sydney ISH meeting is rapidly approaching. When one takes stock of the opportunities for clinicians and scientists to share their work and discuss ideas about blood pressure and hypertension, the number of journals and meetings is a common point of reference.

Those who, 10 years ago, might have wondered if there was anything left to say or discover about blood pressure would be astounded by the vivacity of the field.

In theory it’s simple - keep blood pressure within a healthy range. Yet as populations in the developing world fall prone to increased incidence of high blood pressure and developed populations age, the magnitude of the challenge augments. And the hurdles to healthy blood pressure cover a vast range. They start from convincing people to know their own blood pressures to defining novel pathophysiological trigger points as targets of safer and more effective blood pressure reduction.

From public health to molecular detail, there is still much to do, much to debate and much to share. The combination of wisdom through experience and innovation through fresh young ideas is the marvellous substrate for the future of blood pressure.

Seeing these interactions face-to-face, peppered with the excitement of discovery are one of the joys of the big blood pressure meetings. 2012 provides a rich treat of such delicacies. Bon appétit!

Stephen Harrap
President ISH

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CALL FOR COUNCIL NOMINATIONS

Positions on the Scientific Council will become available at the next Scientific Meeting to be held in Sydney. The Society is now inviting nominations to fill these positions. DEADLINE 2ND JULY 2012.

The Council of the ISH is important as the key active body to further the aspirations and activities of the ISH. In doing so, we’d hope that those on Council might reflect the diversity of ISH members in terms of geography and age. In this respect, the contribution of younger members is crucial for the future of the ISH.

Members of Council have responsibilities as Trustees of the Society. This carries specific commitment to the business of the ISH and so nominees need to be able to devote time and energy to serve the needs of the ISH.

For information on how to nominate a member please view the following page on the Society website: http://www.ishworld.com/default.aspx?Council_Call_for_Nominations_2012

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NOTES FROM THE EDITORIAL TEAM

Would you like to contribute to Hypertension (HT) News?

L. H. Lindholm
Renal Denervation for Resistant Hypertension

Mark Caulfield1, Mark de Belder2, Trevor Cleveland3, David Collier4, John Deanfield5, Huon Gray5, Charles Knight6, Melvin Lobo1, Matthew Matson7, Jon Moss1, Neil Poulter1, Iain Simpson6, Charles Tomson7, Bryan Williams1.

On behalf of the British Hypertension Society1, the British Cardiovascular Intervention Society2, the British Society for Interventional Radiology5, National Institute for Clinical Outcomes Research4, the Department of Health (England)5, the British Cardiovascular Society4, and the Renal Association7.

Any correspondence to:
Professor Mark Caulfield
FMedSci
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http://www.whri.qmul.ac.uk/index.html

Renal Denervation for Resistant Hypertension

Renal denervation for proven resistant hypertension is a new procedure with an emerging evidence base of effectiveness and safety1,2,3. In response to growing interest a collaborative between the UK Societies with an interest in renal denervation has launched a statement on the use of this technology in patient care. This is designed to be read in conjunction with the National Institute of Health and Clinical Excellence Interventional Procedure Guidance on Renal Denervation (NICE IP418)4. Although the membership of the International Society around the world we hope this document may help with safe and effective adoption into practice in other countries. A fuller version can be found at:
http://www.bhsoc.org/docs/The-Joint-UK-Societies’-Consensus-on-Renal-Denervation-for-resistant-hypertension.pdf

Patient eligibility for renal denervation

We recommend that we rely upon the current evidence-base to select patients with resistant hypertension who may be eligible for this therapy. In the trials, resistant hypertension was defined as a sustained clinic systolic blood pressure of ≥ 160 mm Hg (≥ 150 mm Hg in Type 2 Diabetes) in patients on 3 or more anti-hypertensive medications1,2,3. This is equivalent to stage 2 hypertension which is an average clinic blood pressure >160 mm Hg and equivalent to a daytime average on ambulatory blood pressure >150 mm Hg as defined by the 2011 National Institute for Health and Clinical Excellence (CG 127) Hypertension Guideline5. We further recommend that to be eligible for renal denervation patients should have received medications such as angiotensin converting enzyme inhibitors or angiotensin receptor blockers (but not both), or/and calcium channel blockers or/and diuretics. Such patients would have uncontrolled blood pressure and be taking 3 or more medications as recommended in your national or international guidelines5. We believe confirmation of sustained raised blood pressure using ambulatory blood pressure monitoring is essential (as above). This will allow detection of a “white coat”, or an alerting response which may be a cause of apparently resistant hypertension.

Preparing patients for renal denervation

Preparation of patients for this therapy will entail providing a clear description of the procedure including the provision of contemporary statistics on success rates/potential complications, detailed technical information regarding the procedure itself and after care. In particular loin or abdominal pain occurs in the majority of recipients during ablation and adequate peri- and post-procedural analgesia should be provided. Blood pressure typically falls gradually over time and, although uncommon, post-procedural hypotension has been noted.

The establishment of Patient Registries for Renal Denervation

Finally, we recommend that data on all patients undergoing this procedure should be submitted to a national registry or a global registry to inform practice, generate research opportunities and permit audit of clinical effectiveness. We acknowledge that there are many other avenues of research enquiry
about renal denervation but for now the evidence base for adoption into patient care centres around use in resistant hypertension and randomised controlled trial data would be needed to confirm effectiveness and safety in these other areas.

References


MEMBERSHIP NEWS

ISH NOW WELCOMES MEMBERSHIP APPLICATIONS FROM CLINICIANS

The ISH would like to announce the expansion of membership to recognise clinicians with a record of long-standing commitment and high-level contribution to blood pressure treatment.

See www.ish-world.com for further information.

Salt, blood pressure and the United Nations High Level Meeting

September 2011 saw a historic meeting of the United Nations with Director General, Dr Margaret Chan, calling upon the assembled Heads of State to address the ‘non-communicable disease disaster’.

This was only the second time that the General Assembly had addressed a health issue with the HIV/AIDS epidemic the focus of attention a decade earlier. The need for global action on blood pressure has featured highly since the conclusion of the meeting.

The first of four short-term commitments agreed by Member States was the development of a ‘global monitoring framework including voluntary targets and national indicators’. The World Health Organisation has since translated this into two key proposals. The first being a ‘tobacco-free’ world by 2040. And the second a reduction in population salt intake to 5g salt per person per day by 2025.

The difference here isn’t in the daily salt target but making it happen in a defined timeframe. If achieved, salt reduction to this level would both prevent diseases caused by high blood pressure, and decrease the need for mass blood pressure medication, which remains beyond the reach of many that need it.

A focus on salt as a population determinant of blood pressure levels is welcome. While there has been much recent media questioning the role of salt in the causation of ill health there is little substance to the debate. A few pieces of weak observational epidemiology have achieved disproportionate attention because of their controversial findings, with scant regard for quality of the science and the mass of existing data to the contrary. While this has provided great fodder for the media, it has done little to further public health.

It is reassuring therefore to see the World Health Organisation unswerving in its focus on salt reduction. The 2002 World Health Report highlighted the need for population-wide interventions by showing that half of all blood pressure-related disease occurred amongst non-hypertensive individuals. Individuals unprotected by clinical hypertension programs. And, while drug therapy remains a highly effective treatment for the few that receive it, it is treatment not prevention, and will only ever address a part of the problem.

The meeting also emphasised the need to involve all the stakeholders in developing and delivering solutions. The non-communicable disease epidemic is not going to be resolved by clinicians alone and the
same is true of excess salt consumption. Within the United Nations this means marshalling the forces of not just the World Health Organisation but also the Development Programme, the Food and Agriculture Organization, UNICEF, and the International Labour Organization. Likewise, the focus of global salt reduction efforts will need to be government, the food industry and civil society, not healthcare providers. To operate effectively, the partnership between these groups will need clear rules of engagement, specific goals and an objective framework for monitoring and evaluation. Ideal, but unlikely, would be some form of sanction should those responsible not make reasonable efforts.

The voluntary, non-binding and non-prescriptive nature of the Political Declaration agreed at the United Nations fell far short of what was hoped for by public health advocates. However, there is little doubt that the meeting made many in positions of power conscious of a problem they did not know existed. There is a great opportunity for us to use this awareness to further our efforts for the prevention of diseases caused by high blood pressure. Members up for the salt challenge can join us at a Satellite Symposium linked to this year’s scientific meeting in Sydney, Australia. ‘Physical Activity, Nutrition and a Pinch of Salt’ (Friday 29th and Saturday 30th September) will include a focus on the practicalities of making salt reduction happen in developed and developing countries around the world.

Bruce Neal
Senior Director, George Institute for Global Health
Professor of Medicine, University of Sydney
Chair, Australian Division of
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Hypertension Sydney 2012 Meeting

Abstract submission extension to Monday 2nd April

MEETING UPDATE FROM THE CHAIR

‘The Future of Cardiovascular Protection’ is looking bright as the 24th Scientific Meeting of the ISH in Sydney 2012 rapidly approaches.

The ISH2012 program contains something for everyone - clinicians, research scientists and members of the allied health and corporate world.

The program is well advanced with over 50 invited speakers, including two Nobel Laureates and international leaders in the field. Young and emerging stars in the blood pressure world will be highlighted and new challenges addressed including those in the Asia-Pacific region through union with the Asian Pacific Society of Hypertension (APSH).

The program incorporates both innovative original research and expert overviews of major current and emerging issues including:

- Bridging the gap in primary care
- Optimal BP: Goals and assessment
- Absolute risk: Problems and solutions
- Obesity & sympathetic nervous system
- Immunity, inflammation and hypertension
- Lifestyle and nutritional factors
- Hypertension, Stroke and Cognition
- Renal mechanisms of salt balance
- Large artery function
- Pathogenesis of hypertension
- Sex-differences in hypertension
- Global, ethnic & indigenous populations
- Cerebral blood flow and cognition
- Cardiac hypertrophy and remodelling
Your research can be part of this high quality program. *Abstract submissions have been extended to 2nd April 2012.*

There are great opportunities for investigators and younger scientists to participate in the meeting through awards and special symposia.

We would also encourage the presentation of major and late breaking clinical trials at the meeting and there is an opportunity for the best of these to be published in a special edition of The Lancet.

We are delighted also that sponsorship from major pharmaceutical companies and device and equipment manufacturers is building.

**Sydney is a wonderful setting for a major international meeting.** The conference venue around Darling Harbour, close to the famous Harbour Bridge and Opera House is within walking distance of the Central Business District.

A highlight of the social program will be an evening when Hypertension Sydney takes over the historic Rocks area, one of the places that make Sydney so special.

Also visit our website to find out how you can combine great science with seeing more of Australia by attending one of the many first class pre and post meeting satellites that have gathered experts from around the world to focus on defined topics of contemporary interest and debate.

**Whatever you do, don’t miss this opportunity for interaction with international experts and peers as together we define the future of hypertension research and the Future of Cardiovascular Protection.**

**Garry Jennings**
Chair, Hypertension Sydney Local Organising Committee

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**Hypertension Sydney 2012 Symposium Feature:**  
**ISH BRIDGING THE GAPS**  
**Dealing with diversity in cardiovascular risk in affluent countries**

The backdrop of Sydney harbour bridge, which connected and transformed the surrounding area, is a brilliant setting for this symposium on bridging the gaps in cardiovascular care and prevention.

With an increasing number of effective interventions, the challenge for health care is to be at its best where it is needed most - otherwise health systems will widen inequality. The gaps to be bridged include gaps in coverage, gaps in quality, gaps in coordination and gaps in continuity.

In the morning we shall review the challenges, drawing examples from South America, India, South Africa, the UK and Australia. In the afternoon, Norman Swan, the distinguished Australian broadcaster and scientific commentator will host a wide ranging discussion on how these gaps can be bridged, in practical, affordable and sustainable ways.

**Attendance will be free of charge** and not just restricted to those registered for the Hypertension Sydney 2012 meeting. This will however be on a first come first served basis. Those wishing to attend should register their interest by emailing secretariat@ish-world.com.

Further Satellite Meetings include:

**ISH New Investigators’ Symposium**
**29th September 2012**

A full-day event to include 3 interactive oral sessions, a poster tour session followed by an evening social event/mentorship mixer to facilitate networking amongst all (new and established) researchers. For more information email: secretariat@ish-world.com

The neuropathophysiology of hypertension - an emerging therapeutic target

Evolving concepts of the renin angiotensin system

Cardiovascular genetics incorporating the 15th
See you in Sydney!

**ISH 2012 AWARDS & PRIZES**

**Call for nominations: deadline 2nd July**

The ISH is pleased to announce the following awards and prizes for 2012 and call for nominations. In addition to the prestige and kudos associated with each of the awards, they each comprise a significant monetary amount to recognise the excellence of the awardees and support the intended purposes of the specific awards.

Please nominate members for the following awards
- ISH Franz Volhard Award and Lectureship for Outstanding Research
- ISH Robert Tigerstedt Lifetime Achievement Award
- AstraZeneca Award
- Boehringer Ingelheim Developing World Award
- The Stevo Julius Award, supported by Novartis

The following awards and prizes will be presented at the ISH 2012 meeting based on high quality abstracts.
- APSH Young Investigator Awards
- Austin Doyle Award, supported by Servier Australia
- International Forum Poster Prizes, supported by Daiichi Sankyo and the ISH
- ISH New Investigator Oral and Poster Presentation Awards, supported by Daiichi-Sankyo
- Jirí Widimský Sr. Award(s), supported by the Czech Foundation for Hypertension Research

For detailed information please view: [http://www.ish-world.com/Documents/ISH%202012%20Awards.pdf](http://www.ish-world.com/Documents/ISH%202012%20Awards.pdf)
The 8th Congress of the Asian Pacific Society of Hypertension was held in Taiwan from November 24 to 27, 2011. The conference was organized by the Taiwan Society of Hypertension under the leadership of Professor Ming-Fong Chen assisted by Shing-Jong Lin, Chen-Huan Chen, Tzung-Dau Wang, and many others.

It was a great success with over 1,500 registrants from many countries in Asia and around the world. Taiwan lead the list with 600 registrants followed by China with 492, Thailand and Malaysia with about 100 each and Indonesia and Japan with 50. Overall 17 countries from Asia Pacific were represented, 11 from Europe and 5 from other parts of the world.

The Trustees invited lecturer was Professor Il Suh from South Korea who presented his work on a 25 year follow up study on Blood Pressure Tracking from Childhood to Adulthood.

The society has an important role to promote clinical and research investigation particularly by young Investigators. There were a large number of abstracts submitted for presentation either as oral presentations or as posters. The standard of these was high. 20 young investigator fellowship awards were given and 6 people presented for the oral prize. The standard was high and the judges could not separate the top two and equal first prizes were award to Eduardo Pimenta from Brisbane and to Heng-Hsu Lin from Taiwan.

A wide range of topics were covered ranging from basic science through clinical investigation to epidemiology and community health and prevention.

Some highlights were the Symposium related to aldosterone and its importance in Hypertension with talks by International (John Funder, Michael Stowasser, Gian Paolo Rossi) and Taiwan experts (Vin-Cent Wu, Yen-Hung Lin) in the field.

An important symposium supported by Omron, Microlife and AtCor was on the different ways of measuring a number of components of Blood Pressure and how these related to improving outcome and management related to the talks were given related to the use of different instruments to measure different aspects of BP and how these influenced outcome (Michael O’Rourke, Gianfranco Parati, Yutaka Imai).

The management of Resistant Hypertension was discussed and the importance of denervation of the kidney by radio frequency waves was highlighted by Garry Jennings and Henry Krum, (the later by videolink as at the last moment he could not attend).

International experts from Europe contributed in a major role to a number of Symposia related to improving the management and control of BP. These included Thomas Unger, Luis Ruilope, Tony Hegarty, Lars Lindholm, Sverre Kjeldsen, George Stergiou to mention a few. The importance of the rennin angiotensin system and its blockade in the management of hypertension was discussed extensive by speakers including Alistair Hall, Trefor Morgan, Henry Krum. Thomas Unger, Björn Dahlöf and others.

There was extensive discussion of the role of sodium chloride in the genesis and management of hypertension and cardiovascular risk and the importance and effectiveness of nutritional therapy (Hirotugu Ueshima, Mary Easaw). The problem of intervention and management in low and Middle income countries was discussed extensively and is still a major problem but certain strategies can be used and we need to share the benefit of these with each other (Tazeen Jafar, Shu-Ti Chiou).

Many other topics were discussed and this is a brief summary of some of these. Apologies are made to those many speakers and participants and topics not mentioned above.

One of the important aspects of this meeting was the level of audience participation. It is only by active participation that the major benefit if these meetings will be achieved. We hope to see all who were present and also those who were not at the combined meeting of ISH and APSH in Sydney later this year and in Cebu, Philippines in February 2014.

Reported by Professor Trefor Morgan
General Secretary APSH
and Chair - ISH Asia & Australasia Regional Advisory Group
The ISH NIN webpages have been updated with a Spotlight section to feature ISH New Investigators of the Month and as follows.

http://www.ish-world.com/Nin/Pages/Spotlight.aspx

Please contact the Secretariat should you be interested in highlighting your work (as an ISH Research Fellow), or the work of any young researcher in your institute/organisation.

I am a cardiologist, and my main research interests revolve around understanding the mechanisms linking cardiovascular pathology and sleep disorders, in particular, sleep-breathing disorders.

Somnology is an exciting, rather “young” field of medicine. Unfortunately, in my country (Russian Federation) somnology is an underdeveloped medical discipline, and not recognized as an independent specialty that causes certain difficulties. Thus, sleep disorders are addressed by various specialists, while there is a lack of continuity between them.

I believe that physiology and pathology of sleep present one of the most dramatic examples of inseparability and a strong interrelation between all functions of human body, and organ systems requiring individual approach, considering all the peculiarities of the specific case. Such a cross-disciplinary field contributes to the close collaboration of different specialists (including neurologists, psychiatrists, psychologists, cardiologists, pulmonologists, endocrinologists, otorhinolaryngologists, orthodontists, etc.) widening the horizons for discoveries and new ideas and inspirations.

I have no doubt that the unique project New Investigator Network, and Mentorship Scheme in particular, gives a great opportunity for young researchers, as well as for practitioners for information exchange and for development of collaboration networks, partnerships and friend associations across various medical areas and disciplines. Nowadays it is the key factor for further progress and knowledge dissemination. At the same time, in my opinion, it should include more practical issues (personal meetings, collaborative research), and more practical recommendations for both Young Investigators and Mentors about the opportunities of the project.

Let’s investigate and discuss together! Discussio mater veritas est (lat.; Thought thrives on conflict)!

Regular updates are available at:
- ISH/NIN website: www.ish-world.com/NIN
- Twitter: twitter.com/ISHNIN
- Facebook www.facebook.com/ISHNIN
If you haven’t yet paid your membership fee this year and are interested in retaining your links to the Society, we would be delighted to receive your payment.

Please visit the membership section of www.ish-world.com. Alternatively, contact the Secretariat to receive a payment form.

- Past copies of the ISH Newsletter
- Minutes of Society meetings
- A list of ISH Members with full contact details
- Access to the Journal of Hypertension for those who are eligible for free online access. This free online access is available for new members (since 2006) who reside or work in one of the resource poor countries, zones and territories defined by HINARI or in S. Africa.

To access this section of the website you are required to register (using your membership number, email address and a password of your choice). If you do not know your membership number, please contact the Secretariat.

Please help us to recruit new members

We would welcome your assistance to help us recruit new members to the Society.

If you have a colleague who would like to become a member of ISH as a Regular Member or Research Fellow please ask them to complete the relevant downloadable Application Form found in the Membership section of the Society’s website: www.ish-world.com.

Please also remember to update the Secretariat with any changes to your contact details, especially your email address.

The complete, April 2012 issue is available for free to download with the app for a limited time.

Download the app to access the free full issue and give the enhanced experience of Journal of Hypertension on the iPad a try for yourself!

To find the app in the App Store, search for ‘Journal of Hypertension’

The dynamic iPad app combines a print-like reading experience with customized text-sizing, article-sharing features, multimedia links, and other enhancements.

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## UPCOMING MEETINGS

### 2012

- **World Congress of Cardiology**  
  [www.world-heart-federation.org](http://www.world-heart-federation.org)

- **22nd European Meeting on Hypertension & Cardiovascular Protection**  
  [www.esh2012.org](http://www.esh2012.org)

- **Hong Kong College of Cardiology Annual Scientific Congress**

- **2nd International Congress on Cardiac Problems in Pregnancy**  
  [www.cppcongress.com](http://www.cppcongress.com)

- **6th International Symposium on Hypertension and 4th Vascular Risk Workshop**  

- **ESH Satellite Symposium: Resistant Hypertension**  
  [www.eshsymposium2012.org](http://www.eshsymposium2012.org)

- **6th Congress of the Asian Society of Cardiovascular Imaging**  
  [www.asoci2012.org](http://www.asoci2012.org)

- **XXV World Congress of the International Union of Angiology**  
  [www.iua2012.org](http://www.iua2012.org)

- **2012 American Physiological Society Conference**  
  [www.the-aps.org](http://www.the-aps.org)

- **2012 High Blood Pressure Research Scientific Sessions Conference**  
  [http://my.americanheart.org](http://my.americanheart.org)

- **1st International 4 Corners of Cardiology Meeting**  

- **22nd International Congress on Thrombosis**  

- **Artery 12**  
  [www.arterysociety.org](http://www.arterysociety.org)

- **4th World CODHy Congress**  
  [www.codhy.com/2012](http://www.codhy.com/2012)

### 2014

- **Hypertension Sydney 2012 Meeting**  
  **29 September - 4 October**  
  **Sydney, Australia**  
  [www.ish2012.org](http://www.ish2012.org)

  **Abstract submissions extended to 2nd April 2012**

### 2016

- **2016**  
  **Seoul, Korea**

### 2018

- **2018**  
  **Beijing, China**
The ISH would like to acknowledge the support of our Corporate Members:

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