

Lisbon, Portugal  
September 22-25

# CIRSE 2018

## POCKET GUIDE

**ANNUAL MEETING  
AND POSTGRADUATE  
COURSE**

**OF THE**

**CARDIOVASCULAR AND  
INTERVENTIONAL  
RADIOLOGICAL  
SOCIETY OF EUROPE**

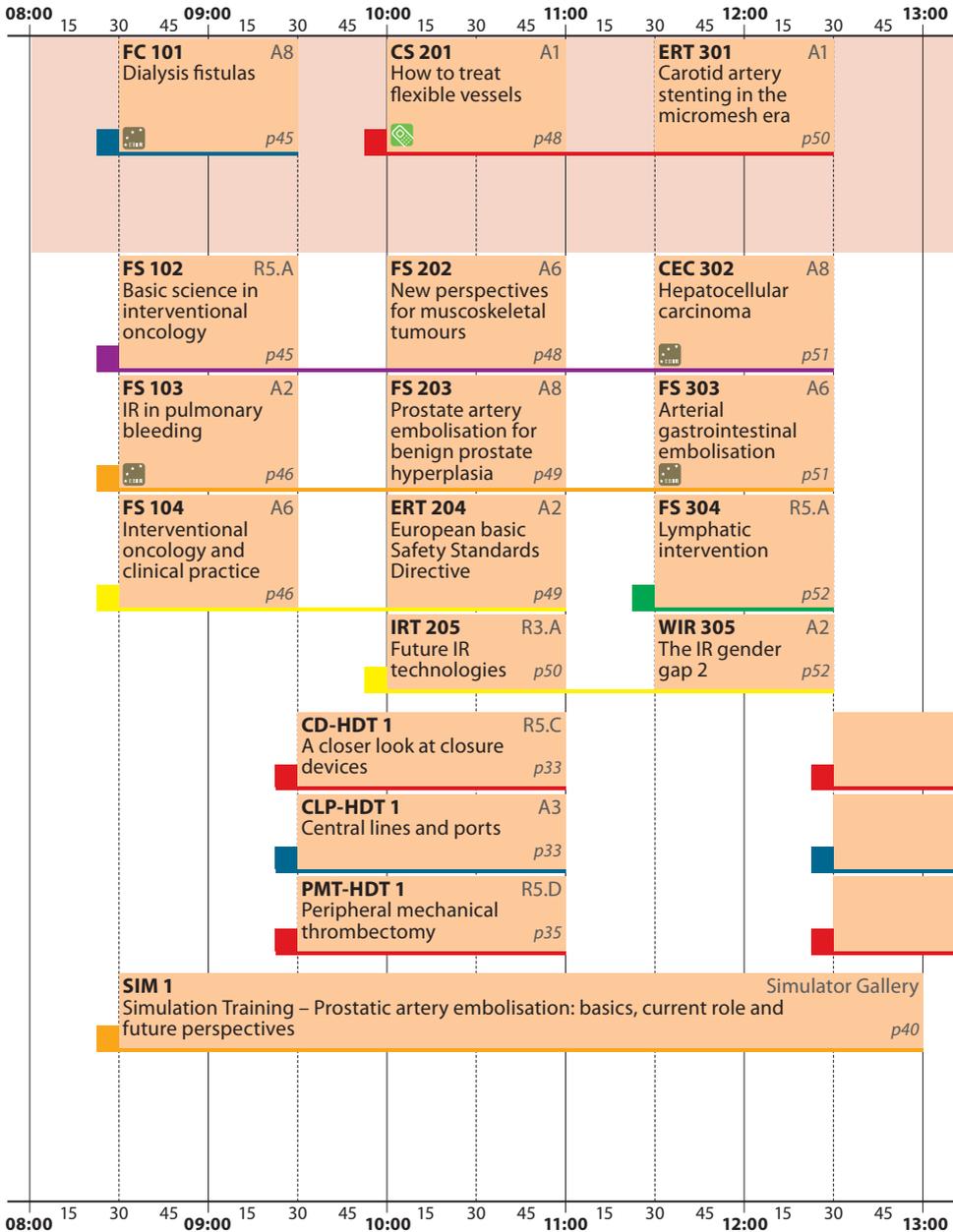
featuring

**IDEAS**

Interdisciplinary  
Endovascular  
Aortic Symposium

[www.cirse.org](http://www.cirse.org)

# Programme at a Glance – Saturday, September 22



**ENDOVASCULAR PROGRAMME**

- ARTERIAL INTERVENTIONS
- VENOUS INTERVENTIONS
- AORTIC INTERVENTIONS IDEAS

**INTERVENTIONAL ONCOLOGY**

- EMBOLISATION
- NEUROINTERVENTIONS
- NON-VASCULAR INTERVENTIONS
- IR MANAGEMENT

recommended for EBIR preparation

e-voting

**A:** Auditorium  
**R:** Room





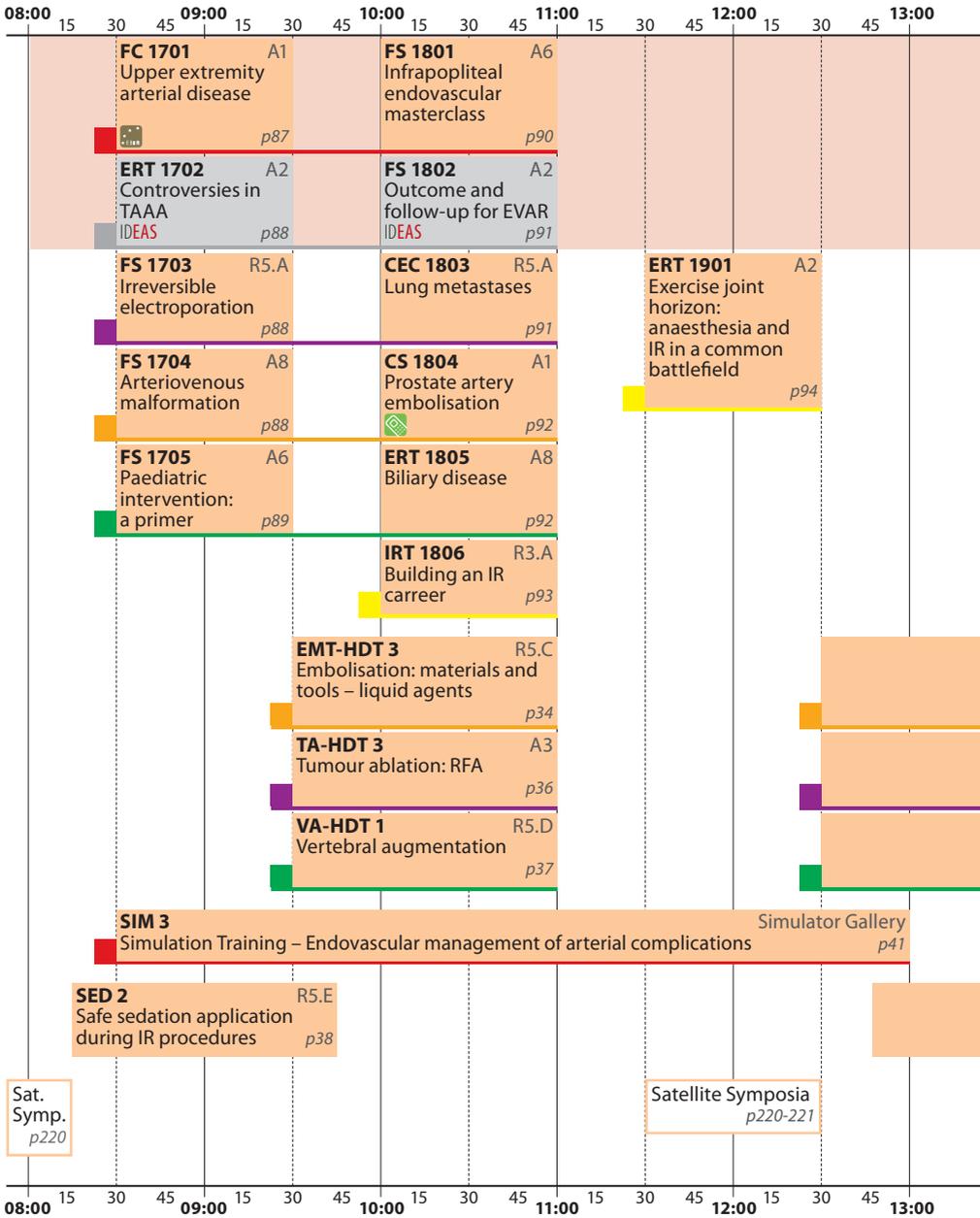
13:00			14:00			15:00			16:00			17:00			18:00		
15	30	45	15	30	45	15	30	45	15	30	45	15	30	45	15	30	
			<b>HL 1301</b> Andreas Gruentzig Lecture <i>p75</i>			<b>HTS 1302</b> Transradial access <i>p76</i>			<b>CEC 1401</b> Femoropopliteal disease in claudicants <i>p77</i>			<b>CBD 1402</b> A bad day in the angio suite (TEVAR) IDEAS <i>p77</i>			<b>VL 1501</b> Arterial interventions <i>p83</i>		
									<b>CBD 1403</b> Arterial gastro- intestinal bleeding <i>p78</i>			<b>WS 1502</b> Fundamentals in TEVAR IDEAS <i>p83</i>			<b>WS 1503</b> TIPS and BRTO <i>p83</i>		
<b>NoS 1204</b> Scientific <i>p75</i>									<b>ERT 1404</b> The role of local tumour treatment in oligometastatic disease <i>p78</i>			<b>WS 1504</b> Cholangiocar- cinoma and neuro- endocrine liver mets <i>p83</i>					
									<b>FC 1405</b> Interventional pain management <i>p79</i>			<b>WS 1505</b> Lung biopsy <i>p84</i>					
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<b>EMT-HDT 2</b> Embolisation: materials and tools – coils & plugs <i>p34</i>									<b>FP 1408</b> Drug-coated balloons in PVD <i>p81</i>			<b>FP 1507</b> Oncologic interventions 3 <i>p85</i>					
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<b>VV-HDT 2</b> Varicose veins <i>p37</i>												<b>SED 1</b> Safe sedation application during IR procedures <i>p38</i>					
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**CBD:** Case-based Discussion  
**CEC:** Clinical Evaluation Course  
**CS:** Controversy Session  
**ERT:** Expert Round Table  
**FC:** Fundamental Course

**FP:** Free Paper Session  
**FS:** Focus Session  
**HDT:** Hands-on Device Training  
**HL:** Honorary Lecture  
**HTS:** Hot Topic Symposium

**IRT:** IR Trainee Session  
**NoS:** News on Stage  
**WIR:** Women in IR  
**WS:** Workshop

# Programme at a Glance – Monday, September 24



**ENDOVASCULAR PROGRAMME**

- ARTERIAL INTERVENTIONS
- VENOUS INTERVENTIONS
- AORTIC INTERVENTIONS IDEAS

**INTERVENTIONAL ONCOLOGY**

- EMBOLISATION
- NEUROINTERVENTIONS
- NON-VASCULAR INTERVENTIONS
- IR MANAGEMENT

recommended for EBIR preparation

e-voting

**A:** Auditorium  
**R:** Room

13:00				14:00				15:00				16:00				17:00				18:00			
15	30	45	15	30	45	15	30	45	15	30	45	15	30	45	15	30	45	15	30	45	15	30	45
								<b>CBD 2103</b> A2 A bad day in the angio suite (EVAR) IDEAS  p97				<b>ERT 2201</b> A1 DCB in lower limbs: updates and debates p97				<b>WS 2301</b> R3.B Venous access: how I do it p102							
<b>NoS 2004</b> Vascular p95				<b>FIQ 2101</b> A1 Film Interpretation Quiz p96				<b>ERT 2202</b> A2 Controversies in ruptured AAA: open or not? IDEAS  p98				<b>WS 2302</b> A2 Fundamentals in EVAR IDEAS  p102											
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												<b>ERT 2204</b> A6 Spine ablation in metastatic cancer patient p99				<b>VL 2304</b> A8 Interventional oncology p102							
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Satellite Symposia p223-224				Satellite Symposia p224-225								Sat. Syp. p225- 226											

**CBD:** Case-based Discussion  
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# The CIRSE 2018 event in the CIRSE society app

## Your toolkit for the 2018 Annual Meeting in Lisbon:

- browse the programme
- build your personal schedule
- complete the session evaluation
- participate in e-voting polls
- send questions to the moderators
- find your way around using the interactive floor plans
- browse the list of exhibitors
- watch sessions live and on demand
- and much more...



- Scientific & Educational Programme \*
- Corporate Activities

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<b>67</b> Sunday – <b>Scientific Programme</b>	SUN
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\* advertisement-free section in accordance with the document  
 UEMS 2016/20 – the Accreditation of Live Educational Events  
 of the EACCME®

## General Information from A to Z

### App

Let the CIRSE app take care of your congress planning. Newcomers, please download the CIRSE society app which is available for iPhone, iPad and Android and install the CIRSE 2018 event. If the CIRSE society app is already on your smartphone, please just install the CIRSE 2018 event and have the best toolkit to plan your personal congress programme, evaluate sessions, browse the exhibition, take part in votings and submit questions to the moderator in selected sessions.

- build your personal schedule
- complete the session evaluation
- search for exhibitors by product category
- and much more...



### Badges

Your personalised badge is your admission card to the congress. For organisational and security reasons, badges must be worn at the congress venue at all times. A lanyard will be given to you with the congress bag. Identity checks in the congress centre may occur at any time. In case of loss, a replacement badge will be provided at an administrative charge of €80.

### Certificate of Attendance

To obtain your certificate of attendance, you can choose one of the following options:

#### Print your certificate onsite at the congress

From 14:00 on Monday, September 24, you can use one of the dedicated workstations in the registration area to print your certificate. All you need is your congress badge.

#### Print your certificate at home

After the congress, you will be able to print your certificate of attendance at [www.cirse.org](http://www.cirse.org). All you need is your last name and badge number. Alternatively, you could log into your personal CIRSE account at [www.cirse.org](http://www.cirse.org) with your personal log-in details.

### CIRSE Library – [library.cirse.org](http://library.cirse.org)

The CIRSE Library (formerly ESIRonline) is the largest online presentation database for interventional radiology, featuring slides and webcasts from past CIRSE meetings. With monthly compiled topic packages, the CIRSE Library is the ideal tool for your research and educational needs. Presentations recorded at CIRSE 2018 will be available immediately.

### **CME Credit Allowance**

**CIRSE 2018**, Lisbon, Portugal, September 22-25, has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 31 European CME credits (ECMEC®s).

**IDEAS 2018**, Lisbon, Portugal, September 23-25, has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 15 European CME credits (ECMEC®s).

Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the Union Européenne des Médecins Spécialistes 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](http://www.ama-assn.org/go/internationalcme).

Live educational activities, occurring outside of Canada, recognised by the UEMS-EACCME® for ECMEC®s 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.

### **Coffee, Snacks & Meals**

Refreshments can be purchased at the cash bars and the restaurant. The cash bars will be open from 07:30-18:00 and the restaurant from 11:30-15:00.

### **Disclaimer**

CIRSE cannot accept any liability for the acts of the suppliers to this meeting or the attendees' safety while travelling to or from the congress. All participants are strongly advised to carry adequate travel and health insurance, as CIRSE cannot accept liability for accidents or injuries that may occur.

### **Disclosures**

For financial disclosures and conflict of interest statements, please refer to [www.cirse.org](http://www.cirse.org).

### **Evaluation**

To complete the session evaluation and obtain credits for your attendance at CIRSE and IDEAS 2018 sessions, please use the online evaluation system, accessible through the CIRSE mobile app (please see page 10) and at [programme.cirse.org](http://programme.cirse.org).



### Hotels | Social Events | City Information

For information regarding hotels, transfers, restaurants and excursions, please ask our official travel partner, Buzz DMC, in cooperation with Kuoni Congress, whose information desk is located in the entrance hall of the congress centre. Buzz DMC, in cooperation with Kuoni Congress, will be pleased to help you with all matters relating to your stay in Lisbon.

#### Opening Hours

Friday, September 21	16:00-18:00
Saturday, September 22	07:00-18:00
Sunday, September 23	07:30-18:00
Monday, September 24	07:30-18:00
Tuesday, September 25	07:30-18:00

#### Internet/Wifi

A free wireless service is available to all delegates throughout the congress centre.

**Network: CIRSE 2018**

**Password: Lisbon18**

#### Live and On Demand – [live.cirse.org](http://live.cirse.org)

All sessions are being livestreamed and are available directly on demand. This means your colleagues who could not attend can watch the lectures at the same time! If you miss a session, just visit the on demand area in the CIRSE Library.

#### Members' Lounge

All members are invited to relax and enjoy a snack in the Members' Lounge which is located on the first floor of Exhibition Hall 2.

#### Mobile Phones

Please do not forget to turn your mobile phone to silent mode during the sessions.

#### Photographs and Video Recording

Please note that any form of recording, filming or photographing of presentation material during the session is strictly forbidden. Subject to the authors' consent, all presentation material will be made available online in the CIRSE Library ([library.cirse.org](http://library.cirse.org)).

#### Poster Area

All accepted scientific and educational posters as well as case reports will be presented electronically through CIRSE's Electronic Poster Online System. For a detailed list of all posters, please refer to pages 128-204.

The Poster Area is located in front of Auditorium 6 (please see the floorplan on page 328). 36 computers will be available to view the CIRSE 2018 posters.

**Opening Hours**

Saturday, September 22	07:30-18:30
Sunday, September 23	07:30-18:30
Monday, September 24	07:30-18:30
Tuesday, September 25	07:30-18:30

Onsite staff will be glad to assist you during these hours.

**Publication in CVIR**

Meeting abstracts are published in CIRSE's official journal CVIR as an electronic supplementary issue and are therefore citable publications (Online Publication Number: 10.1007/s00270-018-2021-1).

We encourage submission of the complete manuscript of oral or poster presentations for consideration to CVIR. Please submit your manuscript through the CVIR submission website on [www.editorialmanager.com/cvir](http://www.editorialmanager.com/cvir). Please note that all submissions have to comply with the "CVIR Instructions for Authors" specified on the CVIR submission website.

**Radiation Protection Pavilion**

The Radiation Protection Pavilion (RPP) is CIRSE's interactive awareness campaign for radiation protection and dose management and is located in the exhibition hall. The RPP offers several short talks on radiation safety and take-home information material. Make sure to visit the Pavilion and learn more about how to best protect yourself, your patients and your team. Please find a detailed description of the initiative and its sponsors on pages 309-315. For more information visit [www.cirse.org/rpp](http://www.cirse.org/rpp).

**Registration Desk – Opening Hours**

Friday, September 21	16:00-18:00
Saturday, September 22	07:00-18:00
Sunday, September 23	07:00-18:00
Monday, September 24	07:00-18:00
Tuesday, September 25	07:30-18:30

**Smoking**

The CIRSE Annual Meeting is a non-smoking congress. Smoking is permitted outside the congress centre only.

### Speaker Centre

The Speaker Centre is located on the entrance level of the congress centre right next to Room 3.B. All material must be in English and provided on a CD-ROM, DVD-ROM or USB flash drive (which is preferred) to be placed on the central server onsite. All presentation files must be uploaded at least 3 hours prior to the beginning of the corresponding session.

Computers connected to the central server allowing access to the speakers' presentations are available in every lecture room. These computers are equipped with Microsoft Windows 10 Professional and Microsoft Office 2016 Professional. Please note that speakers are not allowed to use their own laptops for their presentations.

### Opening Hours

Friday, September 21	16:00-18:30
Saturday, September 22	07:30-18:30
Sunday, September 23	07:30-18:30
Monday, September 24	07:30-18:30
Tuesday, September 25	07:30-18:00

### Students' Lounge

Located on the first floor of Exhibition Hall 2 next to the Members' Lounge, the Students' Lounge is open for all participants of the CIRSE 2018 Student Programme. Students can meet, have lunch and find out more about interventional radiology and CIRSE in a relaxed and comfortable environment. The Students' Lounge will also be the location of the Mentoring Breakfast.

### Technical Exhibition

The CIRSE Technical Exhibition is located on the entrance level. Please find a floor plan of the exhibition on pages 328-332 and a detailed list of all exhibitors on pages 259-308.

### Opening Hours

Saturday, September 22	09:00-18:00
Sunday, September 23	09:00-18:00
Monday, September 24	09:00-18:00
Tuesday, September 25	09:00-18:00

### **Trainees, Residents and young IRs**

Like in previous years, CIRSE will feature tailor made content for IR trainees and residents. This includes three IR trainee sessions, several short talks at noon as well as networking events such as the ETF Quiz and the ETF networking brunch.

### **Transportation in Lisbon**

#### **Public transportation and shuttle service**

The congress centre is located along the Cascais train line, between the stops Alcântara-Mar and Belém. This train line links with the metro network at Cais do Sodré (city centre), and runs along the coast as far as the charming seaside town of Cascais.

Within the city itself, an extensive metro system is augmented by trains and trams, including the iconic “Americanos” – tiny, yellow, turn-of-the-century trams that are synonymous with Lisbon. These delightful curiosities still run on the No. 15 line, ideally suited to old Lisbon’s steep hills and narrow, winding streets.

To enable delegates to maximise their time at the congress without worrying about commuting considerations, a number of complimentary shuttle bus routes will be provided. Our colleagues at the Hotels | Social Events | City Information desk will be happy to assist you with any questions.

#### **Taxis**

Taxis are available outside of the congress centre and will take approximately 15 minutes to reach the city centre of Lisbon for around €10.

INNOVATION | EDUCATION | INTERVENTION

# CIRSE 2018

LIVE AND ON DEMAND



## Can't make it to the congress?

You can watch all sessions in HD quality via our livestream!

## Can't decide which session to go to?

Pick one and watch the other lectures On Demand in our new CIRSE Library!

[live.cirse.org](http://live.cirse.org)

Cardiovascular and Interventional Radiological Society of Europe

## Session Types

### Amazing Interventions

During this session, acclaimed experts in interventional radiology will talk about their most unusual and challenging procedures. The emphasis will be to highlight innovative ways in which interventional radiologists can solve difficult problems and overcome tough situations. The session aims to be both educational and entertaining.

### Case-based Discussions

The case-based discussions are divided into several topics. This format is designed to provide a platform for experts with different skills and views, who can each present their unique approach. Interesting cases, where different treatment options seem possible, will be presented, followed by a lively discussion involving the speakers and the audience. These interactive sessions provide an excellent learning experience on how to approach and work through difficult cases.

### CIRSE meets...

The „CIRSE meets...“ programme has proved to be an important platform for establishing and strengthening the relations between CIRSE and other societies in the field of interventional and vascular therapy. At CIRSE 2018, CIRSE's guests will be SIDI and SOBRICE.

### Clinical Evaluation Sessions



This new session type offers a step-by-step guide through the disease management of different maladies. These clinical-focused training sessions will include multidisciplinary teams made up of the essential experts who design a patient's care pathway and offer the best therapeutic measures. The sessions will analyse themes from a diagnostic point of view, including pros and cons of different therapy options, considerations before, during and after the procedure, possible complications and the follow-up of the patient.

### Controversy Sessions

During Controversy Sessions, two experts will present opposing views on controversial and current topics, after which a short debate will ensue. The moderator will ask the audience which position they support both before and after each new topic in order to assess whether the talks have changed their opinions. For this purpose, voting facility for the audience will be provided.

### Expert Round Tables

The Expert Round Table sessions address important aspects of interventional radiology in an informal setting. Key opinion leaders will outline their views and preferred therapy options regarding select "hot topics", and then engage in lively discussions with both their fellow speakers and the audience.

### Film Interpretation Quiz

The Film Interpretation Quiz will consist of two teams who will compete against each other. The teams will be given cases to diagnose and suggest treatment. One of the principle aims of the film panel is to demonstrate the approach an expert takes towards the solution of a diagnostic/therapeutic problem. This will be undertaken in an entertaining fashion and is not to be missed. The process will be a team effort.

### Free Paper Sessions

Researchers will present original papers on new and innovative aspects of cardiovascular and interventional radiology. Selected papers will be gathered into sessions, each dealing with the same topic. There will be time for discussion between researchers and attendees after each presentation.



### First@CIRSE

This Free Paper session will feature the first data releases of several PAD trials and studies. The authors themselves will present the preliminary results.



### Super Tuesday

This exclusive Free Paper slot will showcase high-class research and up-to-the-minute trial results which all interventional radiologists should be aware of.

### Focus Sessions

Focus Sessions are designed to impart the latest knowledge on topics of interest to interventional specialists. These sessions are the backbone of the CIRSE meeting and are specifically chosen by the programme planning committee because of their importance in daily practice.

### Fundamental Courses

Fundamental Courses cover a specific area of interventional radiology, focusing on basic principles and illustrating the procedure in a step-by-step fashion. They are designed for radiologists-in-training and new consultants, as well as for experienced consultants who require a refresher course on the subject. There will be plenty of time for questions and discussion. Each session will last one hour.

### Hands-on Device Training

The Hands-on Device Training (HDT) sessions provide an overview of the different devices and techniques available for specific topics. Following a kick-off presentation by the HDT coordinators, participants will have the opportunity to learn about the specifics, as well as the safe and effective use of the available technology in a hands-on setting. Each HDT will feature a round-table discussion with the coordinators at the end of each session, allowing participants time to ask questions and give feedback.

### Hot Topic Symposia

The Hot Topic Symposia address controversial IR topics in the setting of a plenary session. Invited speakers will give brief lectures on important aspects of the subject under

discussion. A major feature of these sessions will be a round-table discussion involving the speakers and the audience.

### **IR Trainee Sessions**

The IR Trainee Sessions at CIRSE are aimed specifically at trainees, residents and young IRs, and cover basic IR topics as well as practical issues relating to the beginning of a career in interventional radiology. These sessions will also address future IR technologies and challenges the next generation of IR may face. Organised by the CIRSE European Trainee Forum (ETF), the IR Trainee Sessions are also an opportunity to meet peers and establish relationships with other young IRs across Europe.

### **Morbidity & Mortality Conference**

The Morbidity and Mortality Conference will analyse interventional radiology cases which led to complications and/or deaths that could have been avoided. This session provides a valuable learning experience for everyone involved in interventional radiology. The session will be dedicated to vascular and non-vascular cases.

### **News on Stage**

The aim of this session format is to allow physicians to showcase their research in an informal and open atmosphere. Selected posters and their presenting authors will take centre stage in these sessions. The posters will be displayed and navigated on terminals which are specifically designed for poster discussions in small groups.

### **Satellite Symposia**

Satellite Symposia are organised by companies and take place at lunchtime as well as in the morning and in the evening. During these sessions, cutting-edge information on interventional equipment and techniques is provided.

### **Simulation Training**

This popular series of training sessions comprises a half-hour round-table discussion with experts in the field delivering key knowledge and practical tips, followed by one hour of hands-on experience using high-fidelity simulators.

### **Video Learning Sessions**



This is a new type at the CIRSE annual meeting and will feature stand-alone video presentations of interventions with the purpose of teaching the technique of an IR treatment and providing a brief overview of indication and results. The aim is to demonstrate the technical aspects of the specific intervention in the best possible way and to give the audience the possibility to ask questions.

### **Workshops**

Workshops provide you with the chance to learn from your colleagues' expertise in an informal, interactive manner. Each designated workshop will entail individual cases and discussion points with regard to the particular interventional topic. Attendees can contribute their opinions and ask questions in small groups.

# Film Interpretation Quiz

**Monday, September 24**  
**14:30-15:15**  
**Auditorium 1**

*Coordinators: I.J. McCafferty (Birmingham/UK), O.M. van Delden (Amsterdam/NL)*

The Film Interpretation Quiz is one of CIRSE's most popular sessions and will consist of two teams who will compete against each other.

The teams will be given cases to diagnose and suggest treatment. One of the principle aims of the film panel is to demonstrate the approach an expert takes towards the solution of a diagnostic/therapeutic problem. This will be undertaken in an entertaining fashion and is not to be missed. The process will be a team effort.

## **Team 1:**

*P.A.M.S. Almeida (Viseu/PT)*  
*T.K. Helmberger (Munich/DE)*  
*E. Kashef (London/UK)*  
*C. Sofocleous (New York, NY/US)*

## **Team 2:**

*J.-P. Pelage (Caen/FR)*  
*Y. Arai (Tokyo/JP)*  
*F. Orsi (Milan/IT)*  
*M. Tsitskari (Athens/GR)*



# CIRSE Opening and Awards Ceremony

**Saturday, September 22**

**14:30-16:00**

**Auditorium 1**

## **Welcome Addresses**

**CVIR Editors' Medal Award: Q.-F. Chen (Nanjing/CN), Z.-Y. Jia (Nanjing/CN)**

**The Award of Excellence and Innovation in IR** (*R.W. Günther Foundation Award*):  
**M. Itkin (Philadelphia, PA/US)**

**Distinguished Fellow: P.E. Andersen (Odense/DK)**

*Laudation: A. Bharadwaz (Aarhus/DK)*

**Distinguished Fellow: G. Bartal (Kfar-Saba/IL)**

*Laudation: A. Gangi (Strasbourg/FR)*

**Distinguished Fellow: S. Trerotola (Philadelphia, PA/US)**

*Laudation: C.A. Binkert (Winterthur/CH)*

**Gold Medal: A.-M. Belli (London/UK)**

*Laudation: R.A. Morgan (London/UK)*

**Join us for this year's Opening Ceremony!**

**All delegates including exhibitors are cordially invited.**

## News on Stage

News on Stage will feature displays on the latest results from multi-centric trials, groundbreaking techniques and many more IR hot topics, shown in a dedicated open area. Large-screen presentations given by the authors during dedicated slots around lunch time will give delegates the opportunity to hear from the experts personally and engage with them and other key opinion leaders in active, lively discussions.

Saturday, September 22, 13:15-14:15, News on Stage Area

### NoS 404 Embolisation News on Stage

*Moderators: A.C. Roberts (La Jolla, CA/US), O.M. van Delden (Amsterdam/NL)*

- 404.1 Novel approach for antegrade obliteration of gastric varices utilizing intravascular ultrasound  
*R. Melikian, H. Aryafar; San Diego, CA/US*
- 404.2 WITHDRAWN
- 404.3 WITHDRAWN
- 404.4 Direct percutaneous sac puncture for type II endoleak management  
*G. Falcone, M. Citone, F. Mondaini, C. Raspanti, G. Gabbani, E. Casamassima, F. Fanelli; Florence/IT*
- 404.5 Contrast clearance following hepatic transarterial embolization with radio-opaque and non-radio-opaque micro beads in swine  
*A.S. Mikhail<sup>1</sup>, W. Pritchard<sup>1</sup>, Q.M.B. De Ruiter<sup>1</sup>, I. Bakhutashvili<sup>1</sup>, J. Esparza-Trujillo<sup>1</sup>, D.L. Woods<sup>1</sup>, A.L. Lewis<sup>2</sup>, J. Karanian<sup>1</sup>, B.J. Wood<sup>1</sup>; <sup>1</sup>Bethesda, MD/US, <sup>2</sup>Camberley/UK*
- 404.6 The practice of mixing biological embolics and radiographic contrast: "Is it safe?"  
*T. Ncube<sup>1</sup>, G. Wagner<sup>1</sup>, D.W. Edwards<sup>2</sup>, R.E.B. Watson<sup>2</sup>, G.C. Smith<sup>1</sup>, H.-U. Laasch<sup>2</sup>; <sup>1</sup>Chester/UK, <sup>2</sup>Manchester/UK*

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Sunday, September 23, 13:15-14:15, News on Stage Area

**NoS 1204 Scientific News on Stage**

*Moderators: J.A. Kaufman (Portland, OR/US), O. Pellerin (Paris/FR)*

- 1204.1 Inside interventional radiology: micro CT 3D imaging of angiographic guidewires  
*T.Q.L. Klaus, G.A. Krombach, E. Alexandre-Lafont, M. Kampschulte; Giessen/DE*
- 1204.2 Design, creation and evaluation of 3d-printed high-detailed vascular models for selective interventional simulation  
*R. Kaufmann, M. Takes, C.J. Zech, T. Heye, P. Brantner; Basel/CH*
- 1204.3 Application of a biomechanical deformable registration image method for assessing ablation margins in colorectal liver metastases  
*E.Y. Lin, B.M. Anderson, G. Cazoulat, K. Brock, B.C. Odisio; Houston, TX/US*
- 1204.4 EW-7197, a transforming growth factor-beta type I receptor kinase inhibitor, ameliorates acquired lymphedema in a mouse tail model  
*S.H. Yoon, K.Y. Kim, J.-H. Park, H.-Y. Song; Seoul/KR*
- 1204.5 WITHDRAWN
- 1204.6 Comparison of a full-core end-cut biopsy device with a side-notch device: diagnostic valence of the specimen  
*J. Schaible, B. Pregler, L. Lürken, P. Wiggermann, L.P. Beyer; Regensburg/DE*

**and open setting, join in lively debates and ask questions.**

Monday, September 24, 13:15-14:15, News on Stage Area

**NoS 2004 Vascular News on Stage**

*Moderators: F. Fanelli (Florence/IT), J.A. Reekers (Amsterdam/NL)*

- 2004.1 The effectiveness of the paclitaxel-coated Luminor® balloon catheter versus an uncoated balloon catheter in superficial femoral and popliteal arteries in preventing vessel restenosis or reocclusion: 12 months results of a randomized-controlled trial  
*U. Teichgräber; Jena/DE – presented by T. Franke; Jena/DE*
- 2004.2 Real-world experience with a paclitaxel-coated balloon for the treatment of atherosclerotic infrainguinal arteries. Twenty four-month results of the BIOLUX P-III all comers registry in superficial femoral arteries  
*C.A. Binkert<sup>1</sup>, M. Brodmann<sup>2</sup>, T. Zeller<sup>3</sup>, L. Spak<sup>4</sup>, J.-M. Corpataux<sup>5</sup>, J.K. Christensen<sup>6</sup>, K.F. Keirse<sup>7</sup>, G. Nano<sup>8</sup>, H. Schröder<sup>9</sup>, G. Tepe<sup>10</sup>; <sup>1</sup>Winterthur/CH, <sup>2</sup>Graz/AT, <sup>3</sup>Bad Krozingen/DE, <sup>4</sup>Kosice/SK, <sup>5</sup>Lausanne/CH, <sup>6</sup>Kolding/DK, <sup>7</sup>Tienen/BE, <sup>8</sup>Rome/IT, <sup>9</sup>Berlin/DE, <sup>10</sup>Rosenheim/DE*
- 2004.3 Experimental animal study of a novel drug-coated balloon using 3.5 µg/mm<sup>2</sup> paclitaxel coating on a cellulose-based excipient  
*P.N. Papadimitos<sup>1</sup>, P.M. Kitrou<sup>1</sup>, K.N. Katsanos<sup>1</sup>, M. Theofanis<sup>1</sup>, M. Vaiou<sup>2</sup>, F. Anagnostopoulos<sup>1</sup>, G. Lampropoulos<sup>1</sup>, G. Karpetas<sup>1</sup>, P. Kallidonis<sup>1</sup>, S. Spiliopoulos<sup>3</sup>, A. Moulas<sup>2</sup>, D. Karnabatidis<sup>1</sup>; <sup>1</sup>Patras/GR, <sup>2</sup>Larisa/GR, <sup>3</sup>Athens/GR*
- 2004.4 The Lutonix® global drug coated balloon registry real world patients with below the knee disease – interim 12 month outcomes  
*D. Scheinert; Leipzig/DE*
- 2004.5 PiPeR Technique – an alternative technique for creating arterial-venous fistula during percutaneous deep foot veins arterialization  
*B. Migliara; Peschiera Del Garda/IT*
- 2004.6 Utility of 2D perfusion angiography to predict wound healing in patients undergoing isolated femoropopliteal endovascular revascularization  
*N. Troisi, S. Panci, S. Bacchi, D. Incerti, L. Lovecchio, G.L. Dedola, S. Michelagnoli; Florence/IT*

**Come and meet authors of top-rated posters in an informal**

Tuesday, September 25, 13:15-14:15, News on Stage Area

**NoS 2804 Interventional Oncology News on Stage**

*Moderators: F. Orsi (Milan/IT), J. Ricke (Munich/DE)*

- 2804.1 Prospective randomized trial: tumor response of colorectal liver metastases after transarterial chemoembolization with two different protocols using MRI  
*T.J. Vogl, M.C. Langenbach, C. Marco, R. Hammerstingl, J. Scholz, T. Gruber-Rouh; Frankfurt/DE*
- 2804.2 The usefulness of liver parenchymal perfusion simulation using commercial 3-dimensional workstation and simulation software in conventional transcatheter arterial chemoembolization for hepatocellular carcinoma  
*M. Kinoshita<sup>2</sup>, K. Takechi<sup>2</sup>, Y. Arai<sup>2</sup>, R. Shirono<sup>2</sup>, Y. Nagao<sup>2</sup>, S. Izumi<sup>2</sup>, S. Noda<sup>1</sup>, S. Takao<sup>1</sup>, S. Iwamoto<sup>1</sup>, M. Harada<sup>1</sup>; <sup>1</sup>Tokushima/JP, <sup>2</sup>Komatsushima/JP*
- 2804.3 WITHDRAWN
- 2804.4 In vitro bovine liver experiment of cisplatin-infused and normal saline-infused radiofrequency ablation with an internally cooled perfusion electrode  
*K. Park, H.P. Hong; Seoul/KR*
- 2804.5 Stereotactically navigated percutaneous microwave ablation (MWA) compared to conventional MWA: a matched pair analysis  
*L.P. Beyer, L. Lürken, B. Pregler, J. Schaible, P. Wiggermann; Regensburg/DE*
- 2804.6 Irreversible electroporation in central renal tumor  
*A. Camacho Martínez, J.M. Abadal Villayandre, E. Galvez, M.J. Alvarez; Madrid/ES*

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## First@CIRSE

CIRSE 2018 will feature a dedicated session for the first data release of several PAD trials and studies, the authors themselves presenting the preliminary results.



Saturday, September 22, 16:15-17:15, Auditorium 7  
**Free Paper Session**

### FP 608 **FIRST@CIRSE**

**First data release on PAD trials and studies**

*Moderators: F. Fanelli (Florence/IT), A. Holden (Auckland/NZ)*

- 608.1 DISRUPT PAD II: primary outcomes and mechanistic actions of intravascular lithotripsy in complex, calcified femoropopliteal arteries  
*M. Brodmann<sup>1</sup>, M. Werner<sup>2</sup>, A. Holden<sup>3</sup>, G. Tepe<sup>4</sup>, T.J. Brinton<sup>5</sup>, D. Scheinert<sup>6</sup>, A.G. Schwandt<sup>7</sup>, F. Wolf<sup>8</sup>, M.R. Jaff<sup>9</sup>, A.J. Lansky<sup>10</sup>, T. Zeller<sup>11</sup>; <sup>1</sup>Graz/AT, <sup>2</sup>Freiburg/DE, <sup>3</sup>Auckland/NZ, <sup>4</sup>Rosenheim/DE, <sup>5</sup>Stanford, CA/US, <sup>6</sup>Leipzig/DE, <sup>7</sup>Münster/DE, <sup>8</sup>Vienna/AT, <sup>9</sup>Boston, MA/US, <sup>10</sup>New Haven, CT/US, <sup>11</sup>Bad Krozingen/DE*
- 608.2 Three-year results from the IN.PACT global study  
*G. Tepe; Rosenheim/DE*
- 608.3 Impact of severe calcification on procedural characteristics and 12-month outcomes following femoropopliteal treatment with the Stellarex drug-coated balloon  
*F. Fanelli<sup>1</sup>, Y. Gouëffic<sup>2</sup>, A. Holden<sup>3</sup>; <sup>1</sup>Florence/IT, <sup>2</sup>Nantes/FR, <sup>3</sup>Auckland/NZ*
- 608.4 Zilver PTX post-market surveillance study of paclitaxel-eluting stents for treating femoropopliteal artery disease in Japan: 5-year results  
*K. Kichikawa; Kashihara/JP*
- 608.5 Twelve month results of the IMPERIAL randomized trial comparing the Eluvia and Zilver PTX stents for treatment of femoropopliteal arteries  
*S. Müller-Hülsbeck<sup>1</sup>, K.F. Keirse<sup>2</sup>, K. Ando<sup>3</sup>, A.J. Benko<sup>4</sup>, A. Babaev<sup>5</sup>, Y. Yokoi<sup>6</sup>, H. Schröder<sup>7</sup>, J. Prem<sup>8</sup>, A. Holden<sup>9</sup>, J. Popma<sup>10</sup>, M.R. Jaff<sup>11</sup>, J. Diaz-Cartelle<sup>12</sup>, W.A. Gray<sup>12</sup>; <sup>1</sup>Flensburg/DE, <sup>2</sup>Tienen/BE, <sup>3</sup>Kitakyushu/JP, <sup>4</sup>Sherbrooke, QC/CA, <sup>5</sup>New York, NY/US, <sup>6</sup>Osaka/JP, <sup>7</sup>Berlin/DE, <sup>8</sup>North Canton, OH/US, <sup>9</sup>Auckland/NZ, <sup>10</sup>Boston, MA/US, <sup>11</sup>Marlborough, MA/US, <sup>12</sup>Wynnewood, PA/US*

**This session is geared towards everyone, IRs young and old, and is not to be missed!**



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## Women in IR

**Despite the fact that women now form the majority of graduates from medical schools in Europe, only 10% of IRs are women.**

This session first appeared in the CIRSE programme last year, with the goal of understanding some of the barriers to women entering IR and identifying potential ways to attract women and ensure the continued growth of our specialty.

Following on from last year's successful session, this year's session will continue to highlight issues important to the promotion of women in IR.

The aims of this session are:

1. Understanding whether lack of women in IR leadership roles has an adverse effect on recruitment of women to IR
2. Understanding why women may not consider leadership roles
3. Identifying strategies to promote women in IR

Saturday, September 22, 11:30-12:30, Auditorium 2

### **Women in IR**

#### **WIR 305 The IR gender gap 2**

*Moderator: A.-M. Belli (London/UK)*

- 305.1 Update of issues – where we are now!  
*A.-M. Belli (London/UK)*
- 305.2 The importance of role models in IR  
*A. Parthipun (London/UK)*
- 305.3 The Imposter Syndrome  
*T.M. Wah (Leeds/UK)*
- 305.4 EBIR  
*O.M. van Delden (Amsterdam/NL)*
- 305.5 Women in IR – US approach  
*B. Hamilton (Palm Springs, CA/US)*

#### **Round Table**

*Panellists: B. Hamilton (Palm Springs, CA/US), A. Parthipun (London/UK), O.M. van Delden (Amsterdam/NL), T.M. Wah (Leeds/UK)*

Summing up and action points

*A.-M. Belli (London/UK)*

## Hands-on Device Training

The Hands-on Device Training (HDT) sessions aim to provide an overview of the different devices and techniques available for specific topics as well as to allow hands-on experience for the participants.

After a short kick-off presentation by the HDT co-ordinators, participants will have the opportunity to learn about the specifics as well as safe and effective use of the available technology in an interactive setting.

Each HDT will feature a round-table discussion with the coordinators at the end of the session, allowing participants time to ask questions and provide feedback.

### How to participate:

All delegates wishing to participate in a Hands-on Device Training (HDT) are kindly requested to go to the respective HDT room within 90 minutes prior to the start of the session. You will receive a ticket which will enable you to participate in that specific training session and you will need to present this at the entrance of the HDT room before your session starts. Please note that tickets are limited and given on a “first come, first served” basis.

Participation will be free of charge. However, as HDT sessions offer practical medical training, participation is for qualified medical professionals only.

### A closer look at closure devices

Closure devices are increasingly becoming a key element in all our vascular procedures. Positive results combined with a high rate of safety have contributed to their success. However, knowledge of the different systems available on the market is necessary to achieve even better results.

This Hands-on Device Training aims to provide an overview of the vascular closure devices currently available.

#### **Saturday, September 22**

**CD-HDT 1** 09:30-11:00

**CD-HDT 2** 12:30-14:00

*Coordinators: S. Anthony (Oxford/UK), L. Marques (Flensburg/DE)*

#### **Location**

Room 5.C

### Central lines and ports

Central lines and ports are continually more and more important in the daily activities of interventional radiologists. Thanks to imaging and interventional capabilities, IRs are able to position these catheters in complex situations that other specialists cannot resolve.

This Hands-on Device Training will provide an overview of available devices.

#### **Saturday, September 22**

**CLP-HDT 1** 09:30-11:00

**CLP-HDT 2** 12:30-14:00

*Coordinators: J.A. Guirola (Zaragoza/ES), R. Kasthuri (Glasgow/UK)*

#### **Location**

Auditorium 3

## Embolisation: materials and tools

Embolisation is an important part of an IR's work – however, it is essential to thoroughly understand how to perform this technique in order to avoid complications. Having substantial knowledge of available material is absolutely necessary when selecting the most suitable device for any occasion.

This Hands-on Device Training aims to provide an overview of the various embolic materials available and different delivery techniques. Separate sessions will look at “coils and plugs”, “liquid agents” and “particulate agents” to ensure participants are familiar with common embolic agents.

### Sunday, September 23

**EMT-HDT 1: Coils & plugs** 09:30-11:00

**EMT-HDT 2: Coils & plugs** 12:30-14:00

*Coordinators: M.C. Burgmans (Leiden/NL), V. Pedicini (Milan/IT)*

### Monday, September 24

**EMT-HDT 3: Liquid agents** 09:30-11:00

**EMT-HDT 4: Liquid agents** 12:30-14:00

*Coordinators: I.J. McCafferty (Birmingham/UK), J. Urbano (Madrid/ES)*

### Tuesday, September 25

**EMT-HDT 5: Particulate agents** 09:30-11:00

**EMT-HDT 6: Particulate agents** 12:30-14:00

*Coordinators: T.J. Kroencke (Augsburg/DE), A.G. Rampoldi (Milan/IT)*

### Location

Room 5.C

## Peripheral mechanical thrombectomy

Treatments of patients with acute occlusions of the arterial or venous bed are becoming a more and more frequent occurrence. As technology has steadily developed, several systems have become available to help restore the vessel patency in a quick, safe and efficient way.

This Hands-on Device Training aims to provide an overview of the different devices which are currently being used for the treatment of peripheral occlusive disease, including acute and chronic limb ischaemia.

### Saturday, September 22

**PMT-HDT 1**

09:30-11:00

**PMT-HDT 2**

12:30-14:00

*Coordinators: T. Jahnke (Neumünster/DE), D.K. Tsetis (Iraklion/GR)*

#### Location

Room 5.D

## Stroke thrombectomy

Stroke thrombectomy represents a new frontier for interventional radiologists. The number of patients suffering from this pathological condition is increasing, and, as a consequence, it is necessary for interventional radiologists to participate in these procedures. For this, it is essential to have abundant experience as well as excellent knowledge of anatomy and the techniques and materials to be used.

Participants of this Hands-on Device Training will have the chance to familiarise themselves with the most common thrombectomy devices.

### Tuesday, September 25

**ST-HDT 1**

09:30-11:00

**ST-HDT 2**

12:30-14:00

*Coordinators: K.A. Hausegger (Klagenfurt/AT), H. van Overhagen (The Hague/NL)*

#### Location

Room 5.D

## Tumour ablation

Ablation plays a fundamental role in the minimally invasive treatment of cancer, and ablation technologies and equipment for live image guidance continue to develop quickly.

In order to stay up to date on these developments, this Hands-on Device Training will offer separate sessions to look at radiofrequency ablation, microwave ablation and alternative techniques, including cryoablation and image-guided technologies.

### Sunday, September 23

<b>TA-HDT 1: MWA</b>	09:30-11:00
<b>TA-HDT 2: MWA</b>	12:30-14:00

*Coordinators: L. Crocetti (Pisa/IT), J.L. del Cura Rodriguez (Bilbao/ES)*

### Monday, September 24

<b>TA-HDT 3: RFA</b>	09:30-11:00
<b>TA-HDT 4: RFA</b>	12:30-14:00

*Coordinators: M. Bezzi (Rome/IT), M. Tsitskari (Athens/GR)*

### Tuesday, September 25

<b>TA-HDT 5: Cryoablation, laser ablation and irreversible electroporation</b>	09:30-11:00
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*Coordinators: A.H. Mahnken (Marburg/DE), G. Tsoumakidou (Lausanne/CH)*

### Tuesday, September 25

<b>TA-HDT 6: Image guidance</b>	12:30-14:00
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*Coordinators: R. Bale (Innsbruck/AT), P. Wiggermann (Braunschweig/DE)*

### Location

Auditorium 3

## Varicose veins

Varicose veins are a manifestation of chronic venous disease, which causes a significant impairment in quality of life for both men and women, physically and aesthetically. Recent developments in the endovascular treatment of saphenous vein reflux, which is the most common cause of varicose veins, led to a change in the treatment of varicose veins: from surgery to minimally invasive treatments, and from the OR to the office. Considering the increasing demand for treatment and growing involvement of interventional radiologists, it is essential to understand the timing of such interventions and acquire basic skills in the methodology.

This Hands-on Device Training (HDT), coordinated by two experienced IRs in the field, aims to provide an overview of the selection of devices available and different techniques.

### Sunday, September 23

**VV-HDT 1**

09:30-11:00

**VV-HDT 2**

12:30-14:00

*Coordinators: J.M. Regi (Sheffield/UK), F. Veloso Gomes (Lisbon/PT)*

### Location

Room 5.D

## Vertebral augmentation

Every day interventional radiologists are approached by patients to resolve their vertebral pathologies. In recent years, considerable technological progress has been made as a consequence of the extraordinary outcomes of minimally invasive techniques, which have helped countless patients to achieve pain relief and avoid many of the complications associated with open surgery.

In this Hands-on Device Training, vertebroplasty, kyphoplasty and balloon kyphoplasty will be discussed, and devices for each of these procedures will be presented and available for participants to practice with.

### Monday, September 24

**VA-HDT 1**

09:30-11:00

**VA-HDT 2**

12:30-14:00

*Coordinators: P.N.M. Lohle (Tilburg/NL), K.E. Wilhelm (Bonn/DE)*

### Location

Room 5.D

## Safe sedation application during IR procedures

This practical workshop will give participants the opportunity to perform procedural sedation in a simulated environment and inform them on the most common respiratory problems during procedural sedation, as well as which instruments are available to make these interventions safer.

The simulation set-up consists of a full-scale patient simulator with capnography, BIS Monitoring and TIVA/TCI pumps. Participants will perform these therapies under the supervision of AQAI's experienced trainers.

### Learning objectives

- To apply procedural sedation using different approaches
- To identify complications and challenges during procedural sedation
- To judge on the value of various monitoring technologies
- To recognise the additional value of capnography during sedation

### Sunday, September 23

SED 1	16:30-18:00
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### Monday, September 24

SED 2	08:15-09:45
SED 3	12:45-14:15
SED 4	16:30-18:00

### Tuesday, September 25

SED 5	08:15-09:45
SED 6	12:45-14:15

*Coordinators: M. Heinrichs (Mainz/DE), W. Heinrichs (Mainz/DE)*

### Location

Room 5.E

## How to participate:

All delegates wishing to participate in a Safe Sedation Training are kindly requested to go to the room within 90 minutes prior to the start of the session. You will receive a ticket which will enable you to participate in that specific training session and you will need to present this at the entrance of the room before your session starts. Please note that tickets are limited and given on a "first come, first served" basis.

Participation will be free of charge. However, as Safe Sedation Training sessions offer practical medical training, participation is for qualified medical professionals only.

## Simulation Training

Participants of the Simulation Training can follow live demonstrations of interventional techniques and practice certain procedures under the guidance of a technician and/or instructor.

This popular series of training sessions comprises a half-hour round-table discussion with experts in the field delivering key knowledge and practical tips, followed by one hour of hands-on experience using high-fidelity simulators.

Each session is aimed at delegates with a specific level of experience (core, intermediate or advanced), and the delivery of each session is adaptable to respond to the delegates' interests, with emphasis placed on small group teaching, allowing for close interaction with the expert faculty.

The round-table discussions are themed around learning objectives which relate to a specific clinical or procedural topic. Equipment and devices related to the specific topic will be available to demonstrate deployment techniques.

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

### **Location**

Simulator Gallery

### **How to participate:**

All delegates wishing to participate in a Simulation Training are kindly requested to go to the Simulator Gallery before the start of the session. You will receive a ticket which will enable you to participate in that specific training session and you will need to present this at the entrance of the HDT room before your session starts. Please note that tickets are limited and given on a "first come, first served" basis.

Participation will be free of charge. However, as Simulation Training sessions offer practical medical training, participation is for qualified medical professionals only.

**Saturday, September 22**

08:30-13:00

**SIM 1: Prostatic artery embolisation: basics, current role and future perspectives** (advanced)*Session organiser: H. Hoppe (Bern/CH)**Instructors: S. Constantinescu (Bern/CH), C. Halg (Luzern/CH), M.E. Krokidis (Cambridge/UK), K.E. Wilhelm (Bonn/DE)*

<b>SIM 1.1 (group 1):</b>	08:30-09:00 discussion / 09:00-10:00 simulation
<b>SIM 1.2 (group 2):</b>	09:30-10:00 discussion / 10:00-11:00 simulation
<b>SIM 1.3 (group 3):</b>	10:30-11:00 discussion / 11:00-12:00 simulation
<b>SIM 1.4 (group 4):</b>	11:30-12:00 discussion / 12:00-13:00 simulation

**Learning objectives**

- To understand the management, assessment, relevant vascular anatomy and imaging of patients with benign prostatic hyperplasia
- To understand the materials used for prostatic artery embolisation and precautions to be taken with polyvinyl alcohol particles/microspheres
- To understand the indications for embolisation in patients with benign prostatic hyperplasia
- To understand the pathophysiology of adverse events following prostatic artery embolisation and how to prevent nontarget embolisation
- To perform particulate embolisation on a simulator

**Sunday, September 23**

08:30-13:00

**SIM 2: Basic principles of peripheral arterial intervention (core)***Session organiser: S.D. Qanadli (Lausanne/CH)**Instructors: R. Beasley (Miami Beach, FL/US), A.A. Chouiter (Neuchatel/CH),**P.R. Knuesel (Chur/CH), L. Oguzkurt (Istanbul/TR)*

<b>SIM 2.1 (group 1):</b>	08:30-09:00 discussion / 09:00-10:00 simulation
<b>SIM 2.2 (group 2):</b>	09:30-10:00 discussion / 10:00-11:00 simulation
<b>SIM 2.3 (group 3):</b>	10:30-11:00 discussion / 11:00-12:00 simulation
<b>SIM 2.4 (group 4):</b>	11:30-12:00 discussion / 12:00-13:00 simulation

**Learning objectives**

- To understand the management, assessment and imaging of patients with peripheral arterial disease
- To understand the currently available management options (exercise, best medical therapy, plain balloon angioplasty, drug-coated balloon angioplasty, (drug-eluting) stenting, stent grafting, surgery)
- To understand the indications for endovascular procedures, and choice of treatment modality
- To understand the usefulness of different access routes
- To learn how to perform balloon angioplasty and stenting on a simulator

**Monday, September 24**

08:30-13:00

**SIM 3: Endovascular management of arterial complications (intermediate)***Session organiser: R. Lely (Amsterdam/NL)**Instructors: G. Goh (Melbourne/AU), R.G. McWilliams (Liverpool/UK),**D. A. van den Heuvel (Nieuwegein/NL), C. van Rijswijk (Leiden/NL)*

<b>SIM 3.1 (group 1):</b>	08:30-09:00 discussion / 09:00-10:00 simulation
<b>SIM 3.2 (group 2):</b>	09:30-10:00 discussion / 10:00-11:00 simulation
<b>SIM 3.3 (group 3):</b>	10:30-11:00 discussion / 11:00-12:00 simulation
<b>SIM 3.4 (group 4):</b>	11:30-12:00 discussion / 12:00-13:00 simulation

**Learning objectives**

- To understand and recognise the potential complications in iliac, femoral and crural interventions
- To become familiar with different types of arterial complications
- To understand the treatment options available to manage complications
- To understand how to prevent/reduce complications
- To perform a rescue procedure on a simulator

**Tuesday, September 25**

08:30-13:00

**SIM 4: The basics of chemoembolisation for the liver** (intermediate)*Session organiser: G. Maleux (Leuven/BE)**Instructors: F. Collettini (Berlin/DE), B. Gebauer (Berlin/DE), R. Loffroy (Dijon/FR),  
K. Malagari (Athens/GR)*

<b>SIM 4.1 (group 1):</b>	08:30-09:00 discussion / 09:00-10:00 simulation
<b>SIM 4.2 (group 2):</b>	09:30-10:00 discussion / 10:00-11:00 simulation
<b>SIM 4.3 (group 3):</b>	10:30-11:00 discussion / 11:00-12:00 simulation
<b>SIM 4.4 (group 4):</b>	11:30-12:00 discussion / 12:00-13:00 simulation

**Learning objectives**

- To understand the management of patients with primary and secondary tumors of the liver
- To understand the materials used for chemoembolisation of the liver and precautions to be taken with chemotherapeutic agents
- To understand the indications for chemoembolisation of the liver
- To understand how to improve outcomes and reduce complications in chemoembolisation of the liver
- To understand how, when and which type of new image guidance technology can be used during liver chemoembolisation

Coming  
soon!

# CIRSE academy

## The New CIRSE Academy

**The online learning platform  
for every stage of your career in IR.**

**Purchase online courses  
on a range of topics within IR,  
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- All courses CME accredited
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- Each course only takes 1-2 hours to complete
- Interactive learning via a range of texts, graphics, videos and quizzes
- Suitable for students and trainees as well as experienced IRs

Cardiovascular and Interventional Radiological Society of Europe

# ETF 2018

European Trainee Forum

## Trainees, residents and young IRs at CIRSE 2018

### Training to become an IR or at the start of your IR career?

Building on the success of previous years, CIRSE 2018 will offer IR trainees, residents and young IRs a number of special events and sessions hosted by CIRSE's European Trainee Forum. These exciting events are great opportunities to boost your career by expanding your network and gaining new insights into the interventional radiology profession:

- **IR Trainee Session: Future IR technologies**  
**Saturday, September 22, 10:00-11:00**
- **IR Trainee Session: Building an IR career**  
**Monday, September 24, 10:00-11:00**
- **IR Trainee Session: Clinical know-how**  
**Tuesday, September 25, 10:00-11:00**

### ETF Short Talks

The ETF Short Talks will take place at 12:15 at the News-on-Stage area. Topics will include: grants, international mobility, preparing for the EBIR Exam as well as careers in device development.

### ETF Networking Brunch

This is a chance to meet peers and community leaders from across Europe at an informal brunch event. Relax, have a chat and enjoy a coffee while getting to know other young IRs from all across the globe!

### ETF Quiz

The ETF Quiz is a fun opportunity for IRs in training to meet peers from around Europe, show off knowledge and compete for prizes. A must for everyone looking for a challenge!

**Make sure not to miss the ETF programme for trainees, residents and young IRs at CIRSE 2018!**

## Saturday, September 22

08:30-09:30, Auditorium 8

### Fundamental Course

#### FC 101 Dialysis fistulas



Moderators: D. Karnabatidis (Patras/GR), D.K. Rajan (Toronto, ON/CA)

- 101.1 Percutaneous fistula creations  
*R.G. Jones (Birmingham/UK)*
- 101.2 Non-maturing fistulas  
*S.O. Trerotola (Philadelphia, PA/US)*
- 101.3 Failing fistulas and thrombosed grafts  
*A.R. van Erkel (Leiden/NL)*
- 101.4 Central venous occlusive disease: when and how to treat it  
*P.M. Kitrou (Patras/GR)*

08:30-09:30, Room 5.A

### Focus Session

#### FS 102 Basic science in interventional oncology

Moderators: P. Haage (Wuppertal/DE), F. Wacker (Hannover/DE)

- 102.1 In vitro experiment  
*B. Guiu (Montpellier/FR)*
- 102.2 In vivo experiment Lipiodol drug-eluting beads resorbable material: how to quantify the embolic effect drug elution  
*J. Namur (Jouy en Josas/FR)*
- 102.3 In vivo experiment: animal model rabbit tumours; advantages and limitations  
*K. Osuga (Suita, Osaka/JP)*
- 102.4 Are pets (cats and dogs) suitable translational animal models for preclinical research?  
*O. Pellerin (Paris/FR)*



08:30-09:30, Auditorium 2

**Focus Session****FS 103 IR in pulmonary bleeding***Moderators: G.J. Robinson (Hull/UK), H. Tajima (Kawasaki, Kanagawa/JP)*

- 103.1 Pre-procedural work-up and patient selection  
*A. Khalil (Paris/FR)*
- 103.2 Bronchial arterial embolisation  
*J.A. Vos (Nieuwegein/NL)*
- 103.3 Is there a role for IR in pulmonary tumour bleeding?  
*G. Gabbani (Florence/IT)*
- 103.4 Treatment of pulmonary arteriovenous malformation  
*M. Cejna (Feldkirch/AT)*

08:30-09:30, Auditorium 6

**Focus Session****FS 104 Interventional oncology and clinical practice***Moderators: A. Adam (London/UK), P.A.M.S. Almeida (Viseu/PT)*

- 104.1 Cardio-oncology: prevention and management of cardiac dysfunction in cancer patients  
*K. Keramida (Athens/GR)*
- 104.2 Combining chemotherapy with interventional oncology techniques  
*P.L. Pereira (Heilbronn/DE)*
- 104.3 Nerve and epidural blocks for cancer pain  
*D.K. Filippiadis (Athens/GR)*
- 104.4 The impact of quality assurance on cancer outcomes: why IASIOS is necessary  
*L.M. Kenny (Brisbane, QLD/AU)*

08:30-10:00, Simulator Gallery

**Simulation Training**

- **SIM 1.1 Prostatic artery embolisation: basics, current role and future perspectives**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: H. Hoppe (Bern/CH)*

*Instructors: S. Constantinescu (Bern/CH), C. Haelg (Luzern/CH),  
M.E. Krokidis (Cambridge/UK), K.E. Wilhelm (Bonn/DE)*

09:30-11:00, Room 5.C

**Hands-on Device Training**

- **CD-HDT 1 A closer look at closure devices**

*Coordinators: S. Anthony (Oxford/UK), L. Marques (Flensburg/DE)*

09:30-11:00, Auditorium 3

**Hands-on Device Training**

- **CLP-HDT 1 Central lines and ports**

*Coordinators: J.A. Guirola (Zaragoza/ES), R. Kasthuri (Glasgow/UK)*

09:30-11:00, Room 5.D

**Hands-on Device Training**

- **PMT-HDT 1 Peripheral mechanical thrombectomy**

*Coordinators: T. Jahnke (Neumünster/DE), D.K. Tsetis (Iraklion/GR)*

09:30-11:00, Simulator Gallery

**Simulation Training**

- **SIM 1.2 Prostatic artery embolisation: basics, current role and future perspectives**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: H. Hoppe (Bern/CH)*

*Instructors: S. Constantinescu (Bern/CH), C. Haelg (Luzern/CH),  
M.E. Krokidis (Cambridge/UK), K.E. Wilhelm (Bonn/DE)*



e-voting



recommended for EBIR preparation

10:00-11:00, Auditorium 1

**Controversy Session**■ **CS 201 How to treat flexible vessels** *Moderators: E. Blessing (Karlsbad/DE), A. Buecker (Homburg/DE)*

- 201.1 Common femoral artery endovascular therapy  
*A. Diamantopoulos (London/UK)*
- 201.2 Common femoral artery: atherectomy and alternative endovascular therapies  
*P. Drescher (Hartland, WI/US)*
- 201.3 Common femoral artery endoarterectomy  
*M.J.W. Koelemay (Amsterdam/NL)*
- 201.4 Popliteal artery endovascular therapy  
*B.T. Katzen (Miami, FL/US)*
- 201.5 Popliteal artery: atherectomy and alternative endovascular therapy  
*J.C. van den Berg (Lugano/CH)*
- 201.6 Popliteal artery bypass  
*K. Deloose (Dendermonde/BE)*

10:00-11:00, Auditorium 6

**Focus Session**■ **FS 202 New perspectives for musculoskeletal tumours***Moderators: N. Karunanithy (London/UK), A.D. Kelekis (Athens/GR)*

- 202.1 Bone biopsy: a new perspective for the molecular era?  
*E.P. Eyheremendy (Buenos Aires/AR)*
- 202.2 KYFO-VERTEBRO IORT  
*G.C. Anselmetti (Milan/IT)*
- 202.3 Augmented osteoplasty in cancer patients: biomechanical considerations and techniques  
*P. Clavert (Strasbourg/FR)*
- 202.4 Cone-beam CT, fusion imaging and navigation for ablation and osteoplasty  
*G. Mauri (San Donato Milanese/IT)*

10:00-11:00, Auditorium 8

**Focus Session**

**FS 203 Prostate artery embolisation for benign prostate hyperplasia**

*Moderators: T. Bilhim (Lisbon/PT), F.C. Carnevale (São Paulo/BR)*

- 203.1 Embolic agents and sizes: do they affect outcomes?  
*J. Golzarian (Minneapolis, MN/US)*
- 203.2 Understanding outcomes: finding the best candidate for PAE  
*J.M. Pisco (Lisbon/PT)*
- 203.3 Level of evidence: where we are in 2018  
*N. Hacking (Southampton/UK)*
- 203.4 Future directions  
*M.R. Sapoval (Paris/FR)*

10:00-11:00, Auditorium 2

**Expert Round Table**

**ERT 204 European Basic Safety Standards Directive**

*Coordinators: E. Brountzos (Athens/GR), W. Jaschke (Innsbruck/AT)*

- 204.1 Role of medical physics experts in interventional procedures  
*E.P. Efsthopoulos (Athens/GR)*
- 204.2 Diagnostic reference levels in IR: benefit or a nuisance?  
*G. Bartal (Kfar-Saba/IL)*
- 204.3 Dose optimisation: fine-tuning your angio suite and training your staff  
*G. Paulo (Coimbra/PT)*
- 204.4 Dose reporting, dose limits and overexposure: what the IR needs to know  
*R.W.R. Loose (Nuremberg/DE)*



10:00-11:00, Room 3.A

**IR Trainee Session**

**IRT 205 Future IR technologies**

*Moderators: M.S. Hamady (London/UK), L. Spelt (Lund/SE)*

- 205.1 Future IO technologies  
*L. Tselikas (Villejuif/FR)*
- 205.2 Big data, AI and machine learning  
*P. Kecskemethy (London/UK)*
- 205.3 Robotics and guided catheters  
*M.S. Hamady (London/UK)*
- 205.4 Future training technologies: 3D printing and simulators  
*S. Mafeld (Newcastle/UK)*

10:30-12:00, Simulator Gallery

**Simulation Training**

**SIM 1.3 Prostatic artery embolisation: basics, current role and future perspectives**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: H. Hoppe (Bern/CH)*

*Instructors: S. Constantinescu (Bern/CH), C. Haelg (Luzern/CH),  
M.E. Krokidis (Cambridge/UK), K.E. Wilhelm (Bonn/DE)*

11:30-12:30, Auditorium 1

**Expert Round Table**

**ERT 301 Carotid artery stenting in the micromesh era**

*Coordinators: T.J. Cleveland (Sheffield/UK), S.D. Qanadli (Lausanne/CH)*

- 301.1 Carotid artery stenting in 2018: is there still a role?  
*D. Vorwerk (Ingolstadt/DE)*
- 301.2 Limitation of the "old generation stents" have been overcome?  
*F. Castriota (Cotignola/IT)*
- 301.3 New advancements in carotid artery stenting technology: impacting our daily practice?  
*R. Sachar (Raleigh, NC/US)*
- 301.4 Role of carotid artery stenting in asymptomatic patients  
*A. Halliday (Oxford/UK)*

11:30-12:30, Auditorium 8

**Clinical Evaluation Course**

**CEC 302 Hepatocellular carcinoma**



*Moderators: É. Coimbra (Lisboa/PT), T.K. Helmberger (Munich/DE)*

- 302.1 New guidelines for HCC diagnosis  
*T.F. Jakobs (Munich/DE)*
- 302.2 *The hepatologist's point of view*  
*R. Tato Marinho (Lisbon/PT)*
- 302.3 Ablative therapies  
*F. Orsi (Milan/IT)*
- 302.4 Intra-arterial therapy  
*K. Malagari (Athens/GR)*
- 302.5 Surgical option  
*D. Ribero (Torino/IT)*
- 302.6 HCC: from irresectable to chronic disease  
*L. Crocetti (Pisa/IT)*

11:30-12:30, Auditorium 6

**Focus Session**

**FS 303 Arterial gastrointestinal embolisation**



*Moderators: J. Kettenbach (St. Pölten/AT), R. Uberoi (Oxford/UK)*

- 303.1 Pre-procedural work-up and patient selection  
*C. Cantwell (Dublin/IE)*
- 303.2 Upper and lower GI bleeding: indication and technique  
*R. Cioni (Pisa/IT)*
- 303.3 Strategies for chronic and intermittent acute GI bleeding  
*M. Szczerbo-Trojanowska (Lublin/PL)*
- 303.4 Results, complications and outcome predictors  
*P. Reimer (Karlsruhe/DE)*



11:30-12:30, Room 5.A

**Focus Session**■ **FS 304 Lymphatic intervention***Moderators: A.M. Barnacle (London/UK), A.M. Ierardi (Milan/IT)*

- 304.1 Anatomy and technique of lymphography  
*M. Itkin (Philadelphia, PA/US)*
- 304.2 Thoracic lymphatic leaks  
*L. Tselikas (Villejuif/FR)*
- 304.3 Abdominal and pelvic leaks  
*Z.J. Haskal (Charlottesville, VA/US)*
- 304.4 Lymphatic malformation  
*W.A. Wohlgemuth (Halle/DE)*

11:30-12:30, Auditorium 2

**Women in IR**■ **WIR 305 The IR gender gap 2***Moderator: A.-M. Belli (London/UK)*

- 305.1 Update of issues – where we are now  
*A.-M. Belli (London/UK)*
- 305.2 The importance of role models in IR  
*A. Parthipun (London/UK)*
- 305.3 The Imposter Syndrome  
*T.M. Wah (Leeds/UK)*
- 305.4 EBIR  
*O.M. van Delden (Amsterdam/NL)*
- 305.5 Women in IR – US approach  
*B. Hamilton (Palm Springs, CA/US)*
- 305.6 Round Table  
*B. Hamilton (Palm Springs, CA/US), A. Parthipun (London/UK),  
O.M. van Delden (Amsterdam/NL), T.M. Wah (Leeds/UK)*
- 305.7 Summing up and action points  
*A.-M. Belli (London/UK)*

11:30-13:00, Simulator Gallery

**Simulation Training**

- **SIM 1.4 Prostatic artery embolisation: basics, current role and future perspectives**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: H. Hoppe (Bern/CH)*

*Instructors: S. Constantinescu (Bern/CH), C. Haelg (Luzern/CH),  
M.E. Krokidis (Cambridge/UK), K.E. Wilhelm (Bonn/DE)*

12:30-14:00, Room 5.C

**Hands-on Device Training**

- **CD-HDT 2 A closer look at closure devices**

*Coordinators: S. Anthony (Oxford/UK), L. Marques (Flensburg/DE)*

12:30-14:00, Auditorium 3

**Hands-on Device Training**

- **CLP-HDT 2 Central lines and ports**

*Coordinators: J.A. Guirola (Zaragoza/ES), R. Kasthuri (Glasgow/UK)*

12:30-14:00, Room 5.D

**Hands-on Device Training**

- **PMT-HDT 2 Peripheral mechanical thrombectomy**

*Coordinators: T. Jahnke (Neumünster/DE), D.K. Tsetis (Iraklion/GR)*

13:00-14:00

**Satellite Symposia**

For the detailed programmes, please refer to pages 209-211.

13:15-14:15, News on Stage Area

**News on Stage****NoS 404 Embolisation News on Stage***Moderators: A.C. Roberts (La Jolla, CA/US), O.M. van Delden (Amsterdam/NL)*

- 404.1 Novel approach for anterograde obliteration of gastric varices utilizing intravascular ultrasound  
*R. Melikian, H. Aryafar; San Diego, CA/US*
- 404.2 WITHDRAWN
- 404.3 WITHDRAWN
- 404.4 Direct percutaneous sac puncture for type II endoleak management  
*G. Falcone, M. Citone, F. Mondaini, C. Raspanti, G. Gabbani, E. Casamassima, F. Fanelli; Florence/IT*
- 404.5 Contrast clearance following hepatic transarterial embolization with radio-opaque and non-radio-opaque micro beads in swine  
*A.S. Mikhail<sup>1</sup>, W. Pritchard<sup>1</sup>, Q.M.B. De Ruiter<sup>1</sup>, I. Bakhutashvili<sup>1</sup>, J. Esparza-Trujillo<sup>1</sup>, D.L. Woods<sup>1</sup>, A.L. Lewis<sup>2</sup>, J. Karanian<sup>1</sup>, B.J. Wood<sup>1</sup>; <sup>1</sup>Bethesda, MD/US, <sup>2</sup>Camberley/UK*
- 404.6 The practice of mixing biological embolics and radiographic contrast: "Is it safe?"  
*T. Ncube<sup>1</sup>, G. Wagner<sup>1</sup>, D.W. Edwards<sup>2</sup>, R.E.B. Watson<sup>2</sup>, G.C. Smith<sup>1</sup>, H.-U. Laasch<sup>2</sup>; <sup>1</sup>Chester/UK, <sup>2</sup>Manchester/UK*

14:30-16:00, Auditorium 1

**OP 500 Opening and Awards Ceremony**

Welcome Addresses

**CVIR Editors’ Medal Award:**

**Q.-F. Chen (Nanjing/CN), Z.-Y. Jia (Nanjing/CN)**

**The Award of Excellence and Innovation in IR**

*(R.W. Günther Foundation Award):*

**M. Itkin (Philadelphia, PA/US)**

**Distinguished Fellow: P.E. Andersen (Odense/DK)**

*Laudation: A. Bharadwaz (Aarhus/DK)*

**Distinguished Fellow: G. Bartal (Kfar-Saba/IL)**

*Laudation: A. Gangi (Strasbourg/FR)*

**Distinguished Fellow: S. Trerotola (Philadelphia, PA/US)**

*Laudation: C.A. Binkert (Winterthur/CH)*

**Gold Medal: A.-M. Belli (London/UK)**

*Laudation: R.A. Morgan (London/UK)*

16:15-17:15, Auditorium 6

**Case-based Discussion**

**CBD 601 Mesenteric ischaemia**



*Moderators: P.E. Andersen (Odense /DK), J. Tacke (Passau/DE)*

- 601.1 Acute bowel ischaemia  
*T.J. Kroencke (Augsburg/DE)*
- 601.2 Chronic bowel ischaemia  
*J. Urbano (Madrid/ES)*
- 601.3 Multiple vessels ischaemia  
*U.G. Rossi (Genova/IT)*
- 601.4 Mesenteric ischaemia after endovascular aortic treatment  
*J.F. Benenati (Miami, FL/US)*

16:15-17:15, Auditorium 8

**Expert Round Table****ERT 602 Uterine artery embolisation***Coordinators: A.-M. Belli (London/UK), G.S. Goh (Melbourne, VIC/AU)*

- 602.1 Durability after a decade of follow-up  
*J.G. Moss (Glasgow/UK)*
- 602.2 Adenomyosis: UAE best alternative?  
*P.N.M. Lohle (Tilburg/NL)*
- 602.3 Is UAE still contra-indicated for patients seeking fertility?  
*J.-P. Pelage (Caen/FR)*
- 602.4 Why do women still get hysterectomy?  
*C.C. Leitão (Lisbon/PT)*

16:15-17:15, Room 5.A

**Focus Session****FS 603 IR before major liver surgery***Moderators: A. Denys (Lausanne/CH), S.J. Park (Incheon/KR)*

- 603.1 Imaging and functional assessment of future liver remnant  
*E. Deshayes (Montpellier/FR)*
- 603.2 Portal vein embolisation  
*D.C. Madoff (New York, NY/US)*
- 603.3 Venous deprivation  
*B. Guiu (Montpellier /FR)*
- 603.4 Associating liver partition and portal vein ligation for staged hepatectomy (ALPPS): better than PVE?  
*E. Schadde (Zürich/CH)*



16:15-17:15, Auditorium 2

**Clinical Evaluation Course**

■ **CEC 604 Osteoporosis and vertebral fractures**

*Moderators: G.C. Anselmetti (Milan/IT), W.A. Clark (Ramsgate, NSW/AU)*

- 604.1 Imaging work-up  
*A. Manca (Candiolo/IT)*
- 604.2 Which patient for IR?  
*N. Karunanithy (London/UK)*
- 604.3 Percutaneous vertebroplasty  
*K.E. Wilhelm (Bonn/DE)*
- 604.4 Augmentation  
*X. Buy (Bordeaux/FR)*
- 604.5 Medical treatment  
*J. Paccou (Lille/FR)*
- 604.6 Mortality and complication risks after osteoporotic vertebral fractures  
*A.D. Kelekis (Athens/GR)*



16:15-17:15, Room 5.B

**Free Paper Session****FP 606 Oncologic interventions 1***Moderators: J. Egge (Haugesund/NO), P. Saari (Kuopio/FI)*

- 606.1 Epigenetic re-expression of branched chain aminotransferase enables survival of HCC cells under TACE-like ischemia  
*M. Sheng, S. Pulido, D. Ackerman, M. Noji, M. Silk, G.J. Nadolski, S. Hunt, T. Gade; Philadelphia, PA/US*
- 606.2 Pharmacokinetic analyses in patients with unresectable hepatocellular carcinoma treated by TACE with doxorubicin drug-eluting microspheres  
*K. Malagari<sup>1</sup>, A. Denys<sup>2</sup>, J. Bruix<sup>3</sup>; <sup>1</sup>Athens/GR, <sup>2</sup>Lausanne/CH, <sup>3</sup>Barcelona/ES*
- 606.3 Long-term outcomes of HCC undergoing DEB-TACE for downstaging compared to tumors within Milan criteria receiving DEB-TACE for bridging before liver transplant  
*B.B. Affonso, J.M. Motta-Leal-Filho, F.L. Galastri, R.N. Cavalcante, P.M. Falsarella, N. Wolosker, F. Nasser; São Paulo/BR*
- 606.4 Histopathological evaluation of solitary LR-5 HCC tumors undergoing DEB-TACE prior to liver transplantation: endhole (EH) vs microvalve infusion catheters (MVI)  
*J. Titano<sup>1</sup>, A. Arepally<sup>2</sup>, A. Fischman<sup>1</sup>, S. Citron<sup>2</sup>, D. Joelson<sup>2</sup>, R. Shrestha<sup>2</sup>, R. Rubin<sup>2</sup>; <sup>1</sup>New York, NY/US, <sup>2</sup>Atlanta, GA/US*
- 606.5 Predicting patient survival after TACE for HCC using a neural network: a promising tool  
*D. Pinto dos Santos<sup>1</sup>, A. Mähringer-Kunz<sup>2</sup>, B. Baessler<sup>1</sup>, S. Koch<sup>2</sup>, A. Weinmann<sup>2</sup>, R. Kloeckner<sup>2</sup>; <sup>1</sup>Köln/DE, <sup>2</sup>Mainz/DE*
- 606.6 Irinotecan drug-eluting beads chemoembolization (DEBIRI) plus mFolfox6 as front-line treatment in patients with non resectable liver dominant metastases of colorectal cancer (FFCD 1201 phase II trial): result of single-arm, open-labelled phase II study  
*Q. Pellerin<sup>1</sup>, S. Pernot<sup>1</sup>, V. Vidal<sup>2</sup>, J.-P. Tassu<sup>3</sup>, J. Marsot<sup>4</sup>, C. Monteryard<sup>5</sup>, C. Lepage<sup>5</sup>, J. Taieb<sup>1</sup>, M.R. Sapoval<sup>1</sup>; <sup>1</sup>Paris/FR, <sup>2</sup>Marseille/FR, <sup>3</sup>Poitiers/FR, <sup>4</sup>Lyon/FR, <sup>5</sup>Dijon/FR*
- 606.7 Predicting treatment response of colorectal cancer liver metastases to cTACE using diffusion-weighted MRI: Value of pretreatment apparent diffusion coefficient (ADC) and ADC changes  
*T.J. Vogl<sup>1</sup>, M. Lahrso<sup>1</sup>, M. Bickford<sup>2</sup>, M.H. Albrecht<sup>1</sup>; <sup>1</sup>Frankfurt/DE, <sup>2</sup>Charleston, AL/US*

16:15-17:15, Room 1.15

**Free Paper Session**

**FP 607 Clinical practice 1**

*Moderators: M.L. Åkesson (Malmö/SE), M.J.M. Sousa (Porto/PT)*

- 607.1 Patient safety in interventional radiology: The CIRSE IR checklist as a basis for peri-procedural intervention in 669 patients  
*P. Huespe, S. Oggero, S.H. Hyon; Buenos Aires/AR*
- 607.2 Image guided tumor biopsies in a prospective molecular triage study (MOSCATO-01): what are the risks?  
*C. Prud'homme, L. Tselikas, F. Deschamps, T. de Baère; Villejuif/FR*
- 607.3 The safety and efficacy of hemostasis with InnoSEAL versus Clo-Sur PAD after transarterial chemoembolization: a randomized controlled trial  
*S.M. Seol, S.-Y. Chun, M.Y. Lee, K.M. Kim, J.H. Shin, P.H. Kim, M.S. Lee; Seoul/KR*
- 607.4 Combined endoscopic and fluoroscopic balloon dilation in patients with Eustachian tube dysfunction  
*H.-Y. Song, K.Y. Kim, J.-H. Park, S.H. Yoon, J. Choi; Seoul/KR*
- 607.5 Social media presence of American specialty societies  
*C. Hyman<sup>1</sup>, R. Chand<sup>2</sup>; <sup>1</sup>Providence, RI/US, <sup>2</sup>Chicago, IL/US*
- 607.6 Vacuum-assisted aspiration thrombectomy for the treatment of acute thrombotic superior mesenteric artery (SMA) occlusion: International case series  
*B. Huasen<sup>1</sup>, A. Massmann<sup>2</sup>, E. Beropoulos<sup>3</sup>, M.A. Gelabert<sup>4</sup>, M. Sponza<sup>5</sup>, C. Marcellin<sup>6</sup>, S.P. D'Souza<sup>7</sup>, L.D. Nguyen<sup>8</sup>, T. Bisdas<sup>3</sup>; <sup>1</sup>Auckland/NZ, <sup>2</sup>Homburg/DE, <sup>3</sup>Muenster/DE, <sup>4</sup>Girona/ES, <sup>5</sup>Udine/IT, <sup>6</sup>Bordeaux/FR, <sup>7</sup>Preston/UK, <sup>8</sup>Hanoi/VN*



16:15-17:15, Auditorium 7  
**Free Paper Session**



**FP 608 FIRST@CIRSE**

**First data release on PAD trials and studies**

*Moderators: F. Fanelli (Florence/IT), A. Holden (Auckland/NZ)*

- 608.1 DISRUPT PAD II: primary outcomes and mechanistic actions of intravascular lithotripsy in complex, calcified femoropopliteal arteries  
*M. Brodmann<sup>1</sup>, M. Werner<sup>2</sup>, A. Holden<sup>3</sup>, G. Tepe<sup>4</sup>, T.J. Brinton<sup>5</sup>, D. Scheinert<sup>6</sup>, A.G. Schwindt<sup>7</sup>, F. Wolf<sup>8</sup>, M.R. Jaff<sup>9</sup>, A.J. Lansky<sup>10</sup>, T. Zeller<sup>11</sup>; <sup>1</sup>Graz/AT, <sup>2</sup>Freiburg/DE, <sup>3</sup>Auckland/NZ, <sup>4</sup>Rosenheim/DE, <sup>5</sup>Stanford, CA/US, <sup>6</sup>Leipzig/DE, <sup>7</sup>Münster/DE, <sup>8</sup>Vienna/AT, <sup>9</sup>Boston, MA/US, <sup>10</sup>New Haven, CT/US, <sup>11</sup>Bad Krozingen/DE*
- 608.2 Three-year results from the IN.PACT global study  
*G. Tepe; Rosenheim/DE*
- 608.3 Impact of severe calcification on procedural characteristics and 12-month outcomes following femoropopliteal treatment with the Stellarex drug-coated balloon  
*F. Fanelli<sup>1</sup>, Y. Gouëffic<sup>2</sup>, A. Holden<sup>3</sup>; <sup>1</sup>Florence/IT, <sup>2</sup>Nantes/FR, <sup>3</sup>Auckland/NZ*
- 608.4 Zilver PTX post-market surveillance study of paclitaxel-eluting stents for treating femoropopliteal artery disease in Japan: 5-year results  
*K. Kichikawa; Kashihara/JP*
- 608.5 Twelve month results of the IMPERIAL randomized trial comparing the Eluvia and Zilver PTX stents for treatment of femoropopliteal arteries  
*S. Müller-Hülsbeck<sup>1</sup>, K.F. Keirse<sup>2</sup>, K. Ando<sup>3</sup>, A.J. Benko<sup>4</sup>, A. Babaev<sup>5</sup>, Y. Yokoi<sup>6</sup>, H. Schröder<sup>7</sup>, J. Prem<sup>8</sup>, A. Holden<sup>9</sup>, J. Popma<sup>10</sup>, M.R. Jaff<sup>10</sup>, J. Diaz-Cartelle<sup>11</sup>, W.A. Gray<sup>12</sup>; <sup>1</sup>Flensburg/DE, <sup>2</sup>Tienen/BE, <sup>3</sup>Kitakyushu/JP, <sup>4</sup>Sherbrooke, QC/CA, <sup>5</sup>New York, NY/US, <sup>6</sup>Osaka/JP, <sup>7</sup>Berlin/DE, <sup>8</sup>North Canton, OH/US, <sup>9</sup>Auckland/NZ, <sup>10</sup>Boston, MA/US, <sup>11</sup>Marlborough, MA/US, <sup>12</sup>Wynnewood, PA/US*

16:15-16:35

### Satellite Symposium

For the detailed programme, please refer to page 211.

17:30-18:30, Auditorium 7

### Workshop

#### ■ **WS 701 Diabetic foot and pedal access**

701.1 *A. Spinelli (Cagliari/IT)*

701.2 *T. Rand (Vienna/AT)*

17:30-18:30, Room 5.B

### Workshop

#### ■ **WS 702 Venous sampling**

702.1 *R. Marcello (Rome/IT)*

702.2 *M.B. Matson (London/UK)*

17:30-18:30, Auditorium 6

### Workshop

#### ■ **WS 703 Challenging liver tumours**

703.1 *U. Pua (Singapore/SG)*

703.2 *R. Bale (Innsbruck/AT)*



17:30-18:30, Auditorium 8

**Video Learning Session**

■ **VL 704 Non-vascular interventions**

*Moderators: A. Hatzidakis (Iraklion/GR), E.M. Walser (Galveston, TX/US)*

704.1 Percutaneous transhepatic biliary drainage

*K.P. van Lienden (Amsterdam/NL)*

704.2 Lung biopsy

*X. Buy (Bordeaux/FR)*

704.3 Vertebroplasty

*G.C. Anselmetti (Milan/IT)*

17:30-18:30, Auditorium 2

**Workshop**

■ **WS 705 Urinary tract intervention**

705.1 *R. Argirò (Rome/IT)*

705.2 *G.N. Papageorgiou (Athens/GR)*

17:30-18:30, Room 1.15

**Free Paper Session**

**FP 706 Bone, spine and soft tissue**

*Moderators: S.M. Tutton (Milwaukee, WI/US), A. Manca (Candiolo/IT)*

- 706.1 How many VCF patients were exposed to elevated mortality risk from the 2009 diminution in vertebral augmentation referrals?  
*K.L. Ong<sup>1</sup>, J.A. Hirsch<sup>2</sup>, M. Frohbergh<sup>1</sup>, E. Lau<sup>3</sup>, O. Clerk-Lamallice<sup>4</sup>, D.P. Beall<sup>4</sup>;  
<sup>1</sup>Philadelphia, PA/US, <sup>2</sup>Boston, MA/US, <sup>3</sup>Menlo Park, CA/US, <sup>4</sup>Edmond, OK/US*
- 706.2 Trends in vertebral augmentation for vertebral compression fractures in the US elderly Medicare population  
*R. Rabej<sup>1</sup>, K. Patel<sup>1</sup>, M. Ginsburg<sup>2</sup>, M. Patel<sup>1</sup>, U.C. Turba<sup>1</sup>, B. Arslan<sup>1</sup>, O. Ahmed<sup>1</sup>;  
<sup>1</sup>Chicago, IL/US, <sup>2</sup>McHenry, IL/US*
- 706.3 Numerical simulation of radiofrequency ablation of spine metastasis  
*H. Ballhausen<sup>1</sup>, M. Becker<sup>2</sup>, S. Serow<sup>2</sup>, C. Schumann<sup>1</sup>, M. Skalej<sup>2</sup>, C. Rieder<sup>1</sup>;  
<sup>1</sup>Bremen/DE, <sup>2</sup>Magdeburg/DE*
- 706.4 Clinical experience in 37 patients implanted with a prophylactic implantable medical device indicated for impeding pathological hip fracture  
*F.H. Cornelis<sup>1</sup>, J.-D. Laredo<sup>1</sup>, O. Pellerin<sup>1</sup>, C. Mastier<sup>2</sup>, G. Leleup<sup>3</sup>, F. Deschamps<sup>4</sup>;  
<sup>1</sup>Paris/FR, <sup>2</sup>Lyon/FR, <sup>3</sup>Rouen/FR, <sup>4</sup>Villejuif/FR*
- 706.5 CT-guided percutaneous sacral osteosynthesis in pelvic ring fractures  
*P. Divis, E. Bissoli; Camposampiero (Padova)/IT*
- 706.6 Distribution of contrast medium in CT-guided periradicular infiltration – which pattern is associated with sufficient pain relief?  
*S. Schob, U. Quäschling, K.-T. Hoffmann, V. Reuschel; Leipzig/DE*
- 706.7 Cryoneurolysis in patients with dorsal neuropathic pain secondary to tumor invasion  
*S. Daubié, C. Mastier; Lyon/FR*



17:30-18:30, Room 3.A

**Free Paper Session****FP 707 GI tract and gynaecological interventions***Moderators: P.A.M.S. Almeida (Viseu/PT), S.J. McPherson (Leeds/UK)*

- 707.1 Randomised controlled trial of particles used in uterine fibroid embolisation (PURE study) – final results. Non-spherical polyvinyl alcohol (Contour PVA – Boston Scientific, USA) versus calibrated hydrogel microspheres with polyzene coating (Embozene – CeloNova Biosciences, USA)  
*R. Das, S. Ameli-Renani, Y.-S. Ng, L. Ratnam, L. Mailli, I.T. Manyonda, A.-M. Belli; London/UK*
- 707.2 Gel-Bead: a new resorbable embolic agent for uterine fibroid embolization (UFE)  
*N. Hacking, S. Modi, D. McLean, T.J. Bryant; Southampton/UK*
- 707.3 Early post-procedural patients' compliance and VAS after UAE through transradial versus transfemoral approach: preliminary results  
*A. Boncoraglio<sup>1</sup>, G. Failla<sup>1</sup>, G. Caltabiano<sup>1</sup>, C. Gozzo<sup>1</sup>, A. Motta<sup>1</sup>, P.V. Foti<sup>1</sup>, S. Palmucci<sup>1</sup>, J.J. Garcia-Alfonso<sup>2</sup>, J. Garcia Medina<sup>2</sup>, A. Basile<sup>1</sup>; <sup>1</sup>Catania/IT, <sup>2</sup>Murcia/ES*
- 707.4 Percutaneous radiological gastrostomy without nasogastral insufflation – description of a novel method  
*M. Takes, C.J. Zech; Basel/CH*
- 707.5 Percutaneous antegrade colonic stent insertion using a proximal trans-peritoneal colopexy technique  
*B. Kawa<sup>1</sup>, B. Thomson<sup>1</sup>, A. Rabone<sup>1</sup>, H. Sharma<sup>2</sup>, C. Wetton<sup>1</sup>, C. Wright<sup>2</sup>, P. Ignotus<sup>1</sup>, A. Shaw<sup>1</sup>; <sup>1</sup>Maidstone/UK, <sup>2</sup>Kent/UK*
- 707.6 Percutaneous balloon dilatation and stenting, stone evacuation in duodenum using main pancreatic duct drainage track – the new approach in the management of pancreatic duct benign structures and stones  
*M. Mizandari<sup>1</sup>, T. Azrumelashvili<sup>1</sup>, O. Kepuladze<sup>1</sup>, G. Gabadadze<sup>1</sup>, N. Habib<sup>2</sup>; <sup>1</sup>Tbilisi/GE, <sup>2</sup>London/UK*
- 707.7 Ella-HV anti-migration stent demonstrates superior performance for cancers of the gastro-oesophageal junction  
*P.S. Najran, J.K. Bell, D. Mullan, P. Borg, H.-U. Laasch; Manchester/UK*

17:30-18:30, Room 3.B

**Free Paper Session**

**FP 708 Urinary tract intervention**

*Moderators: M. Cejna (Feldkirch/AT), R.W. Günther (Berlin/DE)*

- 708.1 Ultrasound detection of a biodegradable embolic microsphere after prostatic artery embolisation  
*R.J. Owen, J. McGoey, M. McToal; Edmonton, AB/CA*
- 708.2 Prostate artery embolization with 250µm spherical, hydrogel microspheres for treatment of moderate to severe lower urinary tract symptoms  
*T. Franke, G.F. Enderlein, T. Lehmann, C.-F. von Rundstedt, M.O. Grimm, U. Teichgräber, R. Aschenbach; Jena/DE*
- 708.3 Safety and efficacy of ultrasound-guided transperineal laser ablation for the treatment of benign prostatic hyperplasia in interventional radiology: preliminary results  
*G. Patelli<sup>1</sup>, G.A. Paganelli<sup>1</sup>, A. Ranieri<sup>1</sup>, F. Besana<sup>1</sup>, L. Di Mare<sup>1</sup>, G. Esposito<sup>1</sup>, G. Lo Bue<sup>1</sup>, G. Ori Belometti<sup>1</sup>, A. Poloni<sup>1</sup>, A. D'Alessio<sup>2</sup>, G. Mauri<sup>3</sup>, C.M. Pacella<sup>4</sup>; <sup>1</sup>Seriate/IT, <sup>2</sup>Osio Sotto/IT, <sup>3</sup>Milano/IT, <sup>4</sup>Rome/IT*
- 708.4 Prostatic artery embolization (PAE): number, position or volume of adenoma in adenomatous benign prostatic hyperplasia (BPH) as BEST predictor of success?  
*C.R. Tapping<sup>1</sup>, H. Corrigan<sup>1</sup>, A. Macdonald<sup>1</sup>, M.W. Little<sup>2</sup>, R. Macpherson<sup>1</sup>, P. Boardman<sup>1</sup>; <sup>1</sup>Oxford/UK, <sup>2</sup>Reading/UK*
- 708.5 The STREAM trial: initial results  
*C.R. Tapping<sup>1</sup>, M.W. Little<sup>2</sup>, R. Macpherson<sup>1</sup>, A. Macdonald<sup>1</sup>, J. Crew<sup>1</sup>, P. Boardman<sup>1</sup>; <sup>1</sup>Oxford/UK, <sup>2</sup>Reading/UK*
- 708.6 Is sampling transition zone important to increase prostate cancer detection in systematic prostatic biopsies?  
*P.M. Falsarella, G.C. Mariotti, V.O. Carvalho, M.R.G. Queiroz, G.C. Lemos, R.H. Baroni, R.G. Garcia; São Paulo/BR*
- 708.7 Initial experience with the Lutonix drug-coated balloon in the treatment of benign ureteral strictures  
*P.M. Kitrou, D. Karnabatidis, P. Kallidonis, A. Valsamos, P.N. Papadimitos, K.N. Katsanos, E. Liatsikos; Patras/GR*

17:30-18:30, Room 5.A

**Free Paper Session**

**FP 709 Biliary intervention**

*Moderators: J. Čurić (Zagreb/HR), R.F. Grasso (Rome/IT)*

- 709.1 Prevention of benign stenosis due to endoluminal irreversible electroporation in bile ducts  
*T. Andrašina, J. Panek, D. Cervinka, I. Svobodova, T. Rohan, J. Husty, H. Martin, V. Válek; Brno/CZ*
- 709.2 Creation of neo-biliodigestive anastomosis in patients with complete anastomotic stricture  
*Y. Kulezneva, O. Melekhina, I. Patrushev; Moscow/RU*
- 709.3 Outcomes of percutaneous transluminal biopsy of biliary lesions using a dedicated forceps system  
*R. Inchingolo<sup>1</sup>, S. Spiliopoulos<sup>2</sup>, M. Nestola<sup>1</sup>, G. Di Costanzo<sup>1</sup>, M. Nardella<sup>1</sup>; <sup>1</sup>Matera/IT, <sup>2</sup>Athens/GR*
- 709.4 Systematic review comparing clinical success rates between biodegradable and multiple plastic stent implantation in benign biliary strictures  
*G.G.G. Almeida<sup>1</sup>, B. Gonçalves<sup>2</sup>, P.A.M.S. Almeida<sup>3</sup>; <sup>1</sup>Coimbra/PT, <sup>2</sup>Porto/PT, <sup>3</sup>Viseu/PT*
- 709.5 Percutaneous placement of a biliary dual stent system with long covered extension in patients with malignant duodenobiliary obstruction  
*D.I. Gwon, W.J. Yang, H.H. Chu, S. Park, S.Y. Noh, G.-Y. Ko; Seoul/KR*
- 709.6 Selective trans-catheter coil embolization of cystic duct stump in post cholecystectomy bile leak: no more surgery, please  
*N. Nezami, H.R. Mojibian, M. Arici, R. Ayyagari, J. Pollak, J.C.L. Perez Lozada; New Haven, CT/US*
- 709.7 Irreversible electroporation for treatment of metal stent occlusion in biliary tract – ex vivo experimental model  
*T. Andrašina, T. Rohan, T. Juza, P. Matkulčík, V. Válek; Brno/CZ*

## Sunday, September 23

08:00-08:20

### Satellite Symposia

For the detailed programmes, please refer to page 212.

08:30-09:30, Auditorium 1

### Focus Session

#### FS 901 New frontiers in critical limb ischaemia

*Moderators: M.G. Manzi (Abano Terme/IT), T. Rand (Vienna/AT)*

- 901.1 Percutaneous deep vein arterialisation  
*S. Kum (Singapore/SG)*
- 901.2 Stem cells and gene therapy  
*S. Sharma (Delhi/IN)*
- 901.3 Perfusion angiography  
*J.A. Reekers (Amsterdam/NL)*
- 901.4 Novel drug delivery technologies  
*R. Gandini (Rome/IT)*

08:30-09:30, Auditorium 2

### Focus Session

#### FS 902 Proximal neck issues in EVAR

*Moderators: K. Kichikawa (Kashihara/JP), F.E. Vermassen (Ghent/BE)*

- 902.1 What is a bad neck?  
*R. Uberoi (Oxford/UK)*
- 902.2 Chimneys  
*K.P. Donas (Münster/DE)*
- 902.3 Fenestrated  
*R.K. Fisher (Liverpool/UK)*
- 902.4 EVAR with adjuncts  
*J.P.P.M. de Vries (Nieuwegein/NL)*
- 902.5 Do new device developments help us?  
*A. Holden (Auckland/NZ)*

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08:30-09:30, Auditorium 6

**Focus Session**

■ **FS 903 Lessons from RCT studies in liver cancer**

*Moderators: R. Bale (Innsbruck/AT), D. Sze (Stanford, CA/US)*

- 903.1 CLOCC trial  
*G. Carrafiello (Milan/IT)*
- 903.2 SARAH trial  
*J.I. Bilbao (Pamplona/ES)*
- 903.3 SIRFLOX and FOXFIRE trial  
*T.K. Helmberger (Munich/DE)*
- 903.4 SORAMIC trial  
*R. Iezzi (Rome/IT)*

08:30-09:30, Auditorium 8

**Focus Session**

■ **FS 904 Embolotherapy in urology**

*Moderators: A.N. Chatziioannou (Athens/GR),  
J.B. Spies (Washington, DC/US)*

- 904.1 Embolisation of renal masses  
*B. Gebauer (Berlin/DE)*
- 904.2 Bladder and prostate embolisation for haematuria  
*M. Grosso (Cuneo/IT)*
- 904.3 The role of IR in high-flow and low-flow priapism  
*K.R. Kim (Chapel Hill, NC/US)*
- 904.4 Spermatic vein embolisation  
*A.C. Roberts (La Jolla, CA/US)*

08:30-09:30, Room 5.A

**Focus Session**

**FS 905 Update in venous thrombo-embolic disease**

*Moderators: M. Cejna (Feldkirch/AT), G.J. O’Sullivan (Galway/IE)*

- 905.1 Lessons learnt from the ATTRACT trial  
*R. de Graaf (Friedrichshafen/DE)*
- 905.2 Central venous occlusions  
*M. Guimaraes (Charleston, SC/US)*
- 905.3 Pulmonary embolism  
*B.C. Meyer (Hannover/DE)*
- 905.4 Chronic thrombo-embolic pulmonary hypertension  
*J.G. Caridi (New Orleans, LA/US)*

08:30-10:00, Simulator Gallery

**Simulation Training**

**SIM 2.1 Basic principles of peripheral arterial intervention**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: S.D. Qanadli (Lausanne/CH)*

*Instructors: R.E. Beasley (Miami Beach, FL/US), A.A. Chouiter (Neuchâtel/CH), P.R. Knuesel (Chur/CH), L. Oguzkurt (Istanbul/TR)*

09:30-11:00, Room 5.C

**Hands-on Device Training**

**EMT-HDT 1 Embolisation: materials and tools – Coils & plugs**

*Coordinators: M.C. Burgmans (Leiden/NL), V. Pedicini (Milan/IT)*

09:30-11:00, Auditorium 3

**Hands-on Device Training**

**TA-HDT 1 Tumour ablation – MWA**

*Coordinators: L. Crocetti (Pisa/IT), J.L. del Cura Rodriguez (Bilbao/ES)*



e-voting



recommended for EBIR preparation

09:30-11:00, Room 5.D

**Hands-on Device Training**

■ **VV-HDT 1 Varicose veins**

*Coordinators: J.M. Regi (Sheffield/UK), F. Veloso Gomes (Lisbon/PT)*

09:30-11:00, Simulator Gallery

**Simulation Training**

■ **SIM 2.2 Basic principles of peripheral arterial intervention**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: S.D. Qanadli (Lausanne/CH)*

*Instructors: R.E. Beasley (Miami Beach, FL/US), A.A. Chouiter (Neuchâtel/CH),*

*P.R. Knuesel (Chur/CH), L. Oguzkurt (Istanbul/TR)*

10:00-11:00, Auditorium 1

**Controversy Session**

■ **CS 1001 How to beat calcium**



*Moderators: K. Deloose (Dendermonde/BE), R. Sachar (Raleigh, NC/US)*

- 1001.1 Atherectomy: pro  
*M. Lichtenberg (Arnsberg/DE)*
- 1001.2 Atherectomy: con  
*T.J. Cleveland (Sheffield/UK)*
- 1001.3 Lithoplasty: pro  
*G. Tepe (Rosenheim/DE)*
- 1001.4 Lithoplasty: con  
*D. Vorwerk (Ingolstadt/DE)*
- 1001.5 Stents: pro  
*M.W. Mewissen (Milwaukee, WI/US)*
- 1001.6 Stents: con  
*M.J. Lee (Dublin/IE)*

10:00-11:00, Auditorium 2

**Focus Session**

**FS 1002 Iliac issues in EVAR**

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*Moderators: R.N. Cavalcante (São Paulo/BR), S. Michelagnoli (Florence/IT)*

- 1002.1 How to handle difficult access vessels  
*T. Hupp (Stuttgart/DE)*
- 1002.2 When to treat iliac aneurysms  
*J.F. Benenati (Miami, FL/US)*
- 1002.3 Durability of large iliac legs  
*M.P. Jenkins (London/UK)*
- 1002.4 Bilateral IBD: indication, technique and results  
*W. Ritter (Nuremberg/DE)*
- 1002.5 Limb occlusion: prevention and treatment  
*P. Geisbuesch (Heidelberg/DE)*

10:00-11:00, Room 5.A

**Fundamental Course**

**FC 1003 Musculoskeletal ablation**



*Moderators: M.R. Callstrom (Rochester, MN/US), S. Masala (Rome/IT)*

- 1003.1 Bone ablation in metastatic patients: current evidence  
*M. Muto (Naples/IT)*
- 1003.2 HIFU for MSK lesions in cancer patients: current evidence  
*A. Napoli (Rome/IT)*
- 1003.3 Effect of ablation and HIFU on bone strength and healing  
*S.M. Tutton (Milwaukee, WI/US)*
- 1003.4 Ablation of soft tissue tumours  
*J. Garnon (Strasbourg/FR)*



10:00-11:00, Auditorium 8

**Clinical Evaluation Course**■ **CEC 1004 Management of the poly-traumatised patient***Moderators: A.C. Roberts (La Jolla, CA/US), O.M. van Delden (Amsterdam/NL)*

- 1004.1 Patient management algorithm  
*S. Romagnoli (Florence/IT)*
- 1004.2 Imaging work-up and patient selection for IR  
*E. Kashef (London/UK)*
- 1004.3 IR techniques for trauma management  
*M. Bezzi (Rome/IT)*
- 1004.4 Complications and management  
*C. Nice (Newcastle-upon-Tyne/UK)*
- 1004.5 Damage control surgery  
*C. Pilasi Menichetti (London/UK)*
- 1004.6 Results and outcome predictors  
*C. Dodt (Munich/DE)*

10:00-11:00, Auditorium 6

**Expert Round Table**■ **ERT 1005 Liver colorectal metastases***Coordinators: J.I. Bilbao (Pamplona/ES), O. Pellerin (Paris/FR)*

- 1005.1 Ablative and combined therapies  
*B. Gonçalves (Porto/PT)*
- 1005.2 Intra-arterial therapies  
*D. Sze (Stanford, CA/US)*
- 1005.3 Role of surgery  
*G.J. Poston (Liverpool/UK)*
- 1005.4 Systemic therapies  
*M. Fuchs (Munich/DE)*

10:00-11:00, Room 3.A

**CIRSE meets**

**CM 1006 CIRSE meets SIDI**

*Moderators: M.A. de Gregorio (Zaragoza/ES), R.A. Morgan (London/UK)*

- 1006.1 Congenital portosystemic shunts: diagnosis and treatment options  
*S. Sierra (Buenos Aires/AR)*
- 1006.2 Complications in uterine fibroid embolisation: how to prevent and solve them  
*G.M.L. Guerrero-Avendaño (Mexico City/MX)*
- 1006.3 CHEVAR, FEVAR and T-Branch: the Latin American aorta's puzzle  
*L.A. Cruz Vásquez (Medellín/CO)*

10:30-12:00, Simulator Gallery

**Simulation Training**

**SIM 2.3 Basic principles of peripheral arterial intervention**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: S.D. Qanadli (Lausanne/CH)*

*Instructors: R.E. Beasley (Miami Beach, FL/US), A.A. Chouiter (Neuchâtel/CH), P.R. Knuesel (Chur/CH), L. Oguzkurt (Istanbul/TR)*

11:30-12:30, Auditorium 2

**Expert Round Table**

**ERT 1101 Promoting your IR service: what you need to know to succeed**

*Coordinators: B.T. Katzen (Miami, FL/US), J. Lammer (Vienna/AT)*

- 1101.1 Online advertisement: setting up a webpage  
*F. Wolf (Vienna/AT)*
- 1101.2 How to set up and run an outpatient clinic: in and outside the hospital  
*G.J. O'Sullivan (Galway/IE)*
- 1101.3 How to set up and run your own inpatient beds  
*C.A. Binkert (Winterthur/CH)*
- 1101.4 How to survive turf battles  
*R. Das (London/UK)*

11:30-12:30

**Satellite Symposia**

For the detailed programmes, please refer to pages 213-215.

11:30-13:00, Simulator Gallery

**Simulation Training**

**SIM 2.4 Basic principles of peripheral arterial intervention**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: S.D. Qanadli (Lausanne/CH)*

*Instructors: R.E. Beasley (Miami Beach, FL/US), A.A. Chouiter (Neuchâtel/CH), P.R. Knuesel (Chur/CH), L. Oguzkurt (Istanbul/TR)*

12:30-14:00, Room 5.C

**Hands-on Device Training**

**EMT-HDT 2 Embolisation: materials and tools – Coils & plugs**

*Coordinators: M.C. Burgmans (Leiden/NL), V. Pedicini (Milan/IT)*

12:30-14:00, Auditorium 3

**Hands-on Device Training**

**TA-HDT 2 Tumour ablation – MWA**

*Coordinators: L. Crocetti (Pisa/IT), J.L. del Cura Rodriguez (Bilbao/ES)*

12:30-14:00, Room 5.D

**Hands-on Device Training**

**VV-HDT 2 Varicose veins**

*Coordinators: J.M. Regi (Sheffield/UK), F. Veloso Gomes (Lisbon/PT)*

13:00-14:00

**Satellite Symposia**

For the detailed programmes, please refer to pages 215-217.

13:15-14:15, News on Stage Area

**News on Stage**

**NoS 1204 Scientific News on Stage**

*Moderators: J.A. Kaufman (Portland, OR/US), O. Pellerin (Paris/FR)*

- 1204.1 Inside interventional radiology: micro CT 3D imaging of angiographic guidewires  
*T.Q.L. Klaus, G.A. Krombach, E. Alexandre-Lafont, M. Kampschulte; Giessen/DE*
- 1204.2 Design, creation and evaluation of 3d-printed high-detailed vascular models for selective interventional simulation  
*R. Kaufmann, M. Takes, C.J. Zech, T. Heye, P. Brantner; Basel/CH*
- 1204.3 Application of a biomechanical deformable registration image method for assessing ablation margins in colorectal liver metastases  
*E.Y. Lin, B.M. Anderson, G. Cazoulat, K. Brock, B.C. Odisio; Houston, TX/US*
- 1204.4 EW-7197, a transforming growth factor-beta type I receptor kinase inhibitor, ameliorates acquired lymphedema in a mouse tail model  
*S.H. Yoon, K.Y. Kim, J.-H. Park, H.-Y. Song; Seoul/KR*
- 1204.5 WITHDRAWN
- 1204.6 Comparison of a full-core end-cut biopsy device with a side-notch device: diagnostic valence of the specimen  
*J. Schaible, B. Pregler, L. Lürken, P. Wiggermann, L.P. Beyer; Regensburg/DE*

14:30-15:00, Auditorium 1

**Honorary Lecture**

**HL 1301 Andreas Gruentzig Lecture**

*Moderator: R.A. Morgan (London/UK)*

*Laudation: N. McEniff (Dublin/IE)*

- 1301.1 Darwin and Osler on the good ship IR sailing to Byzantium  
*M.J. Lee (Dublin/IE)*



15:00-16:00, Auditorium 1

**Hot Topic Symposium**

■ **HTS 1302 Transradial access**

*Moderators: C.A. Binkert (Winterthur/CH), M. Guimaraes (Charleston, SC/US)*

- 1302.1 History and rationale for transradial access  
*P.M.M. Lopes (Porto/PT)*
- 1302.2 Transradial access for embolisation  
*D.K. Tsetis (Iraklion/GR)*
- 1302.3 Transradial access for PAD  
*D. Klass (Vancouver, BC/CA)*
- 1302.4 Debate: We should all move to transradial access  
*A. Buecker (Homburg/DE)*
- 1302.5 Debate: Transradial access is a waste of time and effort  
*E. Brountzos (Athens/GR)*

14:30-15:30

**Satellite Symposium**

For the detailed programme, please refer to page 218.

15:40-16:00

**Satellite Symposia**

For the detailed programmes, please refer to pages 218-219.

SUN

16:15-17:15, Auditorium 8

**Clinical Evaluation Course**

■ **CEC 1401 Femoropopliteal disease in claudicants**



Moderators: *M. Palena (Abano Terme/IT), J.A. Reekers (Amsterdam/NL)*

- 1401.1 Clinical evaluation and physical examination  
*C.S. Pena (Miami, FL/US)*
- 1401.2 Best medical therapy and risk factors modification  
*J.H. Rundback (Teaneck, NJ/US)*
- 1401.3 Supervised exercise therapy  
*M.J.W. Koelemay (Amsterdam/NL)*
- 1401.4 Indications and outcome of endovascular procedures  
*C. Del Giudice (Paris/FR)*
- 1401.5 Is bypass indicated in claudication?  
*S. Michelagnoli (Florence/IT)*
- 1401.6 Follow-up management and medical treatment  
*J. Tacke (Passau/DE)*

16:15-17:15, Auditorium 2

**Case-based Discussion**

■ **CBD 1402 A bad day in the angio suite (TEVAR)**



Moderators: *A. Holden (Auckland/NZ), H. Rousseau (Toulouse/FR)*

- 1402.1 Case 1  
*A.L. Nobre (Lisbon/PT)*
- 1402.2 Case 2  
*I. Loftus (London/UK)*
- 1402.3 Case 3  
*M.D. Dake (Stanford, CA/US)*
- 1402.4 Case 4  
*P. Gkoutzios (London/UK)*

16:15-17:15, Auditorium 7

**Case-based Discussion**■ **CBD 1403 Arterial gastrointestinal bleeding**

Moderators: J.A. Kaufman (Portland, OR/US), M. Rossi (Rome/IT)

- 1403.1 Upper GI bleeding  
*D. Sze (Stanford, CA/US)*
- 1403.2 Lower GI bleeding  
*G. Maleux (Leuven/BE)*
- 1403.3 Intermittent GI bleeding  
*G.S. Goh (Melbourne, VIC/AU)*
- 1403.4 Recurrent GI bleeding  
*E.M. Walser (Galveston, TX/US)*

16:15-17:15, Auditorium 6

**Expert Round Table**■ **ERT 1404 The role of local tumour treatment in oligometastatic disease**

Coordinators: A. Adam (London/UK), L.M. Kenny (Brisbane, QLD/AU)

- 1404.1 Systemic therapy: when is it appropriate?  
*M. Lacerda (Lisbon/PT)*
- 1404.2 The role of surgery: when cure is unlikely  
*D. Ribero (Torino/IT)*
- 1404.3 Interventional radiology in patients with oligometastases  
*C.T. Sofocleous (New York, NY/US)*
- 1404.4 SABR and conventional radiotherapy: which modality when?  
*K.-H. Kahl (Augsburg/DE)*

16:15-17:15, Room 5.A

**Fundamental Course**

**FC 1405 Interventional pain management**

*Moderators: D.K. Filippidis (Athens/GR), R.F. Grasso (Rome/IT)*

- 1405.1 Disc and facet joints  
*S. Marcia (Cagliari/IT)*
- 1405.2 Neurolysis in cancer patients  
*A.G. Ryan (Waterford City/IE)*
- 1405.3 Palliative ablation and consolidation  
*F. Deschamps (Villejuif/FR)*
- 1405.4 Embolisation in osteoarthritis  
*Y. Okuno (Tokyo/JP)*

16:15-17:15, Auditorium 1

**AI 1406 Amazing Interventions**

*Coordinator: C.A. Binkert (Winterthur/CH)*

*Case presenters: K.N. Katsanos (Patras/GR), A. Krajina (Hradec Králové/CZ),  
T.J. Kroencke (Augsburg/DE), M. Mizandari (Tbilisi/GE), G. Puippe (Zurich/CH),  
S.O. Trerotola (Philadelphia, PA/US)*



16:15-17:15, Room 1.15

**Free Paper Session****FP 1407 Aortic interventions including EVAR and TEVAR***Moderators: M. Cariati (Milan/IT), S. Spiliopoulos (Athens/GR)*

- 1407.1 Endovascular flow-diversion of visceral and renal artery aneurysms using dual-layer braided nitinol carotid (CASPER) stents  
*P. van Veenendaal<sup>1</sup>, J. Maingard<sup>2</sup>, H.K. Kok<sup>3</sup>, D. Ranatunga<sup>2</sup>, T. Buckenham<sup>1</sup>, R. Chandra<sup>1</sup>, M.J. Lee<sup>3</sup>, D.M. Brooks<sup>2</sup>, H. Asadi<sup>1</sup>; <sup>1</sup>Clayton, VIC/AU, <sup>2</sup>Heidelberg, VIC/AU, <sup>3</sup>Dublin/IE*
- 1407.2 Psoas muscle area and quality are independent predictors of survival in patients treated for abdominal aortic aneurysms  
*M. Suovula, I. Lindström, T. Vänttinen, S.M. Protto, N. Sillanpää, N. Oksala; Tampere/FI*
- 1407.3 Gender-related outcomes of chimney EVAR within the PERICLES registry  
*M.V. Usai<sup>1</sup>, K.P. Donas<sup>1</sup>, G. Torsello<sup>1</sup>, F.J. Veith<sup>2</sup>; <sup>1</sup>Münster/DE, <sup>2</sup>New York, NY/US*
- 1407.4 Midterm clinical results of COLT device – a new branched stent-graft for thoracoabdominal aortic aneurysms  
*P. Szopinski, E. Pleban, J. Iwanowski; Warsaw/PL*
- 1407.5 Baseline parameters for prediction of stent-graft movement after endovascular aneurysm repair  
*U. Asenbaum, M. Schoder, E. Schwartz, G. Langs, F. Wolf, C.M. Loewe, R. Nolz; Vienna/AT*
- 1407.6 Techniques and outcomes of trans-catheter closure of aortic anastomosis leak after aortic replacement  
*J. Pu, Y. Ke, W. Wu, L. Huang; Beijing/CN*
- 1407.7 Prospective single-center experience of endovascular aortic repair (EVAR) using ultra-low profile Altura endograft  
*A. Massmann, F. Frenzel, P. Fries, R. Kubale, R. Shayesteh-Kheslat, A. Buecker; Homburg/DE*

16:15-17:15, Room 3.A

**Free Paper Session**

**FP 1408 Drug-coated balloons in PVD**

*Moderators: A. Cannavale (Rome/IT), S. Punamiya (Singapore/SG)*

- 1408.1 Outcome of DEB and PTA post stenting in occluded versus stenotic lesions including evaluation of the implanted stent – subgroup analysis of the randomized Freeway Stent study  
*J. Tacke<sup>1</sup>, K.A. Hausegger<sup>2</sup>, H. Schröder<sup>3</sup>, S. Müller-Hülsbeck<sup>4</sup>, S. Stahnke<sup>5</sup>, J. Dambach<sup>5</sup>; <sup>1</sup>Passau/DE, <sup>2</sup>Klagenfurt/AT, <sup>3</sup>Berlin/DE, <sup>4</sup>Flensburg/DE, <sup>5</sup>Bonn/DE*
- 1408.2 EffPac-Trial: Effectiveness of LUMINOR® DCB versus POBA in the SFA: 12 months results  
*U. Teichgräber; Jena/DE*
- 1408.3 Comparison of particulate embolization after femoral artery treatment with IN.PACT Admiral, Ranger, and Stellarex paclitaxel-coated balloons in healthy swine  
*R. Virmani; Gaithersburg, MD/US*
- 1408.4 First report of the 12-month outcomes of SELUTION trial: a novel Sirolimus coated DCB technology evaluated in SFA  
*K. Brechtel<sup>1</sup>, D.-R. Meyer<sup>1</sup>, T. Albrecht<sup>1</sup>, U. Beschorner<sup>2</sup>, T. Zeller<sup>2</sup>; <sup>1</sup>Berlin/DE, <sup>2</sup>Bad Krozingen/DE*
- 1408.5 One-year results from the Total IN.PACT™ All-Comers  
*M.P. Kohli<sup>1</sup>, M. Shishebor<sup>2</sup>; <sup>1</sup>San Francisco, CA/US, <sup>2</sup>Cleveland, OH/US*
- 1408.6 6 months primary outcome of KANSHAS 1 study of the novel KANSHAS drug coated balloon for treatment of femoropopliteal occlusive disease; the first-in-human study  
*M. Lichtenberg<sup>1</sup>, G. Tepe<sup>2</sup>, S. Müller-Hülsbeck<sup>3</sup>, K. Deloose<sup>4</sup>, J. Verbist<sup>5</sup>, P. Goverde<sup>6</sup>, T. Zeller<sup>7</sup>; <sup>1</sup>Arnsberg/DE, <sup>2</sup>Rosenheim/DE, <sup>3</sup>Flensburg/DE, <sup>4</sup>Dendermonde/BE, <sup>5</sup>Bonheiden/BE, <sup>6</sup>Antwerpen/BE, <sup>7</sup>Bad Krozingen/DE*
- 1408.7 Two-year clinical outcomes of the CONSEQUENT trial: can femoropopliteal lesions be treated with sustainable clinical results that are economically sound?  
*G. Tepe<sup>1</sup>, M. Waliszewski<sup>2</sup>, C. Roca<sup>3</sup>, U. Redlich<sup>4</sup>, J. Tautenhahn<sup>4</sup>, Z. Halloul<sup>4</sup>, Ö. Gögebakan<sup>2</sup>, D.-R. Meyer<sup>2</sup>, I. Gemeinhardt<sup>2</sup>, T. Zeller<sup>5</sup>, S. Müller-Hülsbeck<sup>6</sup>, I. Ott<sup>7</sup>, T. Albrecht<sup>2</sup>; <sup>1</sup>Rosenheim/DE, <sup>2</sup>Berlin/DE, <sup>3</sup>Melsungen/DE, <sup>4</sup>Magdeburg/DE, <sup>5</sup>Bad Krozingen/DE, <sup>6</sup>Flensburg/DE, <sup>7</sup>München/DE*

16:15-17:15, Room 3.B

**Free Paper Session**

**FP 1409 Oncologic interventions 2**

*Moderators: O. Akhan (Ankara/TR), H.-K. Yoon (Seoul/KR)*

- 1409.1 Percutaneous microwave thermal ablation (MWA) for patients with malignant lung tumors: mid-term results of a prospective multicenter study (MALT study)  
*A. Posa<sup>1</sup>, R. Iezzi<sup>1</sup>, F. Carchesio<sup>1</sup>, D. Basile<sup>2</sup>, A. Veltri<sup>2</sup>, R. Cioni<sup>3</sup>, R. Manfredi<sup>1</sup>, L. Bonomo<sup>1</sup>; <sup>1</sup>Rome/IT, <sup>2</sup>Orbassano/IT, <sup>3</sup>Pisa/IT*
- 1409.2 Combined treatment, TACE and microwave ablation in patients with HCC  
*M.M.A. Zaitoun; Zagazig/EG*
- 1409.3 New interventional treatment model for pancreatic neoplasms using gemcitabine-eluting hydrogel devices: In vitro and in vivo results  
*D.M. Benz, R. Lopez-Benitez; Luzern/CH*
- 1409.4 Vandetanib-eluting radiopaque beads: pharmacokinetics and proof of concept in rabbit VX2 liver tumour model  
*R. Duran<sup>1</sup>, J. Namur<sup>2</sup>, F. Pascale<sup>2</sup>, P. Czuczman<sup>3</sup>, Z. Basca<sup>3</sup>, H. Kilpatrick<sup>3</sup>, R. Whomsley<sup>3</sup>, S. Ryan<sup>3</sup>, A.L. Lewis<sup>3</sup>, A. Denys<sup>1</sup>; <sup>1</sup>Lausanne/CH, <sup>2</sup>Jouy En Josas/FR, <sup>3</sup>Camberley/UK*
- 1409.5 Prostatic artery embolization in the treatment of localized prostate cancer: a bicentric prospective proof-of-concept study of 12 patients  
*L. Mordasini<sup>1</sup>, L. Hechelhammer<sup>2</sup>, P.-A. Diener<sup>2</sup>, J. Diebold<sup>1</sup>, A. Mattei<sup>1</sup>, D. Engeler<sup>2</sup>, G. Müllhaupt<sup>2</sup>, S.-K. Kim<sup>2</sup>, H.-P. Schmid<sup>2</sup>, D. Abt<sup>2</sup>; <sup>1</sup>Luzern/CH, <sup>2</sup>St. Gallen/CH*
- 1409.6 The efficacy of coil-embolization to obtain intrahepatic redistribution in radioembolization  
*A.A.N. Alsultan<sup>1</sup>, J. van Roekel<sup>1</sup>, A.J.A.T. Braat<sup>1</sup>, M.W. Barentsz<sup>1</sup>, P.J.V. Doormaal<sup>2</sup>, M.G.E.H. Lam<sup>1</sup>, M.L.J. Smits<sup>1</sup>; <sup>1</sup>Utrecht/NL, <sup>2</sup>Rotterdam/NL*
- 1409.7 Intra-arterial chemotherapy in retinoblastoma: initial experience from a tertiary care center in India  
*V. Gupta, U. Singh, C.K. Ahuja, D. Bansal, N. Khandelwal; Chandigarh/IN*

16:15-16:35

**Satellite Symposium**

For the detailed programme, please refer to page 219.

16:30-18:00, Room 5.E

**Safe Sedation Training**

**SED 1 Safe sedation application during IR procedures**

*Coordinators: M. Heinrichs (Mainz/DE), W. Heinrichs (Mainz/DE)*

For a detailed programme, please refer to page 38.

17:30-18:30, Auditorium 8

**Video Learning Session**

**VL 1501 Arterial interventions**

*Moderators: H. Hoppe (Bern/CH), T. Jahnke (Neumünster/DE)*

1501.1 BTK recanalisation

*K.N. Katsanos (Patras/GR)*

1501.2 Visceral artery stenting

*J.G. Moss (Glasgow/UK)*

1501.3 Atherectomy

*C. Scheurig-Muenkler (Augsburg/DE)*

17:30-18:30, Auditorium 2

**Workshop**

**WS 1502 Fundamentals in TEVAR**

1502.1 *R.P. Thomas (Marburg/DE)*

1502.2 *P. Holt (London/UK)*



17:30-18:30, Room 3.A

**Workshop**

**WS 1503 TIPS and BRTO**

1503.1 *S. Sabri (Washington, DC/US)*

1503.2 *R. Miraglia (Palermo/IT)*

17:30-18:30 Auditorium 6

**Workshop**

**WS 1504 Cholangiocarcinoma and neuroendocrine liver mets**

1504.1 *I. Dedes (Thessaloniki/GR)*

1504.2 *R.-T. Hoffmann (Dresden/DE)*



e-voting



recommended for EBIR preparation

17:30-18:30, Room 3.B

**Workshop****WS 1505 Lung biopsy**1505.1 *R.F. Grasso (Rome/IT)*1505.2 *F. Collettini (Berlin/DE)*

17:30-18:30, Room 5.A

**Free Paper Session****FP 1506 Stents in PVD***Moderators: P. Drescher (Hartland, WI/US), K.-H. Stensaeth (Oslo/NO)*

1506.1 Primary stenting of the superficial femoral artery in patients with intermittent claudication has durable effects on health related quality of life at 24 months – results of a randomized controlled trial  
*H. Lindgren<sup>1</sup>, M.L. Åkesson<sup>2</sup>, A. Gottsäter<sup>2</sup>, S. Bergman<sup>3</sup>, P. Qvarfordt<sup>1</sup>; <sup>1</sup>Helsingborg/SE, <sup>2</sup>Malmö/SE, <sup>3</sup>Gothenburg/SE*

1506.2 Near infrared spectroscopy of regional foot tissue oxygenation for real-time monitoring of peripheral angioplasty procedures – the INVOS-PAD study  
*M. Theofanis, M. Filippopoulou, P.M. Kitrou, D. Karnabatidis, K.N. Katsanos; Patras/GR*

1506.3 How good are experienced endovascular specialists at predicting the haemodynamic significance of peripheral arterial lesions?  
*M. Albayati; London/UK*

1506.4 BioMimics 3D, the swirling flow stent: 1-year results of the MIMICS-2 study  
*C. Wissgott<sup>1</sup>, T. Zeller<sup>2</sup>, T.M. Sullivan<sup>3</sup>, M. Nakamura<sup>4</sup>; <sup>1</sup>Heide/DE, <sup>2</sup>Bad Krozingen/DE, <sup>3</sup>Minneapolis, MN/US, <sup>4</sup>Tokyo/JP*

1506.5 British iliac angioplasty and stenting (BIAS) registry: fourth report  
*C. Miller, R. Frood, C.J. Hammond; Leeds/UK*

1506.6 Preliminary results of the Italian multicentre registry using a dual component vascular stent for the treatment of distal SFA, with or without involvement of popliteal artery  
*M. Fronza, M.A. Ruffino, A. Discalzi, D. Righi, P. Fonio; Turin/IT*

1506.7 Comparing high vs low chronic outward force of nitinol stents in the SFA: Interim report on the BIOFLEX COF randomised trial  
*M.A. Funovics; Vienna/AT*

17:30-18:30, Room 5.B

**Free Paper Session**

**FP 1507 Oncologic interventions 3**

*Moderators: Y. Arai (Tokyo/JP), E. Dósa (Budapest/HU)*

- 1507.1 Predicting local regrowth after radiofrequency ablation of colorectal liver metastases by 3D registration of pre- and post-ablation imaging  
*B.G. Sibinga Mulder, P. Hendriks, T.R. Baetens, A. van Erkel, A.L. Vahrmeijer, J.S.D. Mieog, M.C. Burgmans; Leiden/NL*
- 1507.2 Intraprocedural minimum ablation margin assessment of FDG-avid liver tumors during PET/CT-guided thermal ablation: feasibility and utility for predicting local tumor progression  
*L.C. Casadaban, K. Tuncali, P.B. Shyn; Boston, MA/US*
- 1507.3 Radiofrequency and microwave ablation compared to systemic chemotherapy and to partial hepatectomy in the treatment of colorectal liver metastases: a systematic review and meta-analysis  
*M.R. Meijerink<sup>1</sup>, R.S. Puijk<sup>1</sup>, A.A.J.M. van Tilborg<sup>1</sup>, K. Holdt Henningsen<sup>2</sup>, L. Garcia Fernandez<sup>2</sup>, M. Neyt<sup>2</sup>, J. Heymans<sup>3</sup>, J.S. Frankema<sup>3</sup>, K.P. de Jong<sup>4</sup>, D.J. Richel<sup>5</sup>, W. Prevoo<sup>1</sup>, J. Vlayen<sup>2</sup>; <sup>1</sup>Amsterdam/NL, <sup>2</sup>Rotselaar/BE, <sup>3</sup>Diemen/NL, <sup>4</sup>Groningen/NL, <sup>5</sup>Enschede/NL*
- 1507.4 The predictive value of the intrahepatic distribution of 99mTc-macroaggregated albumin and holmium-166 scout dose prior to holmium-166 radioembolization  
*M.G. Dassen, M.L.J. Smits, A.J.A.T. Braat, J.F. Prince, C. Beijst, R.C.G. Bruijnen, M.G.E.H. Lam; Utrecht/NL*
- 1507.5 Holmium-166 radioembolisation (Ho166-RE) in HCC – feasibility and safety of a new method in clinical practice  
*C.G. Radosa<sup>1</sup>, J. Radosa<sup>2</sup>, S. Grosche-Schlee<sup>1</sup>, V. Plodeck<sup>1</sup>, M. Laniado<sup>1</sup>, K. Zoepfel<sup>1</sup>, R.-T. Hoffmann<sup>1</sup>; <sup>1</sup>Dresden/DE, <sup>2</sup>Homburg/DE*
- 1507.6 Safety and feasibility of integrating Yttrium-90 radioembolization with capecitabine-temozolomide for grade 2 liver-dominant metastatic neuroendocrine tumors (CapTemY90) – final report  
*M.C. Soulen, D. van Houten, U.R. Teitelbaum, N. Damjanov, K. Cengel, K. Metz, S.W. Stavropoulos; Philadelphia, PA/US*
- 1507.7 Yttrium-90 radioembolization used as a first-line therapy for uveal melanoma liver metastases: survival analysis and predictive factors of survival  
*A. Ponti, A. Denys, A. Digklla, N. Schaefer, M. Silva-Monteiro, A. Hocquet, J.-F. Knebel, O. Michielin, R.A. Meuli, R. Duran; Lausanne/CH*

17:30-18:30, Room 1.15

**Free Paper Session**

**FP 1508 Clinical practice 2**

*Moderators: M.H. Öztürk (Trabzon/TR), C.L. Zollikofer (Kilchberg/CH)*

- 1508.1 Safety and efficacy of a modified rapid hemostasis protocol for left distal radial artery access (IdPROTEA)  
*L. Cardarelli-Leite<sup>1</sup>, F. Kiemeneij<sup>2</sup>, J. Chung<sup>1</sup>, D.M. Liu<sup>1</sup>, S. Ho<sup>1</sup>, G. Legiehn<sup>1</sup>, L. Machan<sup>1</sup>, D. Klass<sup>1</sup>; <sup>1</sup>Vancouver, BC/CA, <sup>2</sup>Lelystad/NL*
- 1508.2 Platelet count and neutrophil-to-lymphocyte ratio predict early, but not late, venous stent malfunction  
*Y. Jahangiri, M. Endo, R. Al-Hakim, J.A. Kaufman, K. Farsad; Portland, OR/US*
- 1508.3 Stenting the upper/cervical oesophagus with a proximal deployment cervical oesophageal stent: technique and outcomes  
*A. Rabone, B. Kawa, B. Thomson, S. Kemp, C. Elwood, A. Okaro, M. Hill, T. Sevitt, J. Waters, P. Ignotus, A. Shaw; Kent/UK*
- 1508.4 Interim results of a multicenter, controlled trial comparing 4 F vs 6 French femoral access site complications for ambulatory endovascular treatment of PAD  
*M. Brodmann; Graz/AT*
- 1508.5 Energy/nodule volume ratio as a predictor of sustained results in ultrasound-guided laser ablation of benign thyroid nodules: one year follow up in a single institution cohort  
*R.M.C. Freitas, A.P. Mizaki, M.H. Tsunemi, V.J.F. Araujo Filho, L.G. Brandão, S. Marui, M.C. Chammas, G.G. Cerri; São Paulo/BR*
- 1508.6 Intraoperative superior hypogastric nerve block allows same-day discharge following uterine fibroid embolization  
*R.M. Salamo, L.M. Morel Ovalle, K. Pereira, A. Fang, J. Kao, K. Vaheesan; Saint Louis, MO/US*
- 1508.7 Regional block in transradial access – a better alternative than radial cocktail?  
*P.M.M. Lopes<sup>1</sup>, M.J.M. Sousa<sup>1</sup>, C. Lobo<sup>1</sup>, M. Sá<sup>2</sup>, B. Gonçalves<sup>1</sup>; <sup>1</sup>Porto/PT, <sup>2</sup>Vila Real/PT*

## Monday, September 24

07:40-08:20

### Satellite Symposium

For the detailed programme, please refer to page 220.

08:15-09:45, Room 5.E

### Safe Sedation Training

#### SED 2 Safe sedation application during IR procedures

Coordinators: *M. Heinrichs (Mainz/DE), W. Heinrichs (Mainz/DE)*

For a detailed programme, please refer to page 38.

08:30-09:30, Auditorium 1

### Fundamental Course

#### ■ FC 1701 Upper extremity arterial disease



Moderators: *M. Cariati (Milan/IT), M. Maynar (Santa Cruz de Tenerife/ES)*

- 1701.1 Treatment of subclavian and innominate atherosclerotic disease  
*R. Lakshminarayan (Hull/UK)*
- 1701.2 Atherosclerotic diseases, axillary artery and beyond  
*H.I. Manninen (Kuopio/FI)*
- 1701.3 Treatment options for arteritis and vasculitis  
*V. Bérczi (Budapest/HU)*
- 1701.4 Acute upper limb ischaemia  
*M. Schoder (Vienna/AT)*



e-voting



recommended for EBIR preparation

08:30-09:30, Auditorium 2

**Expert Round Table**

■ **ERT 1702 Controversies in TAAA**

*Coordinators: M.S. Hamady (London/UK), E. Verhoeven (Nürnberg/DE)*

- 1702.1 Parallel grafts are still useful in TAAA  
*T. Pfammatter (Zurich/CH)*
- 1702.2 Evidence for staged procedures to prevent spinal cord ischaemia  
*J.A. Brennan (Liverpool/UK)*
- 1702.3 Fusion imaging and guidance: tools or toys?  
*H. Kobeiter (Créteil/FR)*
- 1702.4 Indication: where are the limits?  
*M.P. Jenkins (London/UK)*

08:30-09:30, Room 5.A

**Focus Session**

■ **FS 1703 Irreversible electroporation**

*Moderators: D.C. Madoff (New York, NY/US), J.-P. Tasu (Poitiers/FR)*

- 1703.1 Critical review of indications  
*G. Narayanan (Miami, FL/US)*
- 1703.2 Immune reaction and IRE  
*H.J. Scheffer (Amsterdam/NL)*
- 1703.3 Electro-chemo ablation: basic principles and applications  
*F. Pedersoli (Aachen/DE)*
- 1703.4 Targeted electro-immune-therapy: a potential perspective?  
*M.R. Meijerink (Amsterdam/NL)*

08:30-09:30, Auditorium 8

**Focus Session**

■ **FS 1704 Arteriovenous malformation**

*Moderators: P. Saari (Kuopio/FI), L.J. Schultze Kool (Nijmegen/NL)*

- 1704.1 Diagnosis and classification  
*to be announced*
- 1704.2 IR techniques for high-flow AVM  
*W.S. Rilling (Milwaukee, WI/US)*
- 1704.3 IR techniques for low-flow AVM  
*G. Legiehn (Vancouver, BC/CA)*
- 1704.4 Complications and outcomes  
*G. Soulez (Montreal, QC/CA)*

08:30-09:30, Auditorium 6

**Focus Session**

**FS 1705 Paediatric intervention: a primer**

*Moderators: A. Belenky (Petah Tikva/IL), D.A. Parra (Toronto, ON/CA)*

- 1705.1 Venous access  
*A.M. Cahill (Philadelphia, PA/US)*
- 1705.2 Gastrointestinal intervention  
*R. Gnannt (Toronto, ON/CA)*
- 1705.3 Hepatobiliary disease  
*K.P. van Lienden (Amsterdam/NL)*
- 1705.4 Urinary tract intervention  
*A.M. Barnacle (London/UK)*

08:30-10:00, Simulator Gallery

**Simulation Training**

**SIM 3.1 Endovascular management of arterial complications**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: R. Lely (Amsterdam/NL)*

*Instructors: G. Goh (Melbourne/AU), R.G. McWilliams (Liverpool/UK),  
D. A. van den Heuvel (Nieuwegein/NL), C. van Rijswijk (Leiden/NL)*

09:30-11:00, Room 5.C

**Hands-on Device Training**

**EMT-HDT 3 Embolisation: materials and tools – Liquid agents**

*Coordinators: I.J. McCafferty (Birmingham/UK), J. Urbano (Madrid/ES)*

09:30-11:00, Auditorium 3

**Hands-on Device Training**

**TA-HDT 3 Tumour ablation – RFA**

*Coordinators: M. Bezzi (Rome/IT), M. Tsitskari (Athens/GR)*

09:30-11:00, Room 5.D

**Hands-on Device Training**

■ **VA-HDT 1 Vertebral augmentation**

*Coordinators: P.N.M. Lohle (Tilburg/NL), K.E. Wilhelm (Bonn/DE)*

09:30-11:00, Simulator Gallery

**Simulation Training**

■ **SIM 3.2 Endovascular management of arterial complications**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: R. Lely (Amsterdam/NL)*

*Instructors: G. Goh (Melbourne/AU), R.G. McWilliams (Liverpool/UK),*

*D. A. van den Heuvel (Nieuwegein/NL), C. van Rijswijk (Leiden/NL)*

10:00-11:00, Auditorium 6

**Focus Session**

■ **FS 1801 Infrapopliteal endovascular masterclass**

*Moderators: R. Ferraresi (Bergamo/IT), S. Kum (Singapore/SG)*

1801.1 Challenges for infrapopliteal vessel: anatomy, morphology, diabetes and angiosome

*M.G. Manzi (Abano Terme/IT)*

1801.2 Update on randomised trials with drug-coated balloons and drug-eluting stents

*A. Cannavale (Rome/IT)*

1801.3 Tissue perfusion monitoring to control angioplasty outcomes

*S. Spiliopoulos (Athens/GR)*

1801.4 Rationale and current indications for DCB in BTK

*G. Goyault (Strasbourg/FR)*

10:00-11:00, Auditorium 2

**Focus Session**

**FS 1802 Outcome and follow-up for EVAR**



Moderators: *J.F. Benenati (Miami, FL/US), J.A. Brennan (Liverpool/UK)*

- 1802.1 Late failures: fact or pure statistics?  
*R.M. Greenhalgh (London/UK)*
- 1802.2 Imaging strategies  
*H. Rousseau (Toulouse/FR)*
- 1802.3 What is new in endoleak management?  
*J.C. van den Berg (Lugano/CH)*
- 1802.4 Late conversions: indication and mortality  
*G.N. Kouvelos (Larissa/GR)*
- 1802.5 Neck dilatation and migration  
*D. Böckler (Heidelberg/DE)*

10:00-11:00, Room 5.A

**Clinical Evaluation Course**

**CEC 1803 Lung metastases**

Moderators: *L. Crocetti (Pisa/IT), F. Deschamps (Villejuif/FR)*

- 1803.1 Who needs biopsy before treatment?  
*J. Ricke (Munich/DE)*
- 1803.2 When to refer a patient to local treatment  
*M. Fuchs (Munich/DE)*
- 1803.3 SBRT  
*R. Sharma (London/UK)*
- 1803.4 Surgical option  
*D.J. Heineman (Amsterdam/NL)*
- 1803.5 Ablative therapies  
*J. Palussière (Bordeaux/FR)*
- 1803.6 Follow-up imaging  
*D.A. Woodrum (Rochester, MN/US)*



10:00-11:00, Auditorium 1

**Controversy Session****CS 1804 Prostate artery embolisation***Moderators: J. Golzarian (Minneapolis, MN/US), M. Grosso (Cuneo/IT)*

- 1804.1 CTA is better than CBCT for guidance: pro  
*T. Bilhim (Lisbon/PT)*
- 1804.2 CTA is better than CBCT for guidance: con  
*S. Bagla (Alexandria, VA/US)*
- 1804.3 PAE is better than TURP: pro  
*F.C. Carnevale (São Paulo/BR)*
- 1804.4 PAE is better than TURP: con  
*L.C. Pinheiro (Lisbon/PT)*
- 1804.5 PAE ready for wide-spread adoption: pro  
*I. Insausti Gorbea (Pamplona/ES)*
- 1804.6 PAE ready for wide-spread adoption: con  
*J.B. Spies (Washington, DC/US)*

10:00-11:00, Auditorium 8

**Expert Round Table****ERT 1805 Biliary disease***Coordinators: A. Hatzidakis (Iraklion/GR), T.C. See (Cambridge/UK)*

- 1805.1 Endoscopic retrograde cholangiopancreatography  
*H.-U. Laasch (Manchester/UK)*
- 1805.2 Endoscopic ultrasound  
*A. Larghi (Rome/IT)*
- 1805.3 Percutaneous transhepatic biliary drainage  
*V. Pedicini (Rozzano/IT)*
- 1805.4 Combined procedures  
*P.A.M.S. Almeida (Viseu/PT)*

10:00-11:00, Room 3.A

### **IR Trainee Session**

#### **IRT 1806 Building an IR career**

*Moderators: C.A. Binkert (Winterthur/CH), G.C. Makris (Oxford/UK)*

- 1806.1 Welcome and introduction to ETF  
*G.C. Makris (Oxford/UK)*
- 1806.2 Developing your academic career as an IR  
*L. Ratnam (London/UK)*
- 1806.3 Publishing and CVIR  
*K.A. Hausegger (Klagenfurt/AT)*
- 1806.4 The EBIR exam  
*O.M. van Delden (Amsterdam/NL)*
- 1806.5 Establishing private clinics and clinical entrepreneurship  
*C.A. Binkert (Winterthur/CH)*

10:30-12:00, Simulator Gallery

### **Simulation Training**

#### **SIM 3.3 Endovascular management of arterial complications**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: R. Lely (Amsterdam/NL)*

*Instructors: G. Goh (Melbourne/AU), R.G. McWilliams (Liverpool/UK),*

*D. A. van den Heuvel (Nieuwegein/NL), C. van Rijswijk (Leiden/NL)*



11:30-12:30, Auditorium 2

### Expert Round Table

#### ERT 1901 Exercise joint horizon: anaesthesia and IR in a common battlefield

*Coordinator: F. Barbani (Florence/IT), M.J. Lee (Dublin/IE)*

- 1901.1 Managing IR anaesthesia needs without anaesthesiologists: mission impossible or not too distant future?  
*A.H. Mahnken (Marburg/DE)*
- 1901.2 Sharing skills: anaesthesia-supervised, IR-managed moderate sedation for IR procedures  
*C. Batistaki (Athens/GR)*
- 1901.3 IR and non-operating-room-anaesthesia in the age of value-based healthcare  
*F. Orsi (Milan/IT)*
- 1901.4 Interventional pain management by IRs: no-man's-land or indigenous territory?  
*J. Garnon (Strasbourg/FR)*

11:30-12:30

### Satellite Symposia

For the detailed programmes, please refer to pages 220-221.

11:30-13:00, Simulator Gallery

### Simulation Training

#### SIM 3.4 Endovascular management of arterial complications

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: R. Lely (Amsterdam/NL)*

*Instructors: G. Goh (Melbourne/AU), R.G. McWilliams (Liverpool/UK), D. A. van den Heuvel (Nieuwegein/NL), C. van Rijswijk (Leiden/NL)*

12:30-14:00, Room 5.C

### Hands-on Device Training

#### EMT-HDT 4 Embolisation: materials and tools – Liquid agents

*Coordinators: I.J. McCafferty (Birmingham/UK), J. Urbano (Madrid/ES)*

12:30-14:00, Auditorium 3

**Hands-on Device Training**

■ **TA-HDT 4 Tumour ablation – RFA**

*Coordinators: M. Bezzi (Rome/IT), M. Tsitskari (Athens/GR)*

12:30-14:00, Room 5.D

**Hands-on Device Training**

■ **VA-HDT 2 Vertebral augmentation**

*Coordinators: P.N.M. Lohle (Tilburg/NL), K.E. Wilhelm (Bonn/DE)*

12:45-14:15, Room 5.E

**Safe Sedation Training**

**SED 3 Safe sedation application during IR procedures**

*Coordinators: M. Heinrichs (Mainz/DE), W. Heinrichs (Mainz/DE)*

For a detailed programme, please refer to page 38.

13:00-14:00

**Satellite Symposia**

For the detailed programmes, please refer to pages 223-224.

13:15-14:15, News on Stage Area

**News on Stage**

**NoS 2004 Vascular News on Stage**

*Moderators: F. Fanelli (Florence/IT), J.A. Reekers (Amsterdam/NL)*

- 2004.1 The effectiveness of the paclitaxel-coated Luminor® balloon catheter versus an uncoated balloon catheter in superficial femoral and popliteal arteries in preventing vessel restenosis or reocclusion: 12 months results of a randomized-controlled trial  
*U. Teichgräber; Jena/DE – presented by T. Franke; Jena/DE*
- 2004.2 Real-world experience with a paclitaxel-coated balloon for the treatment of atherosclerotic infrainguinal arteries. Twenty four-month results of the BIOLUX P-III all comers registry in superficial femoral arteries  
*C.A. Binkert<sup>1</sup>, M. Brodmann<sup>2</sup>, T. Zeller<sup>3</sup>, L. Spak<sup>4</sup>, J.-M. Corbataux<sup>5</sup>, J.K. Christensen<sup>6</sup>, K.F. Keirse<sup>7</sup>, G. Nano<sup>8</sup>, H. Schröder<sup>9</sup>, G. Tepe<sup>10</sup>; <sup>1</sup>Winterthur/CH, <sup>2</sup>Graz/AT, <sup>3</sup>Bad Krozingen/DE, <sup>4</sup>Kosice/SK, <sup>5</sup>Lausanne/CH, <sup>6</sup>Kolding/DK, <sup>7</sup>Tienen/BE, <sup>8</sup>Rome/IT, <sup>9</sup>Berlin/DE, <sup>10</sup>Rosenheim/DE*

- 2004.3 Experimental animal study of a novel drug-coated balloon using 3.5 µg/mm<sup>2</sup> paclitaxel coating on a cellulose-based excipient  
*P.N. Papadimitos<sup>1</sup>, P.M. Kitrou<sup>1</sup>, K.N. Katsanos<sup>1</sup>, M. Theofanis<sup>1</sup>, M. Vaiou<sup>2</sup>, F. Anagnostopoulos<sup>1</sup>, G. Lampropoulos<sup>1</sup>, G. Karpetas<sup>1</sup>, P. Kallidonis<sup>1</sup>, S. Spiliopoulos<sup>3</sup>, A. Moulas<sup>2</sup>, D. Karnabatidis<sup>1</sup>; <sup>1</sup>Patras/GR, <sup>2</sup>Larisa/GR, <sup>3</sup>Athens/GR*
- 2004.4 The Lutonix® global drug coated balloon registry real world patients with below the knee disease – interim 12 month outcomes  
*D. Scheinert; Leipzig/DE*
- 2004.5 PiPeR Technique – an alternative technique for creating arterial-venous fistula during percutaneous deep foot veins arterialization  
*B. Migliara; Peschiera Del Garda/IT*
- 2004.6 Utility of 2D perfusion angiography to predict wound healing in patients undergoing isolated femoropopliteal endovascular revascularization  
*N. Troisi, S. Panci, S. Bacchi, D. Incerti, L. Lovecchio, G.L. Dedola, S. Michelagnoli; Florence/IT*

14:30-15:15, Auditorium 1

#### FIQ 2101 **Film Interpretation Quiz**

*Coordinators: I.J. McCafferty (Birmingham/UK),  
O.M. van Delden (Amsterdam/NL)*

**Team 1:** *P.A.M.S. Almeida (Viseu/PT), E. Kashef (London/UK),  
T.K. Helmberger (Munich/DE), C. Sofocleous (New York, NY/US)*

**Team 2:** *J.-P. Pelage (Caen/FR), Y. Arai (Tokyo/JP), F. Orsi (Milan/IT),  
M. Tsitskari (Athens/GR)*

15:15-16:00, Auditorium 1

#### **Hot Topic Symposium**

#### HTS 2102 **Embolisation for trauma**

*Moderators: M.A. de Gregorio (Zaragoza/ES), S. Stojanovic (Novi Sad/RS)*

- 2102.1 Splenic embolisation  
*C. Scheurig-Muenkler (Augsburg/DE)*
- 2102.2 Liver embolisation  
*M. Citone (Florence/IT)*
- 2102.3 Pelvic fracture embolisation  
*D. Karnabatidis (Patras/GR)*
- 2102.4 Renal embolisation  
*G.P. Siskin (Albany, NY/US)*

14:30-15:30, Auditorium 2

**Case-based Discussion**

■ **CBD 2103 A bad day in the angio suite (EVAR)**



*Coordinators: K.P. Donas (Münster/DE), M.S. Hamady (London/UK)*

- 2103.1 Case 1  
*L. Mendes Pedro (Lisbon/PT)*
- 2103.2 Case 2  
*E. Verhoeven (Nürnberg/DE)*
- 2103.3 Case 3  
*B.T. Katzen (Miami, FL/US)*
- 2103.4 Case 4  
*A.A. Chouiter (Neuchâtel/CH)*

14:30-15:30

**Satellite Symposia**

For the detailed programmes, please refer to pages 224-225.

16:15-16:35

**Satellite Symposia**

For the detailed programmes, please refer to pages 225-226.

16:15-17:15, Auditorium 1

**Expert Round Table**

■ **ERT 2201 DCB in lower limbs: updates and debates**

*Coordinators: J.H. Rundback (Teaneck, NJ/US), G. Tepe (Rosenheim/DE)*

- 2201.1 DCB in SFA: Level 1 evidence review  
*M. Brodmann (Graz/AT)*
- 2201.2 Endovascular treatment of long SFA lesions: DCB or stents  
*F. Fanelli (Florence/IT)*
- 2201.3 Role of atherectomy in today's drug-eluting practice  
*M. Lichtenberg (Arnsberg/DE)*
- 2201.4 DCB distal embolisation: does this matter, and when?  
*E. Blessing (Karlsbad/DE)*

16:15-17:15, Auditorium 2

**Expert Round Table**■ **ERT 2202 Controversies in ruptured AAA: open or not?**IDEAS  
2 0 1 8*Coordinator: G.M. Richter (Stuttgart/DE), F.E. Vermassen (Ghent/BE)*

- 2202.1 Evidence for or against EVAR?  
*D. Böckler (Heidelberg/DE)*
- 2202.2 Dedicated team performance is required  
*M.A. Funovics (Vienna/AT)*
- 2202.3 Controversial adjuncts  
*F.E. Vermassen (Ghent/BE)*
- 2202.4 Abdominal compartment syndrome  
*C.D. Bicknell (London/UK)*

16:15-17:15, Auditorium 8

**Expert Round Table**■ **ERT 2203 IAT: training and implementation in practice***Coordinators: P. Mordasini (Bern/CH), S. Mangiafico (Florence/IT)*

- 2203.1 How to accomplish a 24/7 service  
*A. Clifton (London/UK)*
- 2203.2 European training guidelines for IAT  
*A. Krajina (Hradec Králové/CZ)*
- 2203.3 IAT in Germany  
*T. Struffert (Giessen/DE)*
- 2203.4 IAT in the Netherlands  
*H. van Overhagen (The Hague/NL)*
- 2203.5 Standards of practice  
*K.A. Hausegger (Klagenfurt/AT)*

16:15-17:15, Auditorium 6

**Expert Round Table**

**ERT 2204 Spine ablation in metastatic cancer patient**

*Coordinators: A. Gangi (Strasbourg/FR), S. Marcia (Cagliari/IT)*

- 2204.1 Spinal interventions: the actual algorithms  
*S. Masala (Rome/IT)*
- 2204.2 Spinal radiation therapy: indications, results, limits  
*V.E. Kouloulis (Athens/GR)*
- 2204.3 Which thermal ablation technology to choose?  
*J.W. Jennings (Saint Louis, MO/US)*
- 2204.4 Protective techniques: where and how?  
*G. Tsumakidou (Lausanne/CH)*

16:15-17:15, Auditorium 7

**Case-based Discussion**

**CBD 2205 True and false aneurysms**



*Moderators: T.J. Kroencke (Augsburg/DE),  
M. Szczerbo-Trojanowska (Lublin/PL)*

- 2205.1 Pancreatitis  
*F. Wolf (Vienna/AT)*
- 2205.2 Visceral  
*I.J. McCafferty (Birmingham/UK)*
- 2205.3 Lung  
*P.E. Andersen (Odense /DK)*
- 2205.4 Peripheral  
*M.A. Ruffino (Turin/IT)*



16:15-17:15, Room 1.15

**Free Paper Session****FP 2206 Neurointervention***Moderators: F. Florio (San Giovanni Rotondo/IT), C.P. Stracke (Essen/DE)*

- 2206.1 Relation between striatocapsular infarction and clot location after endovascular treatment in acute ischemic stroke  
*B.A.J.M. Wagemans, W.H. van Zwam, R.J. van Oostenbrugge, I. MR CLEAN Investigators; Maastricht/NL*
- 2206.2 Clinical impact of delayed ophthalmic artery occlusion associated with pipeline embolization device used for treatment of internal carotid artery aneurysms  
*M. Horikawa, R. Priest, A. Dogan, J. Liu, H. Bozorgchami; Portland, OR/US*
- 2206.3 Chronic ischemic lesions (CILs) predict outcome in mechanical thrombectomy of sexagenarian and older patients  
*S.M. Protto, N. Sillanpää, J.-P. Pienimäki, J. Seppänen; Tampere/FI*
- 2206.4 Endovascular stroke treatment of acute tandem occlusion: a single-center experience  
*F. de Crescenzo, A. Bozzi, R. Gandini; Rome/IT*
- 2206.5 The mid-term follow-up of ruptured intracranial aneurysms treated with WEB intrasaccular flow disruptor  
*V. Da Ros, A. Bozzi, F. de Crescenzo, A. Di Martino, A. Raso, D. Konda, D. Morosetti, R. Floris, R. Gandini; Rome/IT*
- 2206.6 Hydrophilic coating inhibits platelet adhesion on stent- and flow diverter surface: initial results in vitro and in vivo  
*H. Henkes<sup>1</sup>, T. Lenz-Habijan<sup>2</sup>, P. Bhogal<sup>1</sup>, M. Peters<sup>2</sup>, A. Bufe<sup>2</sup>, R. Martinez Moreno<sup>3</sup>, C. Bannewitz<sup>2</sup>, M. Aguilar Perez<sup>1</sup>, H. Monstadt<sup>2</sup>; <sup>1</sup>Stuttgart/DE, <sup>2</sup>Bochum/DE, <sup>3</sup>Granada/ES*
- 2206.7 Safety and efficacy of the Safeguard Manual Assist Technique in the postoperative bleeding management of femoral percutaneous access in cerebral neurovascular procedures: a single center prospective analysis  
*F. Di Caterino<sup>1</sup>, C. Perazzini<sup>2</sup>, E. Pomerio<sup>1</sup>, A. Biondi<sup>1</sup>; <sup>1</sup>Besanc¸on/FR, <sup>2</sup>Clermont-Ferrand/FR*

16:15-17:15, Room 5.B

**Free Paper Session**

**FP 2207 Venous interventions and IVC filters**

*Moderators: V. Pedicini (Rozzano/IT), V. Someshwar (Mumbai/IN)*

- 2207.1 Skipped lesion at iliocaaval confluence: another technique for stenting in chronic venous obstructions  
*M.E. Barbat, A. Gombert, K. Schleimer, C.H. Wittens, H. Jalaie; Aachen/DE*
- 2207.2 Characterization and analysis of acute venographic changes of external iliac vein after adjacent common iliac vein stenting  
*R. Al-Hakim, J.A. Kaufman, K. Farsad; Portland, OR/US*
- 2207.3 Trans-splenic splanchnic venous recanalization single center experience  
*B.M. Alrehaili, A.M. Elsaadany, B.O. Safar, A. Alehaideb, H.S. Alsuhaibani; Riyadh/SA*
- 2207.5 Assessment of the safety and efficacy of the clearlumen thrombectomy system for the treatment of acute deep vein thrombosis  
*J. Cournoyer-Rodrigue<sup>1</sup>, E. Therasse<sup>1</sup>, T.-B. Bui<sup>2</sup>; <sup>1</sup>Montreal, QC/CA, <sup>2</sup>Sherbrooke, QC/CA*
- 2207.6 Prospective audit on insertion and retrieval characteristics of four different new generation filter types  
*A. Shrivastava, L.-M.N.J. Boucher, A. Al Kindi, D.A. Valenti; Montreal, QC/CA*
- 2207.7 Effectiveness of mechanical aspiration thrombectomy in pulmonary thromboembolism  
*J.J. Ciampi Dopazo, J.M. Romeu, M. Sanchez-Casado, C. Lanciego; Toledo/ES*

16:15-17:15, Room 3.A

**GA 2208 General Assembly**



16:30-18:00, Room 5.E

**Safe Sedation Training**

**SED 4 Safe sedation application during IR procedures**

*Coordinators: M. Heinrichs (Mainz/DE), W. Heinrichs (Mainz/DE)*

For a detailed programme, please refer to page 38.

17:30-18:30, Room 3.B

**Workshop**

**WS 2301 Venous access: how I do it**

2301.1 *S.D. Qanadli (Lausanne/CH)*

2301.2 *D. Savio (Turin/IT)*

17:30-18:30, Auditorium 2

**Workshop**

**WS 2302 Fundamentals in EVAR**

2302.1 *F. Fanelli (Florence/IT)*

2302.2 *R.K. Fisher (Newcastle/UK)*



17:30-18:30, Auditorium 6

**Workshop**

**WS 2303 IAT procedures, tips, tricks and lessons to learn**

2303.1 *C.P. Stracke (Essen/DE)*

2303.2 *K.A. Hausegger (Klagenfurt/AT)*

17:30-18:30, Auditorium 8

**Video Learning Session**

**VL 2304 Interventional oncology**

*Moderators: B.C. Meyer (Hannover/DE), P. Vilares Morgado (Porto/PT)*

2304.1 Portal vein embolisation

*A. Denys (Lausanne/CH)*

2304.2 Thermoablation in the liver

*M. Citone (Florence/IT)*

2304.3 TACE

*T.J. Kroencke (Augsburg/DE)*

17:30-18:30, Room 5.A

**Workshop**

**WS 2305 Uterine artery embolisation**

2305.1 *A.V. Giordano (L'Aquila/IT)*

2305.2 *M.P. Kohi (San Francisco, CA/US)*

17:30-18:30, Room 5.B

**Workshop**

**WS 2306 Gastrointestinal intervention**

2306.1 *M.K. Glynos (Athens/GR)*

2306.2 *to be announced*

17:30-18:30, Room 3.A

**Free Paper Session**

**FP 2307 Experimental work in IR**

*Moderators: R. Abraham (Halifax, NS/CA), R.W. Günther (Berlin/DE)*

- 2307.1 The accumulation of Liposomal Doxorubicin in tissues treated by radiofrequency ablation and irreversible electroporation in liver – in vivo experimental study on porcine models  
*T. Juza<sup>1</sup>, T. Andrašina<sup>1</sup>, J. Jaroš<sup>1</sup>, T. Rohan<sup>1</sup>, H. Martin<sup>1</sup>, M.J. Arbet<sup>1</sup>, V. Válek<sup>1</sup>, N. Goldberg<sup>2</sup>; <sup>1</sup>Brno/CZ, <sup>2</sup>Jerusalem/IL*
- 2307.2 Polydioxanone bioabsorbable stent in airway. Tracheal response in an animal model  
*S. Rodriguez-Zapater, C. Serrano, S. Lopez-Minguez, F. Lostale, J.A. Guirola, M.A. de Gregorio; Zaragoza/ES*
- 2307.3 Photoacoustic imaging for spectral characterization and thermography of ex vivo thermochemical ablation  
*R. Parikh<sup>1</sup>, T. Mitcham<sup>2</sup>, R. Bouchard<sup>2</sup>, E.N.K. Cressman<sup>2</sup>; <sup>1</sup>Philadelphia, PA/US, <sup>2</sup>Houston, TX/US*
- 2307.4 Histopathologic changes in a VX2 rabbit liver tumor model using thermoresponsive nanonets for transarterial chemoembolization: a pilot study  
*T.G. Van Ha<sup>1</sup>, S.-K. Lee<sup>1</sup>, L. Yassan<sup>1</sup>, J. Hart<sup>1</sup>, A. Ostdiek<sup>1</sup>, S. Zhu<sup>2</sup>, E. Scott<sup>2</sup>, G. Ameer<sup>2</sup>; <sup>1</sup>Chicago, IL/US, <sup>2</sup>Evanston, IL/US*
- 2307.5 In-vitro evaluation of n-butyl cyanoacrylate / iodized oil mixtures for lymphatic interventions  
*C.C. Pieper, D. Kuetting, H.H. Schild; Bonn/DE*

- 2307.6 Electroporation of the liver: a multipolar prototype with new strategies for IRE and Electrochemotherapy (ECT) in interstitial usage  
*A. Ritter, J. Pfeffer, F. Pedersoli, P. Isfort, M. Baumann, P. Bruners; Aachen/DE*
- 2307.7 Radiofrequency ablation and transarterial chemoembolisation are characterized by changing dynamics of circulating microRNAs  
*J. Zavadil<sup>1</sup>, T. Andrašina<sup>1</sup>, J. Juracek<sup>1</sup>, B. Cechova<sup>1</sup>, V. Valek<sup>1</sup>, O. Slaby<sup>1</sup>, N. Goldberg<sup>2</sup>; <sup>1</sup>Brno/CZ, <sup>2</sup>Jerusalem/IL*

17:30-18:30, Room 1.15

**Free Paper Session**

**FP 2308 Imaging in IR**

*Moderators: S. Stojanovic (Novi Sad/RS), E. Kashef (London/UK)*

- 2308.1 Laboratory prognosticators and imaging response increases predictability for hepatocellular carcinoma survival  
*A. Riaz, R. Ali, Y. Yang, A. Gabr, N. Abouchaleh, A. Al Assadi, R.A. Mora, S. Mouli, R.J. Lewandowski, R. Salem; Chicago, IL/US*
- 2308.2 Optimization of hepatic 4D-DSA acquisition parameters  
*E. Meram, G. Shaughnessy, M. Wagner, C. Mistretta, P.F. Laeseke; Madison, WI/US*
- 2308.3 Prospective study of the incidence and clinical significance of non thrombotic iliac vein lesions  
*S. Spiliopoulos<sup>1</sup>, V. Zymvragoudakis<sup>1</sup>, K. Antonopoulos<sup>1</sup>, K. Moulakakis<sup>1</sup>, C. Lattimer<sup>2</sup>, E. Brountzos<sup>1</sup>, G. Geroulakos<sup>1</sup>; <sup>1</sup>Athens/GR, <sup>2</sup>London/UK*
- 2308.4 Evaluation of kinetic imaging in carotid and cerebral X-ray angiography  
*V. Óriás<sup>1</sup>, D. Szöllősi<sup>1</sup>, I. Góg<sup>1</sup>, K. Szigeti<sup>1</sup>, S. Osváth<sup>1</sup>, P. Sótónyi<sup>1</sup>, Z. Ruzsa<sup>2</sup>; <sup>1</sup>Budapest/HU, <sup>2</sup>Kecskemét/HU*
- 2308.5 Selecting acute ischemic stroke patients for mechanical thrombectomy with CT perfusion imaging using temporal similarity perfusion mapping  
*J.B. de Vis<sup>1</sup>, S. Song<sup>2</sup>, L.L. Latour<sup>2</sup>, R.P. Bokkers<sup>1</sup>; <sup>1</sup>Groningen/NL, <sup>2</sup>Bethesda, MD/US*
- 2308.6 4D Flow MRI analysis of swirling flow induced by the BioMimics 3D helical stent  
*A.C. Bunc<sup>1</sup>, D. Moroney<sup>2</sup>, J.R. Kröger<sup>1</sup>, D. Maintz<sup>1</sup>, K. Heraty<sup>2</sup>, D. Giese<sup>1</sup>; <sup>1</sup>Cologne/DE, <sup>2</sup>Galway/IE*
- 2308.7 Quality improvement of kinetic images with a guided transformation  
*D. Szöllősi, M. Gyánó, V. Óriás, S. Osváth, K. Szigeti, P. Sótónyi; Budapest/HU*

## Tuesday, September 25

08:15-09:45, Room 5.E

### Safe Sedation Training

#### SED 5 Safe sedation application during IR procedures

*Coordinators: M. Heinrichs (Mainz/DE), W. Heinrichs (Mainz/DE)*

For a detailed programme, please refer to page 38.

08:30-09:30, Room 5.A

### Focus Session

#### FS 2501 Clinical trials in IR: what an IR has to know in clinical research

*Moderators: D.D. Liermann (Herne/DE), P.L. Pereira (Heilbronn/DE)*

- 2501.1 New European medical device regulation and clinical trials  
*N. Martelli (Paris/FR)*
- 2501.2 Clinical trials and registries: how to choose the best design for your studies  
*G. Chatellier (Paris/FR)*
- 2501.3 How to build up a clinical research team in your IR department  
*C. Déan (Paris/FR)*
- 2501.4 CIRSE's experience with clinical research  
*R. Bauer (Vienna/AT)*

08:30-09:30, Auditorium 2

### Focus Session

#### FS 2502 Dissection

*Moderators: T. Kölbel (Hamburg/DE), H. Rousseau (Toulouse/FR)*

- 2502.1 Evolving surgical strategies in TAAO  
*W. Hemmer (Stuttgart/DE)*
- 2502.2 Persistent malperfusion after proximal aortic repair  
*G.M. Richter (Stuttgart/DE)*
- 2502.3 Is TEVAR alone enough in complicated TBAD?  
*A. Chavan (Oldenburg/DE)*
- 2502.4 When should endografting be carried out in uncomplicated TBAD?  
*P. Holt (London/UK)*
- 2502.5 Challenges in chronic dissections  
*M.D. Dake (Stanford, CA/US)*

IDEAS  
2 0 1 8

TUE



e-voting



recommended for EBIR preparation

08:30-09:30, Auditorium 6

**Focus Session**

■ **FS 2503 Oncological imaging for staging and follow-up**

Moderators: *T. de Baère (Villejuif/FR), V. Pedicini (Rozzano/IT)*

- 2503.1 Current imaging developments to detect solid organ malignancies  
*J.G. Caridi (New Orleans, LA/US)*
- 2503.2 CT-liver perfusion for HCC follow-up after percutaneous treatment  
*A. Hatzidakis (Iraklion/GR)*
- 2503.3 Limitations of current response criteria systems  
*R.J. Lewandowski (Chicago, IL/US)*
- 2503.4 Practical approach to monitor the immediate treatment response to interventional oncology therapies  
*L. Solbiati (Rozzano/IT)*

08:30-09:30, Auditorium 8

**Fundamental Course**

■ **FC 2504 Postpartum haemorrhage**



Moderators: *J.-P. Pelage (Caen/FR), A.G. Ryan (Waterford City/IE)*

- 2504.1 Diagnosis and management  
*L. Sentilhes (Bordeaux/FR)*
- 2504.2 Occlusion-balloons or embolisation?  
*L.B. Lönn (Copenhagen/DK)*
- 2504.3 Outcome and complications  
*S. Kee (Los Angeles, CA/US)*
- 2504.4 Abnormal placentation  
*L. Ratnam (London/UK)*

08:30-09:30, Room 3.A

**Focus Session**

**FS 2505 IAT: where do we stand?**

*Moderators: A. Clifton (London/UK), A. Krajina (Hradec Králové/CZ)*

- 2505.1 Clinical diagnosis of stroke and IVT  
*P. Mordasini (Bern/CH)*
- 2505.2 Imaging in acute stroke  
*T. Struffert (Erlangen/DE)*
- 2505.3 IAT: what the trials tell us  
*W.H. van Zwam (Maastricht/NL)*
- 2505.4 Complications and their management  
*H.A. Deutschmann (Graz/AT)*

08:30-10:00, Simulator Gallery

**Simulation Training**

**SIM 4.1 The basics of chemoembolisation for the liver**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: G. Maleux (Leuven/BE)*

*Instructors: F. Colletini (Berlin/DE), B. Gebauer (Berlin/DE),  
R. Loffroy (Dijon/FR), K. Malagari (Athens/GR)*

09:30-11:00, Room 5.C

**Hands-on Device Training**

**EMT-HDT 5 Embolisation: materials and tools – Particulate agents**

*Coordinators: T.J. Kroencke (Augsburg/DE), A.G. Rampoldi (Milan/IT)*

09:30-11:00, Room 5.D

**Hands-on Device Training**

**ST-HDT 1 Stroke thrombectomy**

*Coordinators: K.A. Hausegger (Klagenfurt/AT),  
H. van Overhagen (The Hague/NL)*

09:30-11:00, Auditorium 3

**Hands-on Device Training**

- **TA-HDT 5 Tumour ablation – Cryoablation, laser ablation and irreversible electroporation**

*Coordinators: A.H. Mahnken (Marburg/DE), G. Tsoumakidou (Lausanne/CH)*

09:30-11:00, Simulator Gallery

**Simulation Training**

- **SIM 4.2 The basics of chemoembolisation for the liver**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: G. Maleux (Leuven/BE)*

*Instructors: F. Colletini (Berlin/DE), B. Gebauer (Berlin/DE),*

*R. Loffroy (Dijon/FR), K. Malagari (Athens/GR)*

10:00-11:00, Auditorium 6

**Focus Session**

- **FS 2601 Femoropopliteal endovascular masterclass**

*Moderator: K. Mathias (Hamburg/DE), C.S. Pena (Miami, FL/US)*

- 2601.1 Update on randomised trials with drug-coated balloons and drug-eluting stents  
*S. Müller-Hülsbeck (Flensburg/DE)*
- 2601.2 Debulking atherectomy: why, when and how to do in the femoropopliteal artery  
*K.N. Katsanos (Patras/GR)*
- 2601.3 New treatment options  
*A. Holden (Auckland/NZ)*
- 2601.4 Evidence-based algorithm for good practice of femoropopliteal revascularisation  
*J.A. Kaufman (Portland, OR/US)*

10:00-11:00, Auditorium 2

**Expert Round Table**

■ **ERT 2602 Controversies in TBAD: complicated or not?**



*Moderators: K. Kichikawa (Kashihara/JP), G.M. Richter (Stuttgart/DE)*

- 2602.1 Relevance of the morphologic aspects of the entry tear  
*M.D. Dake (Stanford, CA/US)*
- 2602.2 Evolving evidence for the “stabilize” technique  
*W. Ritter (Nuremberg/DE)*
- 2602.3 False lumen embolisation: when and how?  
*T. Kölbel (Hamburg/DE)*
- 2602.4 Do we need close follow-up?  
*T. Larzon (Örebro/SE)*

10:00-11:00, Auditorium 8

**Clinical Evaluation Course**

■ **CEC 2603 Kidney tumours**



*Moderators: A. Veltri (Orbassano/IT), B.J. Wood (Bethesda, MD/US)*

- 2603.1 Diagnosis of renal cell carcinoma: imaging and biopsies  
*M.T. Gomes (Porto/PT)*
- 2603.2 Actual guidelines for renal cell carcinoma  
*D.J. Breen (Southampton/UK)*
- 2603.3 Active surveillance  
*A. Méjean (Paris/FR)*
- 2603.4 Surgical option  
*G. Siena (Florence/IT)*
- 2603.5 Ablative therapies  
*S.W. Stavropoulos (Philadelphia, PA/US)*
- 2603.6 Follow-up imaging  
*M. Gonsalves (London/UK)*

TUE

10:00-11:00, Room 5.A

**Focus Session**

■ **FS 2604 New frontiers in embolotherapy**

*Moderators: K.P. van Lienden (Amsterdam/NL), D. Vorwerk (Ingolstadt/DE)*

- 2604.1 Embolisation for multi goiter thyroid  
*O. Pellerin (Paris/FR)*
- 2604.2 Bariatric embolisation  
*C.R. Weiss (Baltimore, MD/US)*
- 2604.3 Haemorrhoids  
*V. Vidal (Marseille/FR)*
- 2604.4 Haemarthrosis  
*L.J. Schultze Kool (Nijmegen/NL)*

10:00-11:00, Auditorium 1

**Clinical Evaluation Course**

■ **CEC 2605 Essentials in IAT**

*Moderators: K.A. Hausegger (Klagenfurt/AT),  
W.H. van Zwam (Maastricht/NL)*

- 2605.1 Clinical diagnosis  
*B. Maia (Lisbon/PT)*
- 2605.2 Standard patient selection  
*J.A. Vos (Nieuwegein/NL)*
- 2605.3 Adjusting selection based on DEFUSE and DAWN trials  
*E.R. Gizewski (Innsbruck/AT)*
- 2605.4 Techniques for IAT of the anterior circulation  
*S. Mangiafico (Florence/IT)*
- 2605.5 Selection and techniques for the posterior circulation  
*T. Struffert (Giessen/DE)*
- 2605.6 Follow-up management and LT results  
*A. Berlis (Augsburg/DE)*

10:00-11:00, Room 3.A

**IR Trainee Session**

**IRT 2606 Clinical know-how**

*Moderators: R.M. Benz (Basel/CH), R. Uberoi (Oxford/UK)*

- 2606.1 Making patient checklists, approaching patients and follow ups  
*M.J. Lee (Dublin/IE)*
- 2606.2 Multidisciplinary clinical collaboration  
*R. Uberoi (Oxford/UK)*
- 2606.3 Anticoagulation management  
*M.C. Burgmans (Leiden/NL)*
- 2606.4 Web-based innovations clinical practice and patient care  
*G.C. Makris (Oxford/UK)*

10:30-12:00, Simulator Gallery

**Simulation Training**

**SIM 4.3 The basics of chemoembolisation for the liver**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: G. Maleux (Leuven/BE)*

*Instructors: F. Collettini (Berlin/DE), B. Gebauer (Berlin/DE),*

*R. Loffroy (Dijon/FR), K. Malagari (Athens/GR)*

11:30-12:30, Auditorium 1

**Expert Round Table**

**ERT 2701 PAD: What the trials tell us, what they don't tell us, and what we still want to know**

*Coordinators: M. Brodmann (Graz/AT), D. Vorwerk (Ingolstadt/DE)*

- 2701.1 Short SFA lesions (<5cm)  
*H. Lindgren (Helsingborg/SE)*
- 2701.2 Medium SFA lesions (5-10cm)  
*K. Katsanos (Patras/GR)*
- 2701.3 Long SFA lesions (>10cm)  
*C.S. Pena (Miami, FL/US)*
- 2701.4 BTK lesions  
*P.E. Huppert (Darmstadt/DE)*

11:30-12:30, Auditorium 2

**Expert Round Table**■ **ERT 2702 The aortic arch**IDEAS  
2 0 1 8*Coordinators: A. Chavan (Oldenburg/DE), T. Kölbel (Hamburg/DE)*

- 2702.1 The role of cerebral protection  
*M.S. Hamady (London/UK)*
- 2702.2 The role of open arch repair with or without frozen elephant trunk  
*M. Shrestha (Hannover/DE)*
- 2702.3 The role of chimneys and debranching in the arch  
*T. Larzon (Örebro/SE)*
- 2702.4 The role of total endovascular repair  
*T. Kölbel (Hamburg/DE)*

11:30-12:30, Auditorium 6

**Focus Session**■ **FS 2703 Thyroid: small organ – big challenge***Moderators: J.H. Baek (Seoul/KR), Y. Rolland (Rennes/FR)*

- 2703.1 Thyroid tumours on the global scale and classical medical/surgical therapies  
*A.C. Martins (Lisbon/PT)*
- 2703.2 New frontiers of IR in thyroid malignant lesions  
*R. Cervelli (Pisa/IT)*
- 2703.3 Thermal ablation for treatment of thyroid tumours: a review  
*F. Stacul (Trieste/IT)*
- 2703.4 Potential concepts for interdisciplinary therapy in thyroid tumours  
*J.H. Baek (Seoul/KR)*

11:30-12:30, Auditorium 8

**Case-based Discussion**

**CBD 2704 IR for surgical disasters**



*Moderators: S. Stojanovic (Novi Sad/RS), G.-J. Teng (Nanjing/CN)*

- 2704.1 Pylorus preserving pancreaticoduodenectomy  
*O.M. van Delden (Amsterdam/NL)*
- 2704.2 Oesophagus surgery  
*B.A. Radeleff (Hof/DE)*
- 2704.3 Post laparoscopic cholecystectomy  
*P. Lucatelli (Rome/IT)*
- 2704.4 Urinary tract surgery  
*T.J. Bryant (Southampton/UK)*

11:30-12:30, Room 5.A

**Focus Session**

**FS 2705 Advanced stage HCC and beyond: unsolved questions**

*Moderators: M.C. Burgmans (Leiden/NL), T.F. Jakobs (Munich/DE)*

- 2705.1 Subclassification of advanced stage HCC: a proposal  
*I. Bargellini (Pisa/IT)*
- 2705.2 Chemoembolisation: which approach?  
*Y. Arai (Tokyo/JP)*
- 2705.3 Radioembolisation: cost-effectiveness does matter  
*A. Denys (Lausanne/CH)*
- 2705.4 Systemic therapy: 'mabs and 'nibs  
*F. Marra (Florence/IT)*

11:30-12:30, Room 3.A

**CIRSE meets**

**CM 2706 CIRSE meets SOBRICE**

*Moderators: D. Giansante Abud (Ribeirão Preto/BR),  
R.A. Morgan (London/UK)*

- 2706.1 What have we learned in 10 years of prostate artery embolisation  
*J.M. Motta-Leal-Filho (São Paulo/BR)*
- 2706.2 Does Vascular Lake Phenomenon indicate improved tumour response  
in DEB-TACE for HCC?  
*R.N. Cavalcante (São Paulo/BR)*
- 2706.3 10 years experience with renal cancer thermoablation: lessons from the  
past and future perspectives  
*M.R. de Menezes (São Paulo/BR)*

11:30-13:00, Simulator Gallery

**Simulation Training**

**SIM 4.4 The basics of chemoembolisation for the liver**

*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)*

*Session organiser: G. Maleux (Leuven/BE)*

*Instructors: F. Collettini (Berlin/DE), B. Gebauer (Berlin/DE),  
R. Loffroy (Dijon/FR), K. Malagari (Athens/GR)*

12:30-14:00, Room 5.C

**Hands-on Device Training**

**EMT-HDT 6 Embolisation: materials and tools – Particulate agents**

*Coordinators: T.J. Kroencke (Augsburg/DE), A.G. Rampoldi (Milan/IT)*

12:30-14:00, Room 5.D

**Hands-on Device Training**

**ST-HDT 2 Stroke thrombectomy**

*Coordinators: K.A. Hausegger (Klagenfurt/AT),  
H. van Overhagen (The Hague/NL)*

12:30-14:00, Auditorium 3

**Hands-on Device Training**

■ **TA-HDT 6 Tumour ablation – Image guidance**

*Coordinators: R. Bale (Innsbruck/AT), P. Wiggermann (Braunschweig/DE)*

12:45-14:15, Room 5.E

**Safe Sedation Training**

**SED 6 Safe sedation application during IR procedures**

*Coordinators: M. Heinrichs (Mainz/DE), W. Heinrichs (Mainz/DE)*

For a detailed programme, please refer to page 38.

13:00-14:00

**Satellite Symposia**

For the detailed programmes, please refer to page 227.

13:15-14:15, News on Stage Area

**News on Stage**

**NoS 2804 Interventional Oncology News on Stage**

*Moderators: F. Orsi (Milan/IT), J. Ricke (Munich/DE)*

- 2804.1 Prospective randomized trial: tumor response of colorectal liver metastases after transarterial chemoembolization with two different protocols using MRI  
*T.J. Vogl, M.C. Langenbach, C. Marco, R. Hammerstingl, J. Scholz, T. Gruber-Rouh; Frankfurt/DE*
- 2804.2 The usefulness of liver parenchymal perfusion simulation using commercial 3-dimensional workstation and simulation software in conventional transcatheter arterial chemoembolization for hepatocellular carcinoma  
*M. Kinoshita<sup>2</sup>, K. Takechi<sup>2</sup>, Y. Arai<sup>2</sup>, R. Shirono<sup>2</sup>, Y. Nagao<sup>2</sup>, S. Izumi<sup>2</sup>, S. Noda<sup>1</sup>, S. Takao<sup>1</sup>, S. Iwamoto<sup>1</sup>, M. Harada<sup>1</sup>; <sup>1</sup>Tokushima/JP, <sup>2</sup>Komatsushima/JP*
- 2804.3 WITHDRAWN
- 2804.4 In vitro bovine liver experiment of cisplatin-infused and normal saline-infused radiofrequency ablation with an internally cooled perfusion electrode  
*K. Park, H.P. Hong; Seoul/KR*

- 2804.5 Stereotactically navigated percutaneous microwave ablation (MWA) compared to conventional MWA: a matched pair analysis  
*L.P. Beyer, L. Lürken, B. Pregler, J. Schaible, P. Wiggermann; Regensburg/DE*
- 2804.6 Irreversible electroporation in central renal tumor  
*A. Camacho Martínez, J.M. Abadal Villayandre, E. Galvez, M.J. Alvarez; Madrid/ES*

14:30-15:00, Auditorium 1

**Honorary Lecture**

**HL 2901 Josef Roesch Lecture**

*Moderator: R.A. Morgan (London/UK)*

*Laudation: E. Brountzos (Athens/GR)*

- 2901.1 Endovascular embolectomy for acute ischaemic stroke: an update  
*A. Krajina (Hradec Králové/CZ)*

15:00-16:00, Auditorium 1

**MM 2902 Morbidity and Mortality Conference**



*Coordinators: T. Jahnke (Neumünster/DE), J. Garnon (Strasbourg/FR)*

- 2902.1 One last coil...  
*M.E. Krokidis (Cambridge/UK)*
- 2902.2 What you should not miss on the follow-up CT after aortic stentgraft placement  
*H.-K. Yoon (Seoul/KR)*
- 2902.3 Immediate embolisation of iatrogenic bleeding during biliary drainage  
*I. Dedes (Thessaloniki/GR)*
- 2902.4 Major leak, major luck  
*X. Buy (Bordeaux/FR)*
- 2902.5 From the arm to the brain and back  
*M. Wildgruber (Münster/DE)*
- 2902.6 Complex pulmonary ablation complication: assessment and management  
*D.A. Woodrum (Rochester, MN/US)*

14:30-15:30, Auditorium 2

**Hot Topic Symposium**

■ **HTS 2903 Challenges in endovascular repair**



*Moderators: F.E. Vermassen (Ghent/BE), A. Winterbottom (Cambridge/UK)*

- 2903.1 Advances and benefits of virtual reality in endovascular repair  
*G.M. Richter (Stuttgart/DE)*
- 2903.2 Endovascular treatment of malperfusion in aortic dissection  
*A. Chavan (Oldenburg/DE)*
- 2903.3 How to achieve long-term durability in EVAR  
*B.T. Katzen (Miami, FL/US)*
- 2903.4 Evolution towards 3x/4x-FEVAR in the treatment of pararenal AAA  
*E. Verhoeven (Nürnberg/DE)*

16:15-17:15, Auditorium 7

**Case-based Discussion**

■ **CBD 3001 Challenging chronic total occlusion**



*Moderators: P.E. Huppert (Darmstadt/DE), J.H. Peregrin (Prague/CZ)*

- 3001.1 How I do it the traditional way  
*N. Ptohis (Athens/GR)*
- 3001.2 The value of the retrograde access  
*M. Palena (Abano Terme/IT)*
- 3001.3 The value of re-entry devices  
*M.W. de Haan (Maastricht/NL)*
- 3001.4 Other devices  
*R. Ferraresi (Bergamo/IT)*

16:15-17:15, Auditorium 2

**Controversy Session**■ **CS 3002 Hot debates in aortic interventions**

*Moderators: I. Loftus (London/UK), J. Wilkins (London/UK)*

- 3002.1 Open surgery better for juxtarenal aneurysms  
*S. Michelagnoli (Florence/IT)*
- 3002.2 Endovascular repair better for juxtarenal aneurysms  
*A. Winterbottom (Cambridge/UK)*
- 3002.3 Active endovascular management of uncomplicated TBAD  
*R.G. McWilliams (Liverpool/UK)*
- 3002.4 Maximum conservative treatment in uncomplicated TBAD  
*I. Loftus (London/UK)*
- 3002.5 The EVAR concept cannot prevent late failures from late ruptures  
*G.N. Kouvelos (Larissa/GR)*
- 3002.6 Late failures can be avoided (proper case, device and technique selection)  
*A. Hyhlik-Dürr (Augsburg/DE)*

16:15-17:15, Auditorium 6

**Expert Round Table**■ **ERT 3003 Portal hypertension**

*Coordinators: Z.J. Haskal (Charlottesville, VA/US), G. Maleux (Leuven/BE)*

- 3003.1 TIPS for intractable ascites  
*S. Kee (Los Angeles, CA/US)*
- 3003.2 TIPS for variceal bleeding  
*A. Moelker (Rotterdam/NL)*
- 3003.3 Treatment of Budd Chiari syndrome  
*M.D. Darcy (St. Louis, MO/US)*
- 3003.4 Why is BRTO not taking off in Europe?  
*N. McEniff (Dublin/IE)*

16:15-17:15, Auditorium 8

**Clinical Evaluation Course**

**CEC 3004 Prostate artery embolisation**



Moderators: *N. Hacking (Southampton/UK), M.R. Sapoval (Paris/FR)*

- 3004.1 Imaging and treatment plan  
*N.V. Costa (Lisbon/PT)*
- 3004.2 Clinical overview  
*A. Massmann (Homburg/DE)*
- 3004.3 Anatomy and technique  
*A.G. Rampoldi (Milan/IT)*
- 3004.4 Image guidance for safe embolisation  
*H. Kobeiter (Créteil/FR)*
- 3004.5 Surgical outcome  
*G. Siena (Florence/IT)*
- 3004.6 Outcomes and follow-up  
*R.E. Beasley (Miami Beach, FL/US)*

16:15-17:15, Room 5.A

**Fundamental Course**

**FC 3005 Biopsy**



Moderators: *J. Kettenbach (St. Pölten/AT), R. Marcello (Rome/IT)*

- 3005.1 Lung biopsy  
*W. Prevoo (Amsterdam/NL)*
- 3005.2 Mediastinum biopsy  
*M. Tsitskari (Athens/GR)*
- 3005.3 Musculoskeletal biopsy  
*R.L. Cazzato (Strasbourg/FR)*
- 3005.4 Solid abdominal organs  
*F. Mondaini (Florence/IT)*



16:15-17:15, Room 5.B

Free Paper Session


 SUPER  
TUESDAY

 FP 3006 **Super Tuesday**
*Moderators: T.J. Kroencke (Augsburg/DE), D.A. Valenti (Montreal, QC/CA)*

- 3006.1 Incidence of new osteoporotic vertebral compression fractures and further vertebral height loss after vertebroplasty compared with a sham procedure. Results from VERTOS IV trial  
*C.E. Firanescu, P.N.M. Lohle; Tilburg/NL*
- 3006.2 Geniculate artery embolization (GAE) for osteoarthritis (OA)-related knee pain: interim results from a multicenter US trial  
*R. Piechowiak<sup>1</sup>, S. Bagla<sup>1</sup>, J. Orlando<sup>1</sup>, T. Hartman<sup>2</sup>, A. Isaacson<sup>2</sup>; <sup>1</sup>Woodbridge, VA/US, <sup>2</sup>Chapel Hill, NC/US*
- 3006.3 Portal vein embolization, simple and extended liver venous deprivation before major hepatectomy: which is the best technique for liver preparation?  
*B. Guiu, C. Cassinotto, L. Piron, J. Delicque, C. Allimant, V. Schembri, F. Quenet, E. Deshayes; Montpellier/FR*
- 3006.4 Percutaneous irreversible electroporation to treat locally advanced pancreatic cancer: the PANFIRE-2 trial final results  
*A.H. Ruarus, L.G. Vroomen, R.S. Puijk, M.C. de Jong, B.M. Zonderhuis, M.G.H. Besselink, M.P. van den Tol, F. van Delft, H.J. Scheffer, G. Kazemier, M.R. Meijerink; Amsterdam/NL*
- 3006.5 Percutaneous MR-guided whole-gland prostate cancer cryoablation: first results at 5 five years and safety considerations  
*P. De Marini, R.L. Cazzato, J. Garnon, M. Gaullier, G. Koch, J. Caudrelier, H. Lang, A. Gangi; Strasbourg/FR*
- 3006.6 Minimum ablation margin assessment with intraprocedural FDG perfusion PET during PET/CT guided liver tumor ablation  
*A.J. Cubre, P.B. Shyn, K. Tuncali, V. Levesque, T. Kapur, V. Gerbaudo, S. Silverman; Boston, MA/US*
- 3006.7 Prostatic artery embolization versus transurethral resection of the prostate in the treatment of benign prostatic hyperplasia: 12-month results of a clinical trial  
*A. Sáez de Océzar García, I. Insausti Gorbea, S. Solchaga Álvarez, R. Monreal Beortegui, P.J. Giral Villalta, S. Napal Lecumberri, F. Urtasun Grijalba; Pamplona/ES*

17:30-18:30, Auditorium 7

**Workshop**

■ **WS 3101 Transradial access**

3101.1 *D. Mullan (Manchester/UK)*

3101.2 *A. Fischman (New York, NY/US)*

17:30-18:30, Auditorium 2

**Focus Session**

■ **FS 3102 Thoracoabdominal aneurysm**



*Moderators: B.T. Katzen (Miami, FL/US), R.G. McWilliams (Liverpool/UK)*

3102.1 Prevention and treatment of spinal cord ischaemia

*J. Lammer (Vienna/AT)*

3102.2 Outcome of FEVAR and BEVAR: increasing use justified?

*J.A. Brennan (Liverpool/UK)*

3102.3 How to prevent and how to treat side branch occlusion

*J. Wilkins (London/UK)*

3102.4 Strategies in acute thoracoabdominal aneurysm

*E. Verhoeven (Nürnberg/DE)*

3102.5 Is there a role for open surgery?

*N. Cheshire (London/UK)*

17:30-18:30, Auditorium 6

**Workshop****WS 3103 Acute haemodialysis access thrombosis**3103.1 *N.B. Mani (St. Louis, MO/US)*3103.2 *M. Das (Duisburg/DE)*

17:30-18:30, Auditorium 8

**Video Learning Session****VL 3104 Embolisation***Moderators: D.A. Valenti (Montreal, QC/CA), J.-P. Pelage (Caen/FR)*

3104.1 Endoleak embolisation

*C.A. Binkert (Winterthur/CH)*

3104.2 Prostate artery embolisation

*T. Bilhim (Lisbon/PT)*

3104.3 Uterine artery embolisation

*J.-P. Pelage (Caen/FR)*

17:30-18:30, Room 3.B

**Workshop****WS 3105 Biliary intervention**3105.1 *A. Lunardi (Pisa/IT)*3105.2 *M.E. Krokidis (Cambridge/UK)*

17:30-18:30, Room 1.15

**Free Paper Session**

**FP 3106 Radiation safety**

*Moderators: G. Bartal (Kfar-Saba/IL), W. Jaschke (Innsbruck/AT)*

- 3106.1 Eye lens dosimetry in interventional radiology: assessment with dedicated Hp(3) dosimeters  
*R. Bouchard-Bellavance, P. Perreault, G. Soulez, L. Bouchard, M.-F. Giroux, P. Gilbert, V.L. Oliva, L. Normandeau, M. Lainesse, E. Therasse; Montreal, QC/CA*
- 3106.2 Radiation protection of the eyes as a function of the radiologist's body height  
*A.M. König<sup>1</sup>, R. Etzel<sup>2</sup>, B. Keil<sup>2</sup>, M. Fiebich<sup>2</sup>, A.H. Mahnken<sup>1</sup>; <sup>1</sup>Marburg/DE, <sup>2</sup>Giessen/DE*
- 3106.3 Detection and comparison of effective doses for cone-beam computed tomography (CBCT) and multiple detector computed tomography (MDCT) during 3D volume imaging in context of hepatic transarterial chemoembolization (cTACE), using a radiation therapy phantom  
*R. Maeder, L.S. Alizadeh, T.J. Vogl, M.H. Albrecht; Frankfurt/DE*
- 3106.4 Comparative dose study of a concept hybrid angio-MR system and a conventional angio C-arm system for neuro-angiography applications  
*M. Dehairs, H. Bosmans, N. Marshall; Leuven/BE*
- 3106.5 Quantifying radiation protection: what your lead does for you!  
*S. Mehta<sup>1</sup>, A. Mayes<sup>1</sup>, R. Narlawar<sup>2</sup>, K.O. Bashaeb<sup>2</sup>; <sup>1</sup>Manchester/UK, <sup>2</sup>Oldham/UK*
- 3106.6 The PAE learning curve: patient dose and practitioner experience  
*G. Vigneswaran, D. Maclean, S. Modi, M.R. Harris, J. Dyer, T.J. Bryant, N. Hacking; Southampton/UK*
- 3106.7 Preclinical assessment of a new robotic device applied to minimize operators' X-ray exposure during needle insertion under CBCT-guidance  
*A. Pfeil, R.L. Cazzato, L. Barbé, B. Wach, P. Renaud, A. Gangi; Strasbourg/FR*



17:30-18:30, Room 3.A

**Free Paper Session****FP 3107 Venous interventions***Moderator: J.G. Caridi (New Orleans, LA/US), M.D. Darcy (St. Louis, MO/US)*

- 3107.1 A prospective, multicenter, randomized, double blind, controlled study of coated drug balloon (CDB) (paclitaxel) versus high pressure balloon (HPB) for stenosis in fistulae for hemodialysis (preliminary results)  
*T. Moreno Sánchez<sup>1</sup>, J. García Revillo<sup>2</sup>, M. Moreno Ramírez<sup>1</sup>, M. Benítez Sánchez<sup>1</sup>, P. Pardo<sup>3</sup>, P. Navarro<sup>4</sup>, F. Moreno Rodríguez<sup>1</sup>, M.E. Pérez Montilla<sup>2</sup>, M. Sánchez-Agesta Martínez<sup>2</sup>; <sup>1</sup>Huelva/ES, <sup>2</sup>Cordoba/ES, <sup>3</sup>Granada/ES, <sup>4</sup>Puerto Real/ES*
- 3107.2 Portal vein thrombus percutaneous image guided recanalization by endoluminal RFA and stenting (VesOpen procedure) – the new approach in the management of HCC patients, complicated with PVT  
*M. Mizandari<sup>1</sup>, T. Azrumelashvili<sup>1</sup>, N. Habib<sup>2</sup>; <sup>1</sup>Tbilisi/GE, <sup>2</sup>London/UK*
- 3107.3 Covered stent to treat stenosis in arteriovenous fistula: "First Look" at results from the prospective, multi-Center, randomized AVeNEW study  
*B. Dolmatch; Mountain View, CA/US*
- 3107.4 The Lutonix® global AV registry – the latest interim 6 month outcomes  
*P.M. Kitrou; Patras/GR*
- 3107.5 Radiation exposure of patients with postthrombotic syndrome during endovenous recanalization  
*M.E. Barbati, A. Gombert, K. Schleimer, D. Kotelis, C.H. Wittens, P. Bruners, H. Jalaie; Aachen/DE*
- 3107.6 Covered stent to treat stenoses at the venous anastomosis of AV graft access circuits: six-month results from the prospective, multi-Center AVeVA study  
*B. Dolmatch; Mountain View, CA/US*
- 3107.7 Use of drug-coated balloons in dysfunctional arterio-venous access treatment. The effect of consecutive treatments in target lesion primary patency  
*P.M. Kitrou, I. Spyridonidis, K.N. Katsanos, P.N. Papadimatos, M. Theofanis, D. Karnabatidis; Patras/GR*

17:30-18:30, Room 5.A

**Free Paper Session**

**FP 3108 Embolotherapy**

*Moderators: M. Roček (Prague/CZ), C.R. Weiss (Baltimore, MD/US)*

- 3108.1 Splenic artery embolization versus conservative management or surgery (SPLENIQ trial): clinical, imaging and quality of life outcome  
*C.P.A.M. Raaijmakers, J. de Vries, G.F.A.J.B. van Tilborg, P. Lodder, A. Venmans, P.N.M. Lohle; Tilburg/NL*
- 3108.2 Transabdominal thoracic duct embolization – which anatomic structures do we actually cross in transabdominal puncture?  
*C.C. Pieper, H.H. Schild; Bonn/DE*
- 3108.3 Catheter-directed sclerotherapy with 95% ethanol for ovarian endometrioma: Short-term outcome of prospective cohort study  
*S. Han, K. Han, H. Kim, D. Kim, J.Y. Won, J.H. Kwon, M.D. Kim, G.M. Kim, D.Y. Lee, Y.S. Kim, W. Choi, J. Lee; Seoul/KR*
- 3108.4 Predictability and inducibility of complete prostatic central gland repulsion after prostatic artery embolization: post hoc analysis of a prospective trial  
*D. Abt, L. Mordasini, G. Müllhaupt, S. Markart, S. Güsewell, D. Engeler, H.-P. Schmid, L. Hechelhammer; St. Gallen/CH*
- 3108.5 In vitro evaluation of non-vascular applications of the ArtVentive EOS occlusive device  
*D. Kuetting, C. Meyer, H.H. Schild, C.C. Pieper; Bonn/DE*
- 3108.6 GPX gel particle embolic: a novel biocompatible electrostatic coacervate  
*J. Jones, J. Karz; Salt Lake City, UT/US*
- 3108.7 Embolization of genicular arteries for chronic hemarthrosis post knee prosthesis  
*O. d'Archembeau, E. Luyckx, T. Van Der Zijden, M. Voormolen, P.M. Parizel; Edegem/BE*

17:30-18:30, Room 5.B

**Free Paper Session****FP 3109 Oncologic interventions 4***Moderator: U. Pua (Singapore/SG)*

- 3109.1 Imaging and histological characterization of woodchuck hepatitis virus-induced hepatic tumors  
*M. Mauda-Havakuk, W. Pritchard, A.S. Mikhail, M. Starost, E. Jones, A. Partanen, D.L. Woods, J. Esparza-Trujillo, I. Bakhutashvili, V. Krishnasamy, J. Karanian, B.J. Wood; Bethesda, MD/US*
- 3109.2 Long-term hepatic changes in patients with metastatic neuroendocrine tumors treated with Y-90 radioembolization  
*G. El-Haddad<sup>1</sup>, A. Jung<sup>1</sup>, S. Damgaci<sup>1</sup>, F. Galambo<sup>1</sup>, J. Levine<sup>2</sup>, B. Morse<sup>1</sup>, T. Rose<sup>1</sup>, B. Biebel<sup>1</sup>, B. Kis<sup>1</sup>, J. Choi<sup>1</sup>, J. Sweeney<sup>1</sup>, N. Parikh<sup>1</sup>, J. Frakes<sup>1</sup>, S. Hoffe<sup>1</sup>, J. Strosberg<sup>1</sup>; <sup>1</sup>Tampa, FL/US, <sup>2</sup>New Orleans, LA/US*
- 3109.3 Interim analysis of pilot randomized trial of transarterial chemoembolization with or without stereotactic body radiation therapy for hepatocellular carcinoma patients awaiting liver transplantation  
*G.J. Nadolski, M. Hoteit, S. Hunt, S.W. Stavropoulos, E. Ben-Josef, M.C. Soulen; Philadelphia, PA/US*
- 3109.4 Drug levels following TACE correlate with radiopaque bead enhancement on CBCT in woodchuck hepatoma model using treatment planning software  
*A.S. Mikhail<sup>1</sup>, W. Pritchard<sup>1</sup>, A.H. Negussie<sup>1</sup>, V. Krishnasamy<sup>1</sup>, I. Bakhutashvili<sup>1</sup>, J. Esparza-Trujillo<sup>1</sup>, J. Karanian<sup>1</sup>, E. Levy<sup>1</sup>, A.L. Lewis<sup>2</sup>, B.J. Wood<sup>1</sup>; <sup>1</sup>Bethesda, MD/US, <sup>2</sup>Camberley/UK*
- 3109.5 Percutaneous electrochemotherapy of hepatocellular carcinoma at hepatic hilum  
*L. Tarantino<sup>1</sup>, A. Nasto<sup>1</sup>, G. Busto<sup>1</sup>, S. Bortone<sup>1</sup>, R. Fristachi<sup>1</sup>, R.A. Nasto<sup>1</sup>, P. Tarantino<sup>2</sup>, L. Cacace<sup>1</sup>, M. Romano<sup>1</sup>; <sup>1</sup>Pagani/IT, <sup>2</sup>Milano/IT*
- 3109.6 Idarubicin-loaded TANDEM® for chemoembolization of HCC: retrospective study in 72 patients  
*B. Guiu<sup>1</sup>, S. Colombat<sup>2</sup>, C. Cassinotto<sup>1</sup>, L. Piron<sup>1</sup>, J. Delicque<sup>1</sup>, V. Schembri<sup>1</sup>, L. Escal<sup>1</sup>, M.-A. Pierredon<sup>1</sup>, A. Belgour<sup>1</sup>, M.T. Boulin<sup>2</sup>; <sup>1</sup>Montpellier/FR, <sup>2</sup>Dijon/FR*
- 3109.7 Multimodal visibility of DC bead LUMI in comparison to DC Bead and Embozene Tandem and analysis of differences in distribution and embolization area in porcine kidneys  
*D. Schneider<sup>1</sup>, C.M. Sommer<sup>2</sup>; <sup>1</sup>Heidelberg/DE, <sup>2</sup>Stuttgart/DE*

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## Posters

### Aortic Intervention

- P-1 Undersized anchor-collagen-based vascular closure device AngioSeal for hemostasis of medium-sized transarterial access  
*A. Massmann<sup>1</sup>, F. Frenzel<sup>2</sup>, P. Fries<sup>2</sup>, A. Buecker<sup>2</sup>, R. Shayesteh-Kheslat<sup>2</sup>; <sup>1</sup>Homburg/DE, <sup>2</sup>Homburg/DE*
- P-2 Endovascular repair of Isolated iliac artery aneurysms is durable – results of a 20 year single-center experience  
*A. Kobe, C. Andreotti, Z. Rancic, R. Kopp, M. Lachat, G. Puippe, T. Pfammatter; Zurich/CH*
- P-3 Comparison of cardiovascular magnetic resonance imaging and computed tomography to guide transcatheter aortic valve replacement: a pilot study  
*M. Pamminger, G. Klug, S. Reinstadler, M. Reindl, C. Kremser, C. Kranewitter, N. Bonaros, G. Feuchtner, B. Metzler, W. Jaschke, A. Mayr; Innsbruck/AT*
- P-4 Comparison of abdominal post-Lipiodol embolization volume imaging, using either, next generation intra-procedural Cone-Beam-CT(CBCT), or post-interventional multi-detector-computed-tomography(MDCT), in context of conventional hepatic trans-arterial-chemoembolization(cTACE), regarding radiation-dose, image-quality and workflow  
*L.S. Alizadeh, T.J. Vogl, R. Maeder; Frankfurt/DE*
- P-5 Transcaval approach for endovascular aortic interventions: a systematic review  
*I. Wee, A. Wong, A.M. Choong; Singapore/SG*
- P-6 Hemodynamic assessment of pre- and post-operative thoracoabdominal aneurysm through visceral hybrid repair  
*C. Ong, I. Wee, H.L. Leo, A.M. Richards, A.M. Choong; Singapore/SG*
- P-7 Transcarotid transcatheter aortic valve implantation: a systematic review  
*I. Wee<sup>1</sup>, T. Stonier<sup>2</sup>, M. Harrison<sup>3</sup>, A. Wong<sup>1</sup>, A.M. Choong<sup>1</sup>; <sup>1</sup>Singapore/SG, <sup>2</sup>Harlow/UK, <sup>3</sup>Perth, WA/AU*
- P-8 Embolization of type 2 endoleak sac post endovascular abdominal aortic aneurysm repair- a retrospective review  
*S. Karkhanis, M. Duddy, J. Hopkins; Birmingham/UK*
- P-9 Endovascular treatment for TASC C and D aorto-iliac lesions  
*P.P. Sousa, P. Brandão, A. Canedo; Vila Nova De Gaia/PT*

- P-10 Aortic remodelling following type B dissections using the PETTICOAT technique  
*L. Cardarelli-Leite<sup>1</sup>, Y. El Hgar<sup>2</sup>, A. Hadjivassiliou<sup>1</sup>, K. Arsenault<sup>1</sup>, J. Chung<sup>1</sup>, J. Price<sup>1</sup>, J. Faulds<sup>1</sup>, D. Liu<sup>1</sup>, S. Ho<sup>1</sup>, G. Legiehn<sup>1</sup>, L. Machan<sup>1</sup>, D. Klass<sup>1</sup>; <sup>1</sup>Vancouver, BC/CA, <sup>2</sup>Liverpool, NSW/AU*
- P-11 Influence of tumor margins in a dosimetry partition model for liver radioembolization  
*N. Spahr<sup>1</sup>, N. Abolmaali<sup>2</sup>, R. Kikinis<sup>3</sup>, A. Schenk<sup>3</sup>; <sup>1</sup>Lübeck/DE, <sup>2</sup>Dresden/DE, <sup>3</sup>Bremen/DE*
- P-12 Endovascular treatment of late complications of open surgical repair in abdominal and iliac segment  
*P. Szopinski, E. Pleban, P. Ciostek; Warsaw/PL*
- P-13 Mycotic pseudoaneurysms in orthotopic liver transplant patients  
*S.A. Chapman, R. Ahmed, P. Tantrige, D. Huang, P. Kane, J. Wilkins; London/UK*
- P-14 Mycotic aneurysms: to graft or not to graft?  
*R. Flood, E. Palkhi, C. Hazar, K. Flood; Leeds/UK*
- P-15 Nellix endovascular aneurysm sealing system: post-treatment imaging findings  
*F. Daviddi, I. Bargellini, G. Lorenzoni, R. Cervelli, A. Bocuzzi, F. Acquafredda, D. Caramella, R. Cioni; Pisa/IT*
- P-16 Successful endovascular embolization of an intralobar pulmonary sequestration  
*A. Borzelli<sup>1</sup>, A. Paladini<sup>2</sup>, G. Cangiano<sup>1</sup>, F. Giurazza<sup>1</sup>, F. Corvino<sup>1</sup>, M. Silvestre<sup>1</sup>, G. de Magistris<sup>1</sup>, S. Tecame<sup>1</sup>, F. Amodio<sup>1</sup>, E. Cavaglià<sup>1</sup>, R. Niola<sup>1</sup>, G.E. Vallati<sup>2</sup>; <sup>1</sup>Naples/IT, <sup>2</sup>Rome/IT*
- P-17 Endovascular treatment of an actively hemorrhaging stab wound injury to the abdominal aorta at the level of celiac trunk  
*C.H. Jeon, C.W. Kim, H. Kwon; Busan/KR*  
WITHDRAWN
- P-18 Novel approach in the treatment of abdominal aortic ulcers and focal dissections  
*L. Fernández, T. Hernández Cabrero, J.R. Novo Torres, R. Rodríguez Diaz, G. Garzón Moll, M.D. Ponce-Dorrego; Madrid/ES*
- P-19 Intercostal arterial bleeding treated by transarterial embolization (TAE) achieved by fenestration of false aortic lumen  
*P. Boscarato, M. Rosati, A. Borgheresi, C. Micarelli, M. Fichetti, S. Alborino, E. Paci, R. Candelari; Ancona/IT*
- P-20 Endovascular treatment of aneurysm caused by penetrating aortic ulcer by detachable coils, glue and covered stent  
*J. Egge<sup>1</sup>, I.K. Tesdal<sup>2</sup>; <sup>1</sup>Haugesund/NO, <sup>2</sup>Friedrichshafen/DE*

- P-21 Transapical plug embolization of an aortic valvular pseudoaneurysm  
*S. Kao, N. Koney, G. Tse, O. Aksoy, M. Kwon, J.M. Moriarty; Los Angeles, CA/US*
- P-22 Repair of a displaced abdominal endograft: "off-the-shelf" emergency EVAR  
*P. Biondetti, P.M. Brambillasca, G. Spadarella, S. Zannoni, M.L. Jannone Molaroni, S.A. Angileri, A.M. Ierardi, G. Carrafello; Milan/IT*

### Biliary intervention

- P-23 A risk predictive nomogram for early biliary infection after percutaneous transhepatic biliary stenting in malignant biliary obstruction  
*H.-F. Zhou, J. Lu, H.-D. Zhu, J.-H. Guo, G.-J. Teng; Nanjing/CN*  
WITHDRAWN
- P-24 Advanced techniques for ultrasound-guided percutaneous transhepatic biliary drainage in difficult situations: feasibility and safety  
*M. Tamura, S. Nakatsuka, M. Misu, J. Tsukada, N. Ito, M. Inoue, M. Jinzaki; Tokyo/JP*
- P-25 Percutaneous transhepatic bilioplasty with placement of biodegradable biliary stents for treatment of post-liver transplant biliary anastomotic strictures: a single center prospective study  
*G. Barbiero, M. Battistel, C. Mattolin, M. Senzolo, P. Boccagni, G. Zanusi, P. Burra, U. Cillo, D. Miotto; Padua/IT*
- P-26 Clinically significant bleeding after percutaneous biliary drainage catheter insertion – a single centre retrospective analysis from Singapore General Hospital  
*M. Wang, S. Leong; Singapore/SG*
- P-27 Percutaneous transhepatic biliary drainage (PTBD) in palliation of oncological obstructive jaundice: quality of life secondary to right versus left approach  
*C. Gozzo<sup>1</sup>, D.G. Castiglione<sup>1</sup>, M.C. Calcagno<sup>2</sup>, A. Boncoraglio<sup>2</sup>, G. Caltabiano<sup>2</sup>, P.V. Foti<sup>2</sup>, S. Palmucci<sup>2</sup>, A. Basile<sup>2</sup>; <sup>1</sup>Palermo/IT, <sup>2</sup>Catania/IT*
- P-28 Biliary percutaneous transluminal forceps biopsy. Identification of factors associated with higher sensitivity in 70 patients with malignant jaundice  
*P. Huespe, S. Oggero, O. Mazza, M. de Santibañes, R. Sanchez-Claria, E. de Santibañes, J. Pekolj, S.H. Hyon; Buenos Aires/AR*
- P-29 Percutaneous versus endoscopic intervention in malignant hilar biliary obstruction  
*A. Singh, N. Kalra, G. Singh, G.R. Verma, V. Gupta, U. Gorski, V. Singh; Chandigarh/IN*
- P-30 Percutaneous transhepatic biliary drainage (PTCD) by using 0.018-inch micro guide-wire system  
*A.S.-B.C. Chou; Hualien County/TW*

- P-31 Percutaneous cholecystostomy for acute acalculous cholecystitis following biliary metallic stent insertion  
*D.I. Gwon, S. Park, W.J. Yang, S.Y. Noh, H.H. Chu, G.-Y. Ko; Seoul/KR*
- P-32 Biliary recanalization by RFA & stenting using PTBD track – the new approach in percutaneous management of inoperable intrahepatic CCC  
*M. Mizandari<sup>1</sup>, T. Azrumelashvili<sup>1</sup>, N. Habib<sup>2</sup>; <sup>1</sup>Tbilisi/GE, <sup>2</sup>London/UK*
- P-33 Acute pancreatitis after percutaneous insertion of biliary metallic stent in 143 patients with inoperable pancreatic cancer  
*D.I. Gwon<sup>1</sup>, E.T. Kim<sup>2</sup>, S. Park<sup>1</sup>, W.J. Yang<sup>1</sup>, H.H. Chu<sup>1</sup>, S.Y. Noh<sup>1</sup>, J.W. Kim<sup>1</sup>, G.-Y. Ko<sup>1</sup>; <sup>1</sup>Seoul/KR, <sup>2</sup>Guri/KR*
- P-34 Role of percutaneous transhepatic techniques for management of biliary anastomotic strictures in living donor liver transplant recipients; our initial 7 year experience as the pioneer hepatobiliary transplant center in our country  
*H. Ali, A.I. Rang, Z.A. Khan, R. Tahir; Islamabad/PK*
- P-35 Tolerability of endobiliary photodynamic therapy in non-surgical Klatskin tumor patients.  
*D.Y. Frantsev, O.N. Sergeeva, M.A. Shorikov, M.G. Lapteva, E. Virshke, B.I. Dolgushin; Moscow/RU*
- P-36 Clinical outcomes of percutaneous cholecystostomy for acute cholecystitis in patients with coagulopathy  
*H. Yamahata, M. Yabuta, R. Miyazawa, T. Suzuki, M. Rahman; Tokyo/JP*
- P-37 Percutaneous treatment of bile duct stones in patients with gastrectomy  
*U.G. Rossi<sup>1</sup>, A. Valdata<sup>1</sup>, F. Pinna<sup>1</sup>, N. Camisassi<sup>1</sup>, P. Torcia<sup>2</sup>, A.M. Ierardi<sup>2</sup>, G. Carrafiello<sup>2</sup>, M. Cariati<sup>2</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT*
- P-38 A guide to hepatico-gastrostomy  
*A. Ngo, D.A. Valenti, A. Hashim, A. Bessissow, J. Toro, T. Adlan, Y.-I. Chen; Montreal, QC/CA*
- P-39 Novel delivery of Avitene via trans-hepatic introducer sheath for track embolization following transhepatic interventions  
*B. Shaygi, D. McNally; Edmonton, AB/CA*
- P-40 Complex stent-in-stent as palliative treatment in malignant hilar biliary obstruction patients  
*P. Torcia<sup>1</sup>, U.G. Rossi<sup>1</sup>, G. Damiani<sup>1</sup>, S. Squarza<sup>1</sup>, P. Rigamonti<sup>1</sup>, L.C. Pescatori<sup>2</sup>, C. Timpani<sup>3</sup>, M. Cariati<sup>1</sup>; <sup>1</sup>Milan/IT, <sup>2</sup>San Donato Milanese/IT, <sup>3</sup>Chieti/IT*

- P-41 Percutaneous stenting for draining liver abscess into intrahepatic bile duct in patients with refractory liver abscess  
*N. Umakoshi, Y. Arai, M. Sone, S. Sugawara, C. Itoh, S. Wada, T. Hasegawa, T. Kubo; Tokyo/JP*
- P-42 Palliation of malignant biliary disease: towards a novel biliary stent  
*A. Hatzidakis<sup>1</sup>, M.E. Krokidis<sup>2</sup>; <sup>1</sup>Iraklion/GR, <sup>2</sup>Cambridge/UK*
- P-43 Percutaneous management of iatrogenic biliary tract complications  
*L. Pancione; Romford/UK*
- P-44 Percutaneous biliary drainage, step by step  
*C. Garcia Alba, V. Roche, R. Pommier, M. Ronot, A. Sibert, V. Vilgrain; Clichy/FR*
- P-45 Use of retrievable covered stents in long-term treatment of benign biliary strictures  
*G.G.G. Almeida<sup>1</sup>, B. Gonçalves<sup>2</sup>, P.A.M.S. Almeida<sup>3</sup>; <sup>1</sup>Coimbra/PT, <sup>2</sup>Porto/PT, <sup>3</sup>Viseu/PT*
- P-46 3D printing and reconstruction: The role of simulation in biliary interventionism  
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*<sup>1</sup>Yekaterinburg/RU, <sup>2</sup>Kfar-Saba/IL*
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*J.A. Hirsch<sup>1</sup>, O. Clerik-Lamallice<sup>2</sup>, M.R. Chambers<sup>3</sup>, T.G. Andreshak<sup>4</sup>, A.L. Brook<sup>5</sup>, B.M. Bruel<sup>6</sup>, H. Gordon Deen<sup>7</sup>, P.C. Gerszten<sup>8</sup>, S.D. Kreiner<sup>9</sup>, C.A. Sansur<sup>10</sup>, S.M. Tutton<sup>11</sup>, P. van der Meer<sup>12</sup>, H.J. Stoevelaar<sup>13</sup>, D.P. Beall<sup>2</sup>;*  
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*<sup>1</sup>Siena/IT, <sup>2</sup>Firenze/IT*
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*L. Mascagni, M. Rossi, G. Orgera, M.A. Tiplaldi; Rome/IT*
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*R.M.C. Freitas, J.G.M.P. Caldas, A.O. Hoff, J.E. Bezerra Neto, M.Q. Almeida, A.M. Lerario, B.B. Mendonça, M.C.B.V. Fragoso; São Paulo/BR*
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*A. Pacheco<sup>1</sup>, R. García Marcos<sup>1</sup>, J. Martínez<sup>1</sup>, F.M. Gómez<sup>2</sup>, J. Flores<sup>1</sup>, D. Pérez Enguix<sup>1</sup>, M. Cifrian Perez<sup>3</sup>, M. Lloret Larrea<sup>1</sup>; <sup>1</sup>Valencia/ES, <sup>2</sup>Barcelona/ES, <sup>3</sup>Castellón/ES*

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- P-136 Mid-term results of catheter directed foam sclerotherapy combined with tumescent local anaesthesia for treatment of great saphenous Vein Incompetence  
*H. Ali, A. Elbadawy, M. Saleh, O. Mahmoud; Assiut/EG*
- P-137 Distal trans-radial access in interventional radiology: a new and safe technique  
*L. van Dam<sup>1</sup>, D. Bijdevaate<sup>2</sup>, P.J.V. Doormaal<sup>2</sup>, A. Moelker<sup>2</sup>; <sup>1</sup>Sommelsdijk/NL, <sup>2</sup>Rotterdam/NL*
- P-138 Challenges in providing a 24/7 interventional radiology service in our region  
*T. Carlsson<sup>1</sup>, A. Greenwood<sup>2</sup>, B. Odedra<sup>2</sup>, G. Collin<sup>1</sup>; <sup>1</sup>Bristol/UK, <sup>2</sup>Gloucester/UK*
- P-139 Percutaneous aspiration embolectomy using a 5MAX ACE reperfusion catheter for acute mesenteric ischemia  
*I. Ikushima<sup>1</sup>, M. Kawano<sup>1</sup>, T. Hira<sup>2</sup>; <sup>1</sup>Miyakonojo/JJ, <sup>2</sup>Miyazaki/JJ*
- P-140 Utilization of spanish primer to communicate with non-english speaking hispanic patients in interventional radiology  
*D. Jin<sup>1</sup>, J. Park<sup>2</sup>, H. Betancourt<sup>1</sup>, P. Flynn<sup>1</sup>, J. Smith<sup>1</sup>; <sup>1</sup>Loma Linda, CA/US, <sup>2</sup>Alhambra, CA/US*
- P-141 Clinical utility of 0.014-inch pushable coils in transarterial embolization using the triple-coaxial system  
*S. Tsukahara, M. Shimohira, K. Ohta, K. Suzuki, T. Goto, Y. Sawada, K. Iwata, Y. Shibamoto; Nagoya/JJ*
- P-142 Splenic artery embolization in the non operative management of splenic trauma: a single center experience  
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- P-143 Comparison of Angio-CT and Cone-beam CT guided immediate radiofrequency ablation after transcatheter arterial chemoembolization for large hepatocellular carcinoma  
*H. Yuan, F. Liu; Beijing/CN*
- P-144 Radioembolisation in Europe; a survey among CIRSE members  
*M.T.M. Reinders<sup>1</sup>, E. Mees<sup>1</sup>, M. Powerski<sup>2</sup>, R.C.G. Bruijnen<sup>1</sup>, M.A.A.J. van den Bosch<sup>1</sup>, M.G.E.H. Lam<sup>1</sup>, M.L.J. Smits<sup>1</sup>; <sup>1</sup>Utrecht/NL, <sup>2</sup>Magdeburg/DE*
- P-145 Volume adjusted cost effectiveness of hydrogel-coated coil for visceral aneurysmal embolization  
*Y. Tanahashi, S. Goshima, H. Kawada, T. Ando, N. Kawai, S. Nagata, Y. Noda, F. Hyodo, M. Matsuo; Gifu/JJ*

- P-146 The incidence and clinical relevance of extravascular incidental findings in upper limb CT angiograms  
*R. Nourzaie, H. Abbas, J.P. Das, R. Fernando, N. Karunanithy, P. Gkoutzios, S. Ilyas, S. Moser, I. Ahmed, A. Diamantopoulos; London/UK*
- P-147 Clinical relevance of incidental findings in lower limb CT angiograms  
*R. Nourzaie, H. Abbas, A.K. Gupta, N. Karunanithy, P. Gkoutzios, S. Ilyas, S. Moser, I. Ahmed, T. Sabharwal, A. Diamantopoulos; London/UK*
- P-148 Procedural training in the UK: A snapshot survey and the call for simulation  
*M.R. Akhtar, J. Kyaw Tun, A. Zaman, R. Alchanan, D.E. Low; London/UK*
- P-149 Mechanical aspiration thrombectomy; the cost effective way for the management of acute clot?  
*B. Huasen<sup>1</sup>, A. Massmann<sup>2</sup>, S.P. D'Souza<sup>3</sup>; <sup>1</sup>Auckland/NZ, <sup>2</sup>Homburg/DE, <sup>3</sup>Preston/UK*
- P-150 Interventional Radiology Patient Safety Checklist – an audit of compliance  
*J. Dhaliwal, J. Jacob, A. Ramsay; Glasgow/UK*
- P-151 Evaluation of IR complications in a large UK tertiary referral centre using the new CIRSE complications grading system  
*A. Prashar, N. Shaida; Cambridge/UK*
- P-152 Successful implementation of a new interventional radiology emergency response in a United States Level 1 Trauma Hospital  
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- P-153 Tiered response algorithm for endovascular management of traumatic hemorrhage (EmboNow vs. EmboSoon)  
*B. Sadeghi<sup>1</sup>, K. Bui<sup>1</sup>, H. Javan<sup>1</sup>, A. Lam<sup>1</sup>, J. Katrivesis<sup>2</sup>, K.J. Nelson<sup>1</sup>, D.M. Fernando<sup>1</sup>, E. Kuncir<sup>1</sup>, M. Lekewa<sup>1</sup>, N. Abi-Jaoudeh<sup>2</sup>; <sup>1</sup>Irvine, CA/US, <sup>2</sup>Orange, CA/US*
- P-154 What are patients saying about uterine fibroid embolization?  
*C. Hyman<sup>1</sup>, R. Chand<sup>2</sup>; <sup>1</sup>Providence, RI/US, <sup>2</sup>Chicago, IL/US*
- P-156 Sky's the limit: reporting early results and impact of an online webinar based interventional radiology elective  
*V. Kumar, E. Lehrman, M.P. Kohi; San Francisco, CA/US*

- P-157 Therapeutic effect of ultrasonography (US)-guided intra-nodal lymphangiography (INL) for inguinal lymphatic leakage due to femoral cut-down during aortic surgery  
*T. Nakagawa, S. Hase, N. Moriya, M. Kashima, M. Yamasaki, S. Yamamoto; Kawasaki-city, Kanagawa/JP*
- P-158 The role of the Clinical Nurse Specialist in Interventional Radiology, Guy's and St Thomas' NHS Foundation Trust, London  
*V. Bonne, A. Diamantopoulos, N. Karunanithy, A. Credo, M. Lyons, A. Feliciano; London/UK*
- P-159 Educational review of contrast pump injection technique in catheter angiography  
*N. Shah, M.R. Akhtar, M. Renton, D.E. Low, J. Kyaw Tun; London/UK*
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*B. Sebastian, S. Singhal, R. Madhurkar, M. Uthappa; Bangalore/IN*
- P-161 Sharp scratch: anaesthesia in the interventional radiology department  
*H.W.H. McGrath, A. McGrath; London/UK*
- P-162 Glue embolization in rectus sheath haematoma management  
*V. Semeraro<sup>1</sup>, G. Iannelli<sup>2</sup>, N.M. Lucarelli<sup>1</sup>, V. Gisone<sup>1</sup>, M.P. Ganimede<sup>1</sup>, L. Macarini<sup>2</sup>, N. Burdi<sup>1</sup>; <sup>1</sup>Taranto/IT, <sup>2</sup>Foggia/IT*
- P-163 Use of analgesia during interventional radiology procedures  
*C. O'Beirne, R. Karia; Chesterfield/UK*
- P-164 Sedation, analgesia and anesthesia in Interventional Radiology procedures: the essentials every Interventional Radiology resident should know  
*P. Patrão, G. Magalhães, C.F. Ribeiro, D. Silva; Viseu/PT*
- P-165 Miscellaneous pharmaceutical agents in interventional radiology  
*P. Patrão, G. Magalhães, C.F. Ribeiro, D. Silva; Viseu/PT*
- P-166 Contrast media reactions in Interventional Radiology: how to treat them?  
*P. Patrão, G. Magalhães, C.F. Ribeiro, D. Silva; Viseu/PT*
- P-167 Treatment of long distance bicycle-riding related vasculogenic erectile dysfunction with balloon dilatation angioplasty.  
*H.-T. Liu, S.-H. Shen, C.-A. Liu, T.-C. Wei, W.J. Huang, M.-H. Wu, I.-K. Wu; Taipei/TW*

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*S. Xingwei, J. Yong; Suzhou, Jiangsu/CN*
- P-169 How does detapering of dialysis grafts affect access flow and does it result in steal?  
*R. Parikh<sup>1</sup>, R. Bhatt<sup>2</sup>, T.W.I. Clark<sup>1</sup>, S.O. Trerotola<sup>1</sup>; <sup>1</sup>Philadelphia, PA/US, <sup>2</sup>Wilkes Barre, PA/US*
- P-170 Does length matter? A comparative cohort study of 19 cm versus 23 cm length tunneled central venous catheters for hemodialysis  
*K. Damodharan, N.K. Venkatanarasimha, N. Soh, S. Chandramohan, B.S. Tan; Singapore/SG*
- P-171 Placement of implantable venous access ports by conventional and single-incision technique: a retrospective comparison of outcome and complications  
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- P-172 Endovascular management of arteriovenous fistulas in cephalic arch stenosis: a systematic review & meta-analysis  
*R. D'Cruz, S.W. Leong, V.S. Vijayan, A. Tiwari, T.T. Yip; Singapore/SG*
- P-173 Trapezius port placement in patients with breast cancer: long term follow-up and quality of life assessment  
*B.E. Cil<sup>1</sup>, O. Öca<sup>2</sup>, G. Eldem<sup>2</sup>, B. Peynircioglu<sup>2</sup>, F. Balkanci<sup>2</sup>; <sup>1</sup>Istanbul/TR, <sup>2</sup>Ankara/TR*
- P-174 Prospective single center cohort study evaluating the efficacy and durability of a new covered stent (Covera/ CRBard) in treating dysfunctional dialysis av-access  
*T.M. Steinke, L. Nuth; Duesseldorf/DE*
- P-175 Juxta-anastomotic stent graft for native radio-cephalic fistula salvage: feasibility, safety and primary patency at 1 year  
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- P-177 Potentially serious deficit in the understanding of central venous catheters and anatomy by radiology trainees and general radiology consultants  
*B. Alba, W.R. Thomas, K.S. Moore, A.C. Gordon, R.D. White; Cardiff/UK*
- P-178 Haemodialysis vascular access surgery: what the interventionalist needs to know  
*G. Lie, F. Arfeen, J. Kyaw Tun, M.R. Akhtar, O.S. Jaffer, M. Mattson; London/UK*

- P-179 Image guided unconventional venous access techniques  
*A. Medsingel, R. Dhanagana<sup>1</sup>, N.W. Erte<sup>2</sup>, C. Nworgu<sup>1</sup>; <sup>1</sup>Pittsburgh, PA/US, <sup>2</sup>Birmingham, AL/US*
- P-180 Implantation of totally implanted venous access devices in the upper arm -technical considerations  
*H.I. de Sousa Guerreiro, J.D. Busch; Hamburg/DE*
- P-181 Practical use of flow measurements obtained by Doppler ultrasound in the vascular radiology room in dysfunctional or thrombosed arteriovenous fistula for hemodialysis access  
*M.D. Pascual Robles, D. Contreras Padilla, A.J. Mantilla Pinilla, S. Gil Sánchez, J. Irurzun, F. Sanchez Blanco; Alicante/ES*
- P-182 Interventional radiology and placement tunneled catheters for hemodialysis  
*S.S. Torbica<sup>1</sup>, A. Petres<sup>2</sup>, S. Stojanovic<sup>2</sup>, V. Till<sup>2</sup>; <sup>1</sup>Subotica/RS, <sup>2</sup>Novi Sad/RS*
- P-183 Yet another bail out...!!  
*S. Singhal, B. Sebastine, N. Kunderagi, S. Jaganathan, M. Uthappa; Bangalore/IN*
- P-184 Trojan horse method for SVC recanalization  
*A. Alsaifi, B. Jones, A. Graham; London/UK*
- P-185 TULIP (TUnnelled Line Intraluminal Plasty): A novel technique for treating dialysis catheter associated fibrin sheath formation  
*R. Ahmed, S.A. Chapman, P. Tantrige, A. Hussain, E.W. Johnston, T. Ammar, D. Huang, J. Wilkins, G. Garzillo, G.T. Yusuf; London/UK*
- P-186 Neutralising the risk of long-term central line embolisation during catheter removal  
*N.R. Patel, W. Hakim, D. Bosanac; London/UK*
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*G. Leati, R. Corti, L.P. Moramarco, N. Cionfoli, I. Fiorina, C.A. Capodaglio, P. Quaretti; Pavia/IT*

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*F. Giurazza, F. Corvino, G. Cangiano, F. Amodio, E. Cavaglià, R. Niola; Naples/IT*  
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*Q. Zu, G. Lu, H.-B. Shi; Nanjing/CN*

- P-190 Ear arteriovenous malformation management  
*W.F. Yakes; Englewood, CO/US*  
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- P-191 Endovascular vein approach and direct puncture retrograde vein approach for curative AVM treatment: a new unreported technique  
*W.F. Yakes; Englewood, CO/US*  
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- P-192 Head and neck endovascular repair of vascular malformations  
*W.F. Yakes; Englewood, CO/US*  
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*G. Deib<sup>1</sup>, L. Gregg<sup>1</sup>, A. Venbrux<sup>2</sup>, P. Gailloud<sup>1</sup>; <sup>1</sup>Baltimore, MD/US, <sup>2</sup>Washington, DC/US*
- P-195 Clinical outcomes of emergency transcatheter embolization with Glubran<sup>®</sup>2 cyanoacrylate glue for acute arterial bleeding: a single-center experience with 104 patients  
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*L.C. Pescatori<sup>1</sup>, O. Chevallier<sup>2</sup>, R. Né<sup>2</sup>, S. Gehin<sup>2</sup>, P.E. Berthod<sup>2</sup>, N. Falvo<sup>2</sup>, M. Midulla<sup>2</sup>, R. Loffroy<sup>2</sup>; <sup>1</sup>San Donato Milanese/IT, <sup>2</sup>Dijon/FR*
- P-197 Delayed postpartum hemorrhage: effect of selective transcatheter arterial embolization  
*S.H. Kwon, J.H. Oh, T.-S. Seo; Seoul/KR*
- P-198 Using a vascular plug for closure of a surgically created arteriovenous fistula after treatment of extensive iliofemoral thrombosis  
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- P-199 Postpartum hemorrhage due to genital tract injury after vaginal delivery: efficacy of transcatheter arterial embolization  
*S.M. Lee; Jinju, Gyeongsangnamdo/KR*

- P-200 Complications after embolization of peripheral arteriovenous malformations  
*F.C.M. Bouwman, S.M.B.I. Botden, B.H. Verhoeven, C.J.M. van der Vleuten, I. de Blaauw, L.J. Schultze Kool; Nijmegen/NL*
- P-201 Middle and long term follow-up of endovascular treatment of giant visceral aneurysm and pseudoaneurysm: a single center experience  
*M. Pignatelli, M.A. Tipaldi, G. Rampacci, L. Mascagni, F. Laurino, M. Rossi, G. Orgera; Rome/IT*
- P-202 The benefit of transradial approach in patients undergoing bariatric embolization  
*E. Khayrutdinov, D. Gromov; Moscow/RU*
- P-203 The success of direct percutaneous sac injection with N-butyl cyanoacrylate for type II endoleak management: a single-center retrospective review  
*M. Orešnik, D. Kuhelj; Ljubljana/SI*
- P-204 Non-ischaemic priapism: Erectile dysfunction and haemodynamic abnormalities on Doppler after embolization. When should repeat angiography be considered?  
*C. von Stempel, A. Kirkham, M. Walkden; London/UK*
- P-205 PAVMs embolisation with Amplatzer plug IV in patients with hereditary haemorrhagic telangiectasia  
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- P-206 Variations of the bronchial arteries' origin: review of multidetector CT and digital subtraction angiography in 600 patients  
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- P-207 Prostatic artery embolization in large prostate: experience in 31 patients  
*F. Barbosa, P. Brambillasca, S. Secco, P. Gemma, M. Nichelatti, A. Galfano, R. Vercelli, A. Militi, C. Migliorisi, M. Solcia, A.M. Bocciardi, A.G. Rampoldi; Milan/IT*
- P-208 Prostate vascularity assessed by dynamic contrast enhanced MRI preoperatively and its correlation with clinical and volumetric outcomes following prostatic artery embolisation  
*A. Macdonald<sup>1</sup>, H. Corrigan<sup>1</sup>, M.W. Little<sup>2</sup>, R. Macpherson<sup>1</sup>, T. MacKinnon<sup>1</sup>, P. Boardman<sup>1</sup>, C.R. Tapping<sup>1</sup>; <sup>1</sup>Oxford/UK, <sup>2</sup>Reading/UK*
- P-209 Embolization of recurrent wide-neck visceral aneurysms after initial endovascular treatment  
*M. Inoue, S. Nakatsuka, J. Tsukada, M. Tamura, N. Ito, M. Misu, M. Jinzaki; Tokyo/JP*

- P-210 Emergency transarterial embolization in postoperative hip bleeding: indications, techniques, and results in a retrospective cohort  
*E. Lanza<sup>1</sup>, R. Muglia<sup>1</sup>, M. Tamarin<sup>2</sup>, D. Poretti<sup>1</sup>, L. Solbiati<sup>1</sup>, V. Pedicini<sup>1</sup>; <sup>1</sup>Rozzano/IT, <sup>2</sup>Milan/IT*
- P-211 The use of 5-Alpha-Reductase inhibitors prior to prostatic artery embolization (PAE) and its effect on clinical outcome  
*L. Cardarelli-Leite, A.M. de Assis, A.M. Moreira, A.F. Rodriguez, F.C. Carnevale; São Paulo/BR*
- P-212 Novel interventional imaging and treatment of chyluria  
*A. Gurevich<sup>1</sup>, G.J. Nadolski<sup>2</sup>, M. Itkin<sup>2</sup>; <sup>1</sup>Ramat Aviv/IL, <sup>2</sup>Philadelphia, PA/US*
- P-213 In vitro study of the effects of increased temperature on the glue viscosity and its potential role for bronchial arterial embolization using microballoon systems  
*T. Mine<sup>1</sup>, T. Hasebe<sup>2</sup>, K. Bito<sup>3</sup>, T. Hayashi<sup>2</sup>, T. Matsumoto<sup>2</sup>, G. Benndorf<sup>1</sup>; <sup>1</sup>Inzai/JP, <sup>2</sup>Tokyo/JP, <sup>3</sup>Kanagawa/JP, <sup>4</sup>København Ø/DK*
- P-214 Spontaneous bleeding in patients who receive anticoagulant therapy (AT) treated with transarterial embolization (TAE)  
*R. Candelari, M. Rosati, A. Borgheresi, P. Boscarato, C. Micarelli, M. Fichetti, S. Alborino, A. Dimitriadou, E. Paci; Ancona/IT*
- P-215 Direct percutaneous sac puncture for type II endoleak management  
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- P-216 Intra-arterial thrombolytic therapy in addition to mechanical thrombectomy in the MR CLEAN registry  
*A. Mazuri, R.P. Bokkers; Groningen/NL*
- P-217 Spontaneous hemorrhage of the rectus sheath in anticoagulated patients: super-selective transcatheter arterial embolization technique  
*U.G. Rossi<sup>1</sup>, P. Torcia<sup>2</sup>, A.M. Ierardi<sup>1</sup>, A. Valdata<sup>1</sup>, F. Pinna<sup>1</sup>, N. Camisassi<sup>1</sup>, G. Carrafiello<sup>2</sup>, M. Cariatì<sup>2</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT*
- P-218 Diagnosis and grading of splenic injuries in abdominal major trauma for planning interventional radiology management  
*U.G. Rossi<sup>1</sup>, P. Torcia<sup>2</sup>, A.M. Ierardi<sup>2</sup>, F. Pinna<sup>1</sup>, A. Valdata<sup>1</sup>, N. Camisassi<sup>1</sup>, G. Carrafiello<sup>2</sup>, M. Cariatì<sup>2</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT*
- P-219 Interventional radiology point of view in massive arterial hemoptysis: from the diagnosis to the embolization  
*U.G. Rossi<sup>1</sup>, P. Torcia<sup>2</sup>, F. Pinna<sup>1</sup>, A. Valdata<sup>1</sup>, N. Camisassi<sup>1</sup>, A.M. Ierardi<sup>2</sup>, G. Carrafiello<sup>2</sup>, M. Cariatì<sup>2</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT*

- P-220 Structured approach to bronchial artery embolization, tips and tricks and dangerous vessels  
*S.A. Cornelissen, L. Bonne, G. Maleux; Leuven/BE*
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*S. Nirmalarajan<sup>1</sup>, G. Schlaphoff<sup>2</sup>; <sup>1</sup>Randwick, NSW/AU, <sup>2</sup>Liverpool, NSW/AU*
- P-222 Management of difficult cases of balloon-occluded retrograde transvenous obliteration for gastric varices  
*S. Takenaga<sup>1</sup>, K. Masuda<sup>1</sup>, K. Morikawa<sup>1</sup>, K. Michimoto<sup>2</sup>, Y. Matsui<sup>1</sup>, S. Yamazoe<sup>3</sup>, H. Ashida<sup>1</sup>; <sup>1</sup>Tokyo/Jp, <sup>2</sup>Shizuoka/Jp, <sup>3</sup>Chiba/Jp*
- P-223 Endovascular treatment for hepatic encephalopathy caused by portosystemic shunts: a review of techniques and clinical outcomes  
*S. Takenaga<sup>1</sup>, K. Masuda<sup>1</sup>, K. Morikawa<sup>1</sup>, Y. Matsui<sup>1</sup>, K. Michimoto<sup>2</sup>, H. Ashida<sup>1</sup>; <sup>1</sup>Tokyo/Jp, <sup>2</sup>Shizuoka/Jp*
- P-224 Anterograde approach for large shunts embolization in patients with refractory hepatic encephalopathy (RHE)  
*P. Sarlieve, J. Albraldes, R.J. Owen; Edmonton, AB/CA*
- P-225 Various utilization of endovascular plugs – a pictorial review  
*D. Jin, V. Yagnik, J. Smith, S. Fujimoto; Loma Linda, CA/US*
- P-226 The use of PHIL, a novel embolic agent in the peripheral vascular system  
*A. Prashar, N. Shaida; Cambridge/UK*
- P-227 Emergency embolization: hunting bleeders all over the body  
*A.M.A. Moussa; Cairo/EG*
- P-228 Embolization: Historic milestones and a comprehensive review of current technology  
*J.B. Jia, H. Dermendjian, C.H. Lam, G. Vatakencherry; Los Angeles, CA/US*
- P-229 Endovascular superselective embolization of prostatic arteries as the new method of BPH less invasive treatment  
*I.I. Sitkin, D. Kurbatov, A. Lepetuchin, S. Dubsy, I. Dedov; Moscow/RU*
- P-230 Coronary-to-bronchial anastomosis an unusual potential risk for bronchial artery embolisation  
*R. Chen, H.-J. Hu; Hangzhou Zhejiang/CN*  
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*P. Boscarato, M. Rosati, A. Borgheresi, C. Micarelli, M. Fichetti, S. Alborino, E. Paci, R. Candelari; Ancona/IT*
- P-232 A case of ruptured pseudoaneurysm caused by traumatic mesenteric injury controlled by embolization using n-butyl cyanoacrylate.  
*M. Hirata, S. Iwano, S. Nakamura, A. Akamune, R. Watanabe; Matsuyama Ehime/JP*
- P-233 Emergency embolization with NBCA for pancreatic arteriovenous malformation: A case report  
*K. Nakayama<sup>1</sup>, K. Kurosaka<sup>2</sup>, S. Kobayashi<sup>2</sup>, K. Kurono<sup>2</sup>, M. Shimohira<sup>1</sup>, Y. Shibamoto<sup>1</sup>; <sup>1</sup>Nagoya/JP, <sup>2</sup>Toyokawa/JP*
- P-234 Genuiculate artery embolisation for treatment of recurrent spontaneous haemarthrosis secondary to osteoarthritis  
*B. Kawa, B. Thomson, A. Rabone, P. Ignoutus, A. Shaw; Maidstone/UK*
- P-235 Emergency endovascular treatment of arterial bleeding from a high-origin anterior tibial artery during total knee arthroplasty  
*J.H. Hwang<sup>1</sup>, S.W. Park<sup>1</sup>, K.H. Kim<sup>1</sup>, W.-Y. Yang<sup>1</sup>, C.H. Jeon<sup>2</sup>; <sup>1</sup>Seoul/KR, <sup>2</sup>Busan/KR*
- P-236 Transarterial embolization of a congenital pelvic arteriovenous malformation (AVM).  
*V.A. San Martín Luque<sup>1</sup>, J. Cobos Alonso<sup>1</sup>, J.M. Vicente Martín<sup>1</sup>, M. Morales García<sup>2</sup>, F. Carretero Lopez<sup>1</sup>, J. Vega Villar<sup>1</sup>; <sup>1</sup>Getafe/ES, <sup>2</sup>Madrid/ES*
- P-237 Hepatic transarterial embolization with portal vein thrombosis  
*H.M. Coffey, P. Collingwood; St. John's, NL/CA*
- P-238 First in Man: Rectal venous malformation treated by superior rectal artery embolization  
*J. El-Sheikha<sup>1</sup>, M.W. Little<sup>2</sup>, M. Bratby<sup>1</sup>; <sup>1</sup>Oxford/UK, <sup>2</sup>Reading/UK*
- P-239 Lateral genuiculate artery embolization in a patient with idiopathic spontaneous recurrent knee hemarthrosis without a history of knee surgery  
*H. Haghghatkhah, R. Pourghorban, S. Fadaei; Tehran/IR*
- P-240 Embolization of rare bronchial artery-pulmonary artery arterio-venous malformation  
*U. Pua; Singapore/SG*
- P-241 Successful embolization of congenital systemic-pulmonary artery fistula: A novel "coil filtering technique"  
*M. Inoue, S. Nakatsuka, M. Misu, J. Tsukada, N. Ito, M. Jinzaki; Tokyo/JP*

- P-242 Transcatheter arterial embolization for relieving chronic shoulder pain associated with calcific tendinitis refractory to conservative treatment  
*J.H. Hwang<sup>1</sup>, S.W. Park<sup>1</sup>, K.H. Kim<sup>1</sup>, W.-Y. Yang<sup>1</sup>, C.H. Jeon<sup>2</sup>; <sup>1</sup>Seoul/KR, <sup>2</sup>Busan/KR*
- P-243 Infected Leaking aortic stump treated with Onyx  
*S.H. Lim, C. Hay; Edinburgh/UK*
- P-244 Discussion of lethal pseudoaneurysm of pulmonary artery  
*K. Inoue<sup>1</sup>, J. Fujimoto<sup>2</sup>; <sup>1</sup>Otsu-city, Shiga Prefecture/JP, <sup>2</sup>Otsu/JP*
- P-245 Stentgraft assisted-coiling endovascular treatment of misdiagnosed large arc of Buhler aneurysm  
*I. Fiorina, L.P. Moramarco, N. Cionfoli, R. Corti, G. Leati, P. Quaretti; Pavia/IT*
- P-246 Intranodal intersitial embolization using N-butyl cyanoacrylate for the treatment of groin lymphorrhea  
*Y. Kwon, J. Kim, J.H. Won; Suwon/KR*
- P-247 Endovascular treatment of an ascending aortic anastomotic pseudoaneurysm following a total aortic arch replacement: a report of two cases  
*H. Torikai<sup>1</sup>, H. Yashiro<sup>1</sup>, H. Haida<sup>1</sup>, S. Kotani<sup>1</sup>, Y. Inoue<sup>1</sup>, S. Suzuki<sup>1</sup>, M. Inoue<sup>2</sup>, T. Hachiya<sup>3</sup>; <sup>1</sup>Hiratsuka-city/JP, <sup>2</sup>Tokyo/JP, <sup>3</sup>Kawasaki-city/JP*
- P-248 Embolization of pancreatic arteriovenous malformation in a patient with intestinal bleeding  
*A. Bruno, E. Mengozzi, A. Affinita, D. Papadopoulos, C.A. Di Ciesco, V. Cosi, M. Imbriani, N. Montanari; Bologna/IT*
- P-249 Embolization of the arteriovenous malformation of the uterus  
*J. Lučev, S. Breznik, A. Slanič; Maribor/SI*
- P-250 Embolization for pulmonary artery pseudoaneurysm communicating with intercostal arteries: a case report  
*E. Sakata<sup>1</sup>, M. Yabuta<sup>2</sup>, Y. Ishizaka<sup>1</sup>, A. Okumura<sup>1</sup>, T. Koyama<sup>1</sup>; <sup>1</sup>Kurashiki/JP, <sup>2</sup>Tokyo/JP*
- P-251 Posterior encephalic territory infarct as a complication of bronchial artery embolization  
*T. Cermenati Bahrs, R. Cocio Arcos, C. Moya Ochoa, F. Pizarro Concha, F. Galleguillos Elgueta, J.C. Bravo Perez, P. Palavecino, T. Palavecino; Santiago/CL*

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- P-252 Abdominal aorta aneurysm: morfological changes of proximal neck after EVAR  
*U.G. Rossi<sup>1</sup>, P. Torcia<sup>2</sup>, A.M. Ierardi<sup>2</sup>, A. Valdada<sup>1</sup>, F. Pinna<sup>1</sup>, N. Camisassi<sup>1</sup>, G. Carrafiello<sup>2</sup>, M. Cariati<sup>2</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT*

- P-253 Evaluation of 2D-shear wave elastography in the evaluation of endoleak after stent-graft treatment of abdominal aortic aneurysm  
*Y. Bando<sup>1</sup>, M. Kitase<sup>1</sup>, M. Shimohira<sup>2</sup>, J. Honda<sup>1</sup>, Y. Furuta<sup>1</sup>, M. Mizutani<sup>1</sup>, K. Ohta<sup>2</sup>, Y. Shimamura<sup>2</sup>, Y. Shibamoto<sup>2</sup>; <sup>1</sup>Aichi/JP, <sup>2</sup>Nagoya/JP*
- P-254 Clinical outcome of sac embolization using N-butyl cyanoacrylate in emergency stent-graft placement for ruptured aortic or iliac aneurysm  
*S. Ohba, M. Shimohira, T. Hashizume, K. Ohta, K. Suzuki, M. Muto, Y. Shibamoto; Nagoya/JP*
- P-255 The Candy-plug technique using an Excluder aortic cuff – clinical utility and technical aspects  
*Y. Ogawa, H. Nishimaki, K. Chiba, T. Iraha, Y. Sakurai, T. Miyairi, Y. Nakajima; Kawasaki, Kanagawa/JP*
- P-256 Ruptured abdominal aortic aneurysm in the era of endovascular repair – towards single center validation of two new risk prediction algorithms  
*A. Coelho, M. Lobo, J. Campos, R. Augusto, N. Coelho, A.C. Semião, J. Ribeiro, A. Canedo; Vila Nova De Gaia/PT*
- P-257 Mid-term result of thoracic endovascular aortic repair in octogenarians and nonagenarians  
*T. Hashimoto, N. Kato, T. Ouchi, K. Nakajima, T. Higashigawa, S. Chino; Tsu/JP*
- P-258 Gender differences in AAA presentation and repair complexity  
*T. Hall<sup>1</sup>, W. Al-Obaydi<sup>2</sup>, P. Thurley<sup>2</sup>, P.M. Bungay<sup>2</sup>; <sup>1</sup>Nottingham/UK, <sup>2</sup>Derby/UK*
- P-259 Role of intra vascular ultrasound (IVUS) in EVAR planning  
*G. Falcone, G. Gabbani, C. Raspanti, M. Citone, F. Mondaini, E. Casamassima, F. Fanelli; Florence/IT*
- P-260 Experience of ProGlide system for percutaneous EVAR in 141 patients  
*C. Hazar, A. White, D. Jarosz, P. Walker, D.R. Shaw, C. Tingerides; Leeds/UK*
- P-261 Total free contract EVAR under IVUS guidance: initial experience  
*G. Falcone, M. Citone, F. Mondaini, E. Casamassima, G. Gabbani, C. Raspanti, F. Fanelli; Florence/IT*
- P-262 Outcome of hypogastric artery occlusion while undertaking endovascular aortic aneurysm repair  
*P.P. Sousa<sup>1</sup>, R. Machado<sup>2</sup>, R. Almeida<sup>2</sup>, P.S. Pinto<sup>2</sup>; <sup>1</sup>Vila Nova De Gaia/PT, <sup>2</sup>Porto/PT*

- P-263 Iliac artery tortuosity, calcification and abnormal shape augment aortic aneurysm anatomy in predicting complications after endovascular aneurysm repair  
*R. Fitridge<sup>1</sup>, A. Pagnozzi<sup>2</sup>, N. Dowson<sup>2</sup>, B. Thurston<sup>3</sup>, P. Cowled<sup>1</sup>;*  
*<sup>1</sup>Woodville South, SA/AU, <sup>2</sup>Herston, QLD/AU, <sup>3</sup>Adelaide, SA/AU*  
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- P-264 Percutaneous primary stenting for aortic endograft limb occlusion: long-term outcomes  
*S. Spiliopoulos<sup>1</sup>, K. Palialexis<sup>1</sup>, C. Konstantos<sup>1</sup>, L. Reppas<sup>2</sup>, K. Moulakakis<sup>1</sup>, J. Kakisis<sup>1</sup>, A.M. Lazaris<sup>1</sup>, G. Geroulakos<sup>1</sup>, E. Brountzos<sup>1</sup>;*  
*<sup>1</sup>Athens/GR, <sup>2</sup>Chaidari/GR*
- P-265 Emergency endovascular repair for post-operative malperfusion causing by stent graft/frozen elephant trunk mal-positioned into false lumen after initial procedure in aortic dissection  
*X. Pu; Beijing/CN*
- P-266 Long term follow-up in a large cohort of patients undergoing Cordis Incraft EVAR  
*Y. Shahin, D. Kusuma, T.J. Cleveland, S.D. Goode; Sheffield/UK*
- P-267 Endovascular aneurysm sealing (EVAS). Outcomes and anatomical suitability, a single centre experience.  
*L. Monzon, A. Prent, M. Sallam, R. Bell; London/UK*
- P-268 Percutaneous f-/b-EVAR in patients with thoracoabdominal aortic aneurysm: midterm results  
*J.P. Schaefer, J. Trentmann, H. Gottschalk, J. Schupp, J. Pfarr, A. Lebenatus, O. Jansen; Kiel/DE*
- P-269 Spinal cord ischaemia in TEVAR  
*C. Williams, A.C. Gordon, A.M. Wood, I. Williams, R.D. White; Cardiff/UK*
- P-270 Percutaneous f-/b-EVAR in patients with post-dissection thoracoabdominal aortic aneurysm: midterm results of a prospective observational study  
*J.P. Schaefer, J. Trentmann, H. Gottschalk, J. Pfarr, J. Schupp, A. Lebenatus, O. Jansen; Kiel/DE*
- P-271 Thoracic endovascular aortic repair (TEVAR) in oncological setting  
*U.G. Rossi<sup>1</sup>, A. Valdata<sup>1</sup>, F. Pinna<sup>1</sup>, P. Torcia<sup>2</sup>, L.C. Pescatori<sup>3</sup>, A.M. Ierardi<sup>2</sup>, G. Carrafello<sup>2</sup>, M. Cariati<sup>2</sup>;*  
*<sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT, <sup>3</sup>San Donato Milanese/IT*
- P-272 EVAR limb occlusion  
*A. Ismail, I. Wilson, R.P. Allison, J. Coyne; Southampton/UK*

- P-273 Diagnosis and techniques to improve the clinical success of the transarterial embolization of type II endoleaks after endovascular aneurysm repair  
*R. Kawasaki<sup>1</sup>, M. Yamaguchi<sup>2</sup>, T. Okada<sup>2</sup>, T. Gentsu<sup>1</sup>, M. Kinoshita<sup>1</sup>, S. Shohei<sup>1</sup>, H. Horinouchi<sup>2</sup>, K. Sasaki<sup>2</sup>, K. Sugimoto<sup>2</sup>; <sup>1</sup>Himeji/JIP, <sup>2</sup>Kobe/JIP*
- P-274 Fixing the leak whilst the tap is still running – what’s in the toolbox? – endoleak management  
*P.E. Jenkins, F.C. Lyall, N.F. Gafoor; Plymouth/UK*
- P-275 Percutaneous emergency EVAR and TEVAR: how I do it  
*A.N. Pantos<sup>1</sup>, M.E. Krokidis<sup>2</sup>; <sup>1</sup>Aberdeen/UK, <sup>2</sup>Cambridge/UK*
- P-276 Magnetic resonance imaging in EVAR follow-up: indications, benefits and stent compatibility  
*A. Kozá, D. Annan, J. Kyaw Tun, T. Fotheringham, M.B. Matson; London/UK*
- P-277 Beyond endoleaks: uncommon complications related to endovascular aneurysm repair  
*R.C. Gaio, A.C. Lopes, J.B. Leitão, J.F. Santos; Lisboa/PT*
- P-278 Late onset aorto-esophageal fistula after treatment of 1 a chronic type B aortic dissection with a three-step approach  
*M.V. Usaj; Münster/DE*  
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- P-279 De Novo retroperitoneal fibrosis with urinary obstruction after EVAR of an asymptomatic infrarenal aneurysm of the abdominal aorta  
*F. Fey, F. Barakat, C. Puskas, P. Reimer; Karlsruhe/DE*
- P-280 Rapidly progressive aortic endograft infection following transcatheter arterial embolization for type II endoleak after endovascular abdominal aortic aneurysm repair: a case report and review of the literature.  
*H. Nagayama<sup>1</sup>, A. Miyazaki<sup>1</sup>, E. Sueyoshi<sup>2</sup>, H. Onizuka<sup>2</sup>, I. Sakamoto<sup>2</sup>; <sup>1</sup>Omura/JIP, <sup>2</sup>Nagasaki/JIP*
- P-281 Descending thoracic aortic ulcer in a patient with infrarenal aortic occlusion: how we managed a complex case  
*K.D. Malik<sup>1</sup>, G.L. Poletto<sup>1</sup>, Y. Zhao<sup>2</sup>, E. Civilini<sup>1</sup>; <sup>1</sup>Rozzano/IT, <sup>2</sup>Nanchang/CN*
- P-282 TEVAR to the false lumen to treat type B aortic dissection with aneurysmal dilatation and chronic true lumen occlusion: A novel technique  
*S. Koussayer; Riyadh/SA*

- P-283 A novel diagnostic and therapeutic approach to delayed type IIIB endoleak post fenestrated endovascular aortic repair  
*D. Cornelli, A. Wadhvani, D. Bakshi, A. Mirakhur; Calgary, AB/CA*
- P-284 Late-onset paraplegia due to stent-graft induced new entry (SINE) after thoracic endovascular aortic repair (TEVAR) for Stanford B aortic dissection: A case report  
*N. Miyamoto<sup>1</sup>, A. Yamada<sup>1</sup>, K. Gan<sup>1</sup>, T. Asada<sup>1</sup>, S. Miyazaki<sup>1</sup>, F. Namba<sup>1</sup>, S. Adachi<sup>1</sup>, M. Tomita<sup>1</sup>, K. Sugimoto<sup>2</sup>; <sup>1</sup>Ono-shi Hyogo-ken/JP, <sup>2</sup>Kobe/JP*
- P-285 Endovascular aortic stent graft placement for ureteroaortic fistula  
*J.A. Hwang, W.-H. Lee, H.N. Lee; Cheonan/KR*
- P-286 Hybrid total arch replacement for an isthmic aortic false aneurysm post-patch coarctation aortoplasty  
*D. Barillà<sup>1</sup>, A. Cotroneo<sup>2</sup>, G.L. Martinelli<sup>2</sup>, M. Diena<sup>2</sup>; <sup>1</sup>Messina/IT, <sup>2</sup>Novara/IT*

### Experimental work in IR

- P-287 The development of pump-based perfusion system using indwelling catheter to reserve hepatic-arterial flow after coil embolization of CHA for the treatment of postoperative hemorrhage after pancreaticoduodenectomy: feasibility study in a swine model  
*H. Kondo<sup>1</sup>, Y. Tanahashi<sup>2</sup>, S. Inui<sup>1</sup>, M. Yamamoto<sup>1</sup>, T. Yokoyama<sup>1</sup>, S. Toshimasa<sup>1</sup>, J. Toda<sup>1</sup>, R. Zako<sup>1</sup>, S. Goshima<sup>2</sup>, S. Furui<sup>1</sup>, H. Oba<sup>1</sup>; <sup>1</sup>Tokyo/JP, <sup>2</sup>Gifu/JP*
- P-288 In-vitro characterization of idarubicin-loaded superabsorbent polymer microsphere (Hepasphere™)  
*Y. Kimura, K. Osuga, H. Hongyo, R. Ohira, Y. Ono, T. Nakazawa, H. Higashihara, N. Tomiyama; Suita, Osaka/JP*
- P-289 Inside interventional radiology: micro CT 3D imaging of angiographic guidewires  
*T.Q.L. Klaus, G.A. Krombach, E. Alexandre-Lafont, M. Kampschulte; Giessen/DE*
- P-291 The practice of mixing biological embolics and radiographic contrast: "Is it safe?"  
*T. Ncube<sup>1</sup>, G. Wagner<sup>1</sup>, D.W. Edwards<sup>2</sup>, R.E.B. Watson<sup>2</sup>, G.C. Smith<sup>1</sup>, H.-U. Laasch<sup>2</sup>; <sup>1</sup>Chester/UK, <sup>2</sup>Manchester/UK*
- P-292 Endobronchial navigation based on airway segmentation and planning software with CBCT imaging without bronchoscopy: procedural success and accuracy in swine  
*Q.M.B. De Ruiter<sup>1</sup>, J. Karanian<sup>1</sup>, M. Mauda-Havakuk<sup>1</sup>, I. Bakhutashvili<sup>1</sup>, J. Esparza-Trujillo<sup>1</sup>, W. van der Sterren<sup>2</sup>, S. Schampaert<sup>2</sup>, A. Radaelli<sup>2</sup>, I.M. van der Bom<sup>2</sup>, J.R. Fontana<sup>1</sup>, W. Pritchard<sup>1</sup>, B.J. Wood<sup>1</sup>; <sup>1</sup>Bethesda, MD/US, <sup>2</sup>Best/NL*
- P-293 Nonsurgical placement of a balloon-expandable metallic stent: human cadaver study of the Eustachian tube  
*J.-H. Park, H.-Y. Song, K.Y. Kim, J. Choi, S.H. Yoon, J.M. Kang, D.S. Ryu; Seoul/KR*

- P-294 In vivo micro-endoscopic monitoring of stent-induced fibroblast cell proliferation in a mouse esophageal model  
*J.-H. Park, H.-Y. Song, N.G. Bekheet, S.H. Yoon, J. Choi, D.S. Ryu, J.M. Kang; Seoul/KR*
- P-295 EW-7197 eluting nano-fiber covered self-expandable metallic stent to prevent granulation tissue formation in a canine urethral model  
*J.-H. Park, H.-Y. Song, S.H. Yoon, J. Choi, N.G. Bekheet, J.M. Kang, D.S. Ryu; Seoul/KR*
- P-296 Evaluating the feasibility of isolated pancreatic perfusion chemotherapy using computed tomography: an experimental study in pig models  
*S. Murata<sup>1</sup>, S. Onozawa<sup>2</sup>, D. Yasui<sup>3</sup>, T. Ueda<sup>3</sup>, F. Sugihara<sup>3</sup>, A. Shimizu<sup>3</sup>, K. Suzuki<sup>3</sup>, M. Satake<sup>3</sup>; <sup>1</sup>Chiba/JJ, <sup>2</sup>Kawasaki, Kanagawa/JJ, <sup>3</sup>Tokyo/JJ*
- P-297 In vitro bovine liver experiment of cisplatin-infused and normal saline-infused radiofrequency ablation with an internally cooled perfusion electrode  
*K. Park, H.P. Hong; Seoul/KR*
- P-298 The effect of carbon dioxide gas for hypervascular liver tumors on abdominal angiography : an experimental study for rat model  
*J. Matsumoto, T. Ogi, K. Okumura, T. Minami, W. Koda, T. Gabata; Kanazawa/JJ*
- P-299 Design, creation and evaluation of 3d-printed high-detailed vascular models for selective interventional simulation  
*R. Kaufmann, M. Takes, C.J. Zech, T. Heye, P. Brantner; Basel/CH*
- P-300 Feasibility study of a novel animal model to evaluate the pathologic change after Eustachian tube balloon dilation  
*K.Y. Kim<sup>1</sup>, H.-Y. Song<sup>2</sup>, Z. Wang<sup>2</sup>, H.J. Park<sup>2</sup>, W.S. Kang<sup>2</sup>; <sup>1</sup>Jeonju/KR, <sup>2</sup>Seoul/KR*  
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- P-301 Development and application of a steerable guiding tube using shape memory material for gastrointestinal intervention  
*J. Choi, H.-Y. Song, J.-H. Park, K.Y. Kim; Seoul/KR*
- P-302 Dexterity assessment of a novel endovascular snare system based on a loop-formed torque-command wire  
*N. Nitta, A. Yamada, A. Sonoda, S. Ota, S. Naka, S. Morikawa, T. Tani, K. Murata; Otsu/JJ*
- P-303 Transradial access in neuroradiology: single-centre experience  
*R. Barranco Pons, I.R. Caamaño, O. Chirife Chaparro, L. Aja Rodriguez, S. Aixut Lorenzo, M.A. de Miquel; Barcelona/ES*

- P-305 Experimental animal study of a novel drug-coated balloon using 3.5 µg/mm<sup>2</sup> paclitaxel coating on a cellulose-based excipient  
*P.N. Papadimatos<sup>1</sup>, P.M. Kitrou<sup>1</sup>, K.N. Katsanos<sup>1</sup>, M. Theofanis<sup>1</sup>, M. Vaiou<sup>2</sup>, F. Anagnostopoulos<sup>1</sup>, G. Lampropoulos<sup>1</sup>, G. Karpetas<sup>1</sup>, P. Kallidonis<sup>1</sup>, S. Spiliopoulos<sup>3</sup>, A. Moulas<sup>2</sup>, D. Karnabatidis<sup>1</sup>; <sup>1</sup>Patras/GR, <sup>2</sup>Larisa/GR, <sup>3</sup>Athens/GR*
- P-306 Angiography easily taught with video guides  
*A. Boccuzzi, R. Cervelli, F. Daviddi, I. Bargellini, R. Piazza, F. Acquafredda, D. Caramella, R. Cioni; Pisa/IT*
- P-307 Interventional radiology in marine animals  
*J.A. Flores Mendez<sup>1</sup>, A. Pacheco<sup>1</sup>, R. García Marcos<sup>1</sup>, J. Martínez<sup>1</sup>, M. Cifrian Perez<sup>2</sup>, D. Pérez Enguix<sup>1</sup>; <sup>1</sup>València/ES, <sup>2</sup>Castellón/ES*
- P-308 An overview of statistics and its applications to interventional radiology  
*T. Moran, J. Diaz; New Orleans, LA/US*
- P-309 Intra-arterial contrast-enhanced ultrasound assisted embolization for refractory hematuria due to locally advanced prostate cancer  
*H. Dermendjian, J.B. Jia, J. Kang, E. Nguyen, D. Artenstein, M. Gulati, D. Finley, I. Lekht; Los Angeles, CA/US*
- P-310 Cryoablation of large iliac bone metastasis using augmented reality: enhanced ablation planning using 3D holographic models, virtual probe trajectories, and virtual ablation zones  
*B. Park, M. Sheng, C. Jiang, G.J. Nadolski, T. Gade, S. Hunt; Philadelphia, PA/US*
- P-311 A review of tumor specific immune effects of cryoablation and their therapeutic synergy in combination with immune checkpoint therapies  
*B. Aarts<sup>1</sup>, E. Klompenhouwer<sup>1</sup>, F. Imani<sup>1</sup>, P. Bhairosing<sup>1</sup>, A. Bex<sup>1</sup>, S. Horenblas<sup>1</sup>, J. Haanen<sup>1</sup>, R.G.H. Beets-Tan<sup>1</sup>, F.M. Gómez<sup>2</sup>; <sup>1</sup>Amsterdam/NL, <sup>2</sup>Barcelona/ES*
- P-312 A novel use of contrast enhanced ultrasound in uterine artery embolization  
*J.B. Jia, H. Dermendjian, I. Lekht; Los Angeles, CA/US*

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- P-313 Contrast-enhanced ultrasound after embolization of blunt spleen trauma in young people or children  
*U.G. Rossi<sup>1</sup>, P. Torcia<sup>2</sup>, A.M. Ierardi<sup>2</sup>, A. Valdata<sup>1</sup>, F. Pinna<sup>1</sup>, N. Camisassi<sup>1</sup>, G. Carrafiello<sup>2</sup>, M. Cariati<sup>2</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT*

- P-314 Splenectomy for hypersplenism with or without preoperative splenic artery embolization: a two-concurrent cohort study  
*M.M.A. Zaitoun, S.B. Elsayed, M. Basha; Zagazig/EG*
- P-315 Importance of supportive therapy in transarterial chemoembolization (DEB-TACE) for metastatic liver cancers  
*G. Fiorentini<sup>1</sup>, D. Sarti<sup>1</sup>, R. Carandina<sup>2</sup>, S. Guadagni<sup>3</sup>, C. Aliberti<sup>2</sup>; <sup>1</sup>Pesaro/IT, <sup>2</sup>Padova/IT, <sup>3</sup>L'Aquila/IT*
- P-316 What is the real efficacy of microwave ablation for HCC? Correlation with pathological examination after total hepatectomy in patients submitted to liver transplantation  
*P. Rossi, F.P. Tarantino, R. Cervelli, P. Scalise, S. Mazzeo, D. Campani, R. Cioni, D. Caramella, L. Crocetti; Pisa/IT*
- P-317 Trans arterial embolization of non-variceal upper gastrointestinal bleeding: is Onyx as safe as coils?  
*M.A. Tipaldi<sup>1</sup>, G. Orgera<sup>1</sup>, F. Laurino<sup>1</sup>, L. Mascagni<sup>1</sup>, M.E. Krokidis<sup>2</sup>, M. Rossi<sup>1</sup>; <sup>1</sup>Rome/IT, <sup>2</sup>Cambridge/UK*
- P-318 Fluoroscopic gastroduodenal stent placement in 55 Patients with endoscopic stent placement failure  
*H.-Y. Song, N.G. Bekheet, M. Kim; Seoul/KR*
- P-319 Fluoroscopic self-expandable metallic stent placement for treating postoperative nonanastomotic strictures in the proximal small bowel: a 15-year single institution experience  
*N.G. Bekheet, H.-Y. Song, J. Tsauo; Seoul/KR*
- P-320 Pancreatic duct percutaneous image guided drainage – what for and how  
*M. Mizandari<sup>1</sup>, T. Azrumelashvili<sup>1</sup>, O. Kepuladze<sup>1</sup>, G. Gabadadze<sup>1</sup>, N. Habib<sup>2</sup>; <sup>1</sup>Tbilisi/GE, <sup>2</sup>London/UK*
- P-321 Percutaneous endoluminal biopsy, RFA and stenting using main pancreatic duct drainage track – the new approach in the management of inoperable patients with the cancer of the head of pancreas  
*M. Mizandari<sup>1</sup>, T. Azrumelashvili<sup>1</sup>, O. Kepuladze<sup>1</sup>, G. Gabadadze<sup>1</sup>, N. Habib<sup>2</sup>; <sup>1</sup>Tbilisi/GE, <sup>2</sup>London/UK*
- P-322 Transgastric access procedures: a 5 year experience in a tertiary UK centre  
*M. Renton, J. Kyaw Tun, M.R. Akhtar, N. Shah, I. Renfrew, T. Fotheringham; London/UK*
- P-323 Rectus sheath block for radiologically placed gastrostomy. Its role in reducing post procedural pain.  
*N.J. Young; Dundee/UK*

- P-324 Computed tomography in acute abdominal haemorrhage: how should haemodynamically unstable patients with no acute vascular findings on CT be managed?  
*G.M. Healy, A. O'Brien, A. Patil, N. Rutledge, J. McCann, C. Cantwell; Dublin/IE*
- P-325 Audit: complication rates of fluoroscopically guided oesophageal self-expanding metallic stents (SEMS) insertion  
*R. Karia, K. Chan, H.J. Harris; Chesterfield/UK*
- P-326 Percutaneous formation of pancreaticogastric fistula for pancreatic duct decompression as a treatment of obstructive pancreatitis and pancreatic atrophy related diabetes  
*M. Mizandari; Tbilisi/GE*
- P-327 Gastrointestinal prosthesis placement via percutaneous transhepatic approach, in afferent loop syndrome: a case series  
*G. De Rubeis, M. Corona, P. Lucatelli, P.G. Nardis, M. Bezzi, C. Catalano; Rome/IT*
- P-328 Pretreatment volumetric iodine uptake: a biomarker for tumor response to DEB-TACE?  
*F.P. Tarantino, P. Rossi, L. Crocetti, I. Bargellini, R. Cervelli, P. De Simone, D. Campani, D. Caramella, R. Cioni; Pisa/IT*
- P-329 Preliminary experience in endovascular treatment of hemorrhoids with arterial embolization  
*I. Paladini, A. Andreone, E. Epifani, G. Capurri, M. Fantoni, R. Zannoni, C. Marcato; Parma/IT*
- P-330 The clinical benefit of track embolisation following percutaneous liver intervention  
*D. Mullan<sup>1</sup>, P.S. Najran<sup>2</sup>, J.K. Bell<sup>1</sup>, P. Borg<sup>1</sup>, N. Kibriya<sup>3</sup>, J. Lawrance<sup>1</sup>, H.-U. Laasch<sup>1</sup>; <sup>1</sup>Manchester/UK, <sup>2</sup>Birmingham/UK, <sup>3</sup>Liverpool/UK*
- P-331 Survival and response of patients with metastatic ocular melanoma after Chemosaturation percutaneous hepatic perfusion (CS-PHP)  
*M. Zeile<sup>1</sup>, A. Stang<sup>1</sup>, G.A. Stavrou<sup>2</sup>, M. Beumer<sup>1</sup>, H. Weilert<sup>1</sup>, B. Feyerabend<sup>1</sup>, P. Mohr<sup>3</sup>, K.C. Kaehler<sup>4</sup>, K.J. Oldhafer<sup>1</sup>, R.D. Brüning<sup>1</sup>; <sup>1</sup>Hamburg/DE, <sup>2</sup>Saarbrücken/DE, <sup>3</sup>Buxtehude/DE, <sup>4</sup>Kiel/DE*
- P-332 Spontaneous liver rupture and hemoperitoneum: interventional radiology management  
*U.G. Rossi<sup>1</sup>, A.M. Ierardi<sup>2</sup>, L.C. Pescatori<sup>3</sup>, A. Valdata<sup>1</sup>, F. Pinna<sup>1</sup>, N. Camisassi<sup>1</sup>, G. Carrafiello<sup>2</sup>, M. Cariati<sup>2</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT, <sup>3</sup>San Donato Milanese/IT*

- P-333 Long term outcomes of transjugular intrahepatic portosystemic shunt in Indian patients with Budd-Chiari syndrome  
*S. Gamanagatti, S. Shalimar, S. Acharya; Delhi/IN*  
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- P-334 The acute non-variceal GI bleeding  
*D. Coppolino, A. Contegiaco, N. Attempati, C. Di Stasi, R. Iezzi, A. Cina, R. Manfredi; Rome/IT*
- P-335 Complex stenting of the GI tract  
*A. Rabone, B. Thomson, B. Kawa, S. Kemp, C. Elwood, A. Okaro, C. Wright, M. Hill, T. Sevitt, J. Waters, C. Wetton, P. Ignotus, A. Shaw; Kent/UK*
- P-336 Endovascular management of chronic mesenteric ischaemia  
*D.C. O'Neill, T.É. Murray, D. Bowden, M.J. Lee; Dublin/IE*
- P-337 Endovascular embolisation of acute haemorrhagic intestinal loops bleeding in elderly patients  
*L. Pancione; Romford/UK*
- P-338 Novel technique: a single centre experience of bronchoscopic-assisted conversion of gastrostomy to gastrojejunostomy tubes  
*I. Azam, T. Welbank, N. Hersey, F. Lee; Sheffield/UK*
- P-339 Qualitative and quantitative performance data for established and potential novel devices and materials in the gastrointestinal and biliary tract  
*D. Mullan, J.K. Bell, P.S. Najran, H.-U. Laasch; Manchester/UK*
- P-340 Critical bleed due to aorto-esophageal fistula: an autopsy case report of a rare complication of PTEG  
*H. Ishii; Okayama/JP*
- P-341 Radiologic gastroscopic combined intervention to manage sleeve gastrectomy leak  
*B. Shin, H.P. Cheah, K. Wong, J. Hanson; Gosford, NSW/AU*
- P-342 Spontaneous rupture of an hepatic adenoma treated with covered stents  
*R. Russo, S. Molinaro, M.A. Ruffino, A. Discalzi, E. Soncin, P. Fonio; Turin/IT*
- P-343 Percutaneous coil and glue embolisation of a splenic pseudoaneurysm  
*L. Monfardini<sup>1</sup>, C. Sallemi<sup>2</sup>; <sup>1</sup>Brescia/IT, <sup>2</sup>Milan/IT*
- P-344 Transsplenic access for the treatment of the upper gastrointestinal bleeding  
*R.B. Martins, V.O. Carvalho, P.M. Falsarella, F.L. Galastrri, B.B. Affonso, R.G. Garcia, F. Nasser; São Paulo/BR*

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- P-345 Anti-Müllerian hormone levels before and after uterine artery embolization  
*B. McLucas<sup>1</sup>, W.D. Voorhees<sup>2</sup>, S.A. Snyder<sup>3</sup>; <sup>1</sup>Beverly Hills, CA/US, <sup>2</sup>West Lafayette, IN/US, <sup>3</sup>Bloomington, IN/US*  
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- P-346 Feasibility of transcatheter arterial embolization for treatment of retained products of conception with marked vascularity  
*S.J. Lee, G.S. Jeon, Y. Kim, J.T. Lee; Seongnam-si, Gyeonggi-do/KR*
- P-347 Perioperative internal iliac artery balloon occlusion in the setting of placenta accreta and its variants: what the Interventional Radiologist needs to know  
*S. Gamanagatti, N. Malhotra, V. Dadwal; Delhi/IN*  
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- P-348 Vascular and non-vascular interventional therapies in benign gynaecological disease: an overview  
*N.R. Patel, S. Dyer Hartnett, W. Hakim, N. Bharwani, M.S. Hamady, E. Kashef; London/UK*
- P-349 Ovarian vein embolisation for pelvic congestion syndrome: a proposed patient pathway  
*N.R. Patel, W. Hakim, N. Bharwani, M.S. Hamady, E. Kashef; London/UK*
- P-350 Characterization of perfusion changes during uterine artery embolization using 2D-DSA images  
*E. Meram, S. Schafer, J. Pinchot, P.F. Laeseke; Madison, WI/US*
- P-351 DVT and menorrhagia by uterine fibroids: Treatment by uterine embolisation and anticoagulation  
*P.F. Saad, K.R. Saad, D. Ribeiro, Y. Campos, F. Almeida, D. Armstrong, D. Brito; Petrolina/BR*

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- P-352 About the value of CE-MRA for follow-up of intracranial aneurysms after endovascular coiling: a retrospective comparison of TOF-MRA and additional CE-MRA at 3 Tesla compared with the Gold Standard 2D-/3D-DSA  
*M. Eibisberger<sup>1</sup>, H.A. Deutschmann<sup>1</sup>, R.H. Portugaller<sup>1</sup>, M. Augustin<sup>1</sup>, U. Wießpeiner<sup>1</sup>, C. Schnedl<sup>2</sup>, F. Schmid<sup>1</sup>; <sup>1</sup>Graz/AT, <sup>2</sup>Klagenfurt/AT*
- P-353 Validation of the position of injection needles with contrast-enhanced ultrasound for dynamic contrast-enhanced MR lymphangiography  
*M.D. Ponce-Dorrego<sup>1</sup>, K. Darge<sup>2</sup>, G.J. Nadolski<sup>2</sup>, D. Biko<sup>2</sup>, M. Itkin<sup>2</sup>; <sup>1</sup>Madrid/ES, <sup>2</sup>Philadelphia, PA/US*

- P-354 Motion compensated aortic valve CT imaging  
*C. Spink<sup>1</sup>, T. Elss<sup>1</sup>, M. Morlock<sup>1</sup>, R. Bippus<sup>1</sup>, T. Ivanc<sup>2</sup>, G. Adam<sup>1</sup>, M. Grass<sup>1</sup>, G. Lund<sup>1</sup>;*  
*<sup>1</sup>Hamburg/DE, <sup>2</sup>Cleveland, OH/US*
- P-355 Metal artefact reduction in CBCT with needles crossing the field of view border  
*D. Schaefer<sup>1</sup>, C. Haase<sup>1</sup>, W. van der Sterren<sup>2</sup>, A. Radaelli<sup>2</sup>, M. Grass<sup>1</sup>;*  
*<sup>1</sup>Hamburg/DE, <sup>2</sup>Best/NL*
- P-356 Clinical benefit of cone-beam computed tomography in the management of patients with clinically relevant bleeding of uncertain origin  
*T. Zitzelsberger<sup>1</sup>, U. Grosse<sup>1</sup>, R. Syha<sup>1</sup>, D. Ketelsen<sup>2</sup>, R. Hoffmann<sup>1</sup>, S. Partovi<sup>3</sup>,*  
*K. Nikolaou<sup>1</sup>, G. Grözinger<sup>1</sup>;*  
*<sup>1</sup>Tuebingen/DE, <sup>2</sup>Berlin/DE, <sup>3</sup>Cleveland, OH/US*
- P-357 Clinical value of C-arm cone-beam CT in patients with hemoptysis for intra-procedural bronchial artery embolization planning  
*T. Zitzelsberger<sup>1</sup>, U. Grosse<sup>1</sup>, G. Grözinger<sup>1</sup>, R. Syha<sup>1</sup>, D. Ketelsen<sup>2</sup>, S. Partovi<sup>3</sup>,*  
*K. Nikolaou<sup>1</sup>, R. Hoffmann<sup>1</sup>;*  
*<sup>1</sup>Tuebingen/DE, <sup>2</sup>Berlin/DE, <sup>3</sup>Cleveland, OH/US*
- P-358 Image quality of arterial phase and parenchymal blood volume (PBV) maps derived from C-arm cone-beam CT in the evaluation of transarterial chemoembolization  
*T. Zitzelsberger<sup>1</sup>, R. Syha<sup>1</sup>, G. Grözinger<sup>1</sup>, R. Hoffmann<sup>1</sup>, S. Partovi<sup>2</sup>,*  
*K. Nikolaou<sup>1</sup>, M. Maurer<sup>1</sup>, D. Ketelsen<sup>3</sup>, U. Grosse<sup>1</sup>;*  
*<sup>1</sup>Tuebingen/DE, <sup>2</sup>Cleveland, OH/US, <sup>3</sup>Berlin/DE*
- P-359 Transarterial chemoembolization of hepatocellular carcinoma (HCC) using radiopaque beads: How to pursue follow-up with cross-sectional imaging?  
*C. Ruff<sup>1</sup>, G. Grözinger<sup>1</sup>, R. Syha<sup>1</sup>, S. Elser<sup>1</sup>, S. Partovi<sup>2</sup>, M. Bitzer<sup>1</sup>,*  
*M. Horger<sup>1</sup>, K. Nikolaou<sup>1</sup>, U. Grosse<sup>1</sup>;*  
*<sup>1</sup>Tuebingen/DE, <sup>2</sup>Cleveland, OH/US*
- P-360 Application of a biomechanical deformable registration image method for assessing ablation margins in colorectal liver metastases  
*E.Y. Lin, B.M. Anderson, G. Cazoulat, K. Brock, B.C. Odisio;*  
*Houston, TX/US*
- P-361 Spectral computed tomography angiography with a Gadolinium-based contrast agent: First clinical imaging results in cardiovascular applications  
*J. Nadjiri, D. Muenzel, A. Sträter, P. Noel, H.-H. Eckstein, K.-L. Laugwitz, E. Rummeny,*  
*R. Braren, M. Rasper;*  
*Munich/DE*
- P-362 Radiation dose in non-invasive lower limb angiography – as low as reasonably achievable? Completing the audit cycle  
*P. Douglas, G. Roditi;*  
*Glasgow/UK*
- P-363 Ultrasound evaluation of puncture sites after vascular closure device deployment: prospective comparison of Perclose ProGlide® versus FemoSeal™  
*Y.J. Heo, H.W. Jeong, J.W. Baek, H.S. Jung;*  
*Busan/KR*

- P-364 Follow-up after splenic artery embolization in blunt trauma: when and how?  
*N.M. Lucarelli, V. Semeraro, V. Gisone, M.P. Ganimede, G.L. Bellanova, N. Burdi; Taranto/IT*
- P-365 Real-time image quality enhancement with kinetic imaging in carbon-dioxide angiography  
*V. Óriás<sup>1</sup>, M. Gyánó<sup>1</sup>, D. Szöllösi<sup>1</sup>, I. Góg<sup>1</sup>, Z. Ruzsa<sup>2</sup>, B. Nemes<sup>1</sup>, K. Szigeti<sup>1</sup>, S. Osváth<sup>1</sup>, P. Sótónyi<sup>1</sup>; <sup>1</sup>Budapest/HU, <sup>2</sup>Kecskemét/HU*
- P-366 Application of Silent MRA for the follow-up study after endovascular treatment of intracranial aneurysms using microcoils with prominent metallic artifact  
*S. Tanoue, T. Abe, Y. Uchiyama, M. Koganemaru, A. Kuhara, T. Kugiyama, A. Nasu, N. Tanaka, M. Hirohata; Kurume/JP*
- P-367 A new software for immediate volumetric assessment of tumor ablation completeness: could it allow to spare local retreatments?  
*R. Muglia<sup>1</sup>, M. Solbiati<sup>2</sup>, L. Solbiati<sup>3</sup>; <sup>1</sup>Rozzano/IT, <sup>2</sup>Milano/IT, <sup>3</sup>Rozzano (Milan)/IT*
- P-368 Assessment of absorbed radiation dose at 3T MRI after Holmium-166 poly(L-lactic acid)-loaded: preliminary experience  
*R. Cervelli, E. Bozzi, I. Bargellini, M. Giannelli, A. Giuliano, T. Depalo, M. Marletta, G. Boni, R. Cioni; Pisa/IT*
- P-369 Prediction of futile recanalization with multiparametric computed tomography in a series of mechanical thrombectomy  
*J.D. Molina Nuevo, F. Hernández Fernández, L. López Martínez, E. Juliá Mollá, M.J. Pedrosa Jiménez, C. Alcahut Rodríguez, I. Feria Vilar; Albacete/ES*
- P-370 Recent trends in interventional radiology literature: a six year review  
*A. Sidhu<sup>1</sup>, D. StLouis<sup>2</sup>, K. Nasra<sup>2</sup>, J.R. Kachura<sup>1</sup>; <sup>1</sup>Toronto, ON/CA, <sup>2</sup>Southfield, MI/US*
- P-371 Myosteosis as a predicting factor of survival in patients with hepatocellular carcinoma treated with TACE  
*R. Dezman<sup>1</sup>, T. Jordan<sup>1</sup>, A. Leben<sup>1</sup>, M. Garbajs<sup>1</sup>, M. Štabuc<sup>1</sup>, K. Popuri<sup>2</sup>, P. Popovic<sup>1</sup>; <sup>1</sup>Ljubljana/SI, <sup>2</sup>Burnaby, AB/CA*
- P-372 Comparison of preserved renal parenchyma volume after partial nephrectomy or radiofrequency ablation: CT evaluation with semiautomatic 3D segmentation  
*M. Calandri<sup>1</sup>, J. Brino<sup>2</sup>, M. Barrera<sup>2</sup>, F. Porpiglia<sup>2</sup>, A. Veltri<sup>2</sup>; <sup>1</sup>Turin/IT, <sup>2</sup>Orbassano/IT*
- P-373 Endobiliary photodynamic therapy (EPDT) effects in Klatskin tumor patients assessed with MRI  
*M.A. Shorikov, M.G. Lapteva, D.Y. Frantsev, O.N. Sergeeva, B.I. Dolgushin; Moscow/RU*

- P-374 TRICKS-MRA in spinal dural artero-venous fistula assessment: preliminary comparison between angiographic found  
*P. Palumbo, M. Varrassi, M.V.M. Micelli, A.V. Giordano, S. Carducci, C. Masciocchi; L'Aquila/IT*
- P-375 Inadvertent arterial puncture and arterial placement of the central venous catheter. The spectrum of iatrogenic complications.  
*J. Koo<sup>1</sup>, A. Mohandas<sup>1</sup>, J. Tisnado<sup>2</sup>; <sup>1</sup>Detroit, MI/US, <sup>2</sup>Richmond, VA/US*
- P-376 Utilization of an angiographic image display system with use of an electroencephalogram sensor on operator's head and gaze sensor  
*T. Ogura, S. Yamanouchi, S. Mitsuru, K. Takahashi; Maebashi/JP*
- P-377 PET CT & CBCT fusion imaging in Interventional Radiology: myth or reality  
*E.M. Fumarola, P. Biondetti, C. Floridi, P.M. Brambillasca, F. Pesapane, A.M. Ierardi, G. Carraffello; Milan/IT*
- P-378 Identification of the bleeding point in cerebral AVMs (arterovenous malformation) by CT angiography: demonstration of hyperflow aneurysms  
*M. Belletti<sup>1</sup>, F. Di Caterino<sup>2</sup>, F. Misischi<sup>1</sup>, I. Galesio<sup>1</sup>, F. Zandrino<sup>1</sup>, S. Barbero<sup>1</sup>; <sup>1</sup>Alessandria/IT, <sup>2</sup>Turin/IT*
- P-379 Role of dual energy CT during late hepatic arterial phase in characterizing portal vein thrombosis in patients with hepatocellular carcinoma  
*C. Sofia<sup>1</sup>, M.A. Marino<sup>2</sup>, S. Silipigni<sup>2</sup>, G. Ascenti<sup>2</sup>; <sup>1</sup>Chioggia/IT, <sup>2</sup>Messina/IT*
- P-380 The usefulness of gadolinium enhanced spinal MR angiography in support by interventional radiologists in the diagnosis of spinal dural AV fistula  
*D. Dzelebdzic, M. Jovanovic, I. Vukasinovic, D. Damjanovic, S. Lavrnic, S. Banjalic, K. Petrujkic, D. Ristic Balos, I. Nikolic, S. Gavrilovic; Belgrade/RS*
- P-381 Imaging trauma patients with resuscitative endovascular balloon occlusion of the aorta (REBOA) inserted in the pre-hospital setting  
*W. Fleming, J. Kyaw Tun, M. Chana, O.S. Jaffer, G. Grier, T. Fotheringham; London/UK*
- P-382 Vascular abnormalities associated with vein of galen malformation  
*A.K. Gupta, H. Pendharkar, A.H. Ramlingaiah, C. Prasad, J. Saini, K. Bhattacharya; Bangalore/IN*
- P-383 Pearls and pitfalls in imaging of blunt traumatic thoracic aortic injury  
*N.R. Patel, B. Pitrola, W. Hakim, E. Dick, N. Batrick, M.P. Jenkins, E. Kashef; London/UK*

- P-384 Learning from discrepancies: the resident's guide to vascular CT  
*K.S. Moore, W.R. Thomas, A.C. Gordon, I. Williams, E. Walters, R.D. White; Cardiff/UK*
- P-385 Where has the artery gone? Arterial variations in the emergency hepatic tumour rupture embolisation  
*P.E. Jenkins, I.J. Walton; Plymouth/UK*
- P-386 Free floating cement embolism in IVC mimicking calcified retained guidewire-diagnostic conundrum  
*N.B. Mani<sup>1</sup>, O. Akinwande<sup>2</sup>, R. Ramaswamy<sup>1</sup>, M.D. Darcy<sup>1</sup>; <sup>1</sup>St. Louis, MO/US, <sup>2</sup>Baltimore, MD/US*
- P-387 Case of facial AVM treated using 4D DSA  
*H. Ashida, Y. Matsui, Y. Nozawa, T. Higuchi; Tokyo/JP*
- P-388 "Hands on" approach to phlegmasia cerulea dolens (PCD) of the arm after IV amiodarone  
*F. Potters, I. van Dop, F. Janse, J. Wille, L. van der Heijden; Nieuwegein/NL*
- P-389 A primary fistula forming racemose hemangioma of bronchial artery treated with 4D DSA  
*T. Higuchi, H. Ashida, Y. Matsui, Y. Nozawa; Tokyo/JP*

### Neuro and carotid intervention

- P-390 Plaque protrusion during carotid artery stenting: risk factors determined by MR plaque imaging  
*K. Takayama<sup>1</sup>, K. Myouchin<sup>1</sup>, T. Wada<sup>2</sup>, S. Kurokawa<sup>1</sup>, K. Kichikawa<sup>2</sup>; <sup>1</sup>Yao/JP, <sup>2</sup>Kashihara/JP*
- P-391 Single-center experience in endovascular treatment of wide-neck brain aneurysms with the pCONus device  
*F. Vitošević, S. Milosevic Medenica, D. Nestorovic, L. Rasulic; Belgrade/RS*
- P-392 A meta-analysis of carotid stenting versus endarterectomy for symptomatic carotid stenosis  
*A.D. Copoeru, O. Cristea, V.H. Cristian; Cluj-Napoca/RO*
- P-393 A meta-analysis of mechanical thrombectomy versus intravenous thrombolysis for acute ischemic stroke  
*A.D. Copoeru, V.H. Cristian, O. Cristea; Cluj-Napoca/RO*

- P-394 Comparison of neurological outcome of patients treated by mechanical thrombectomy for acute ischemic stroke in posterior circulation after 3 and 12 months  
*M. Köcher, D. Machal, D. Sanak, M. Černá; Olomouc/CZ*
- P-395 The pCONus device in endovascular treatment of wide-neck intracranial aneurysms  
*A. Bozzi, R. Gandini, D. Morosetti, D. Konda, V. Da Ros, F. De Crescenzo, A. Di Martino, A. Raso; Rome/IT*
- P-396 Stent-retriever thrombectomy and simultaneous aspiration vs. IV rt-PA in occluded MCA. Immediate outcome  
*R.L. Logvinenko, M.A. Domashenko, A. Frantsevich, A.V. Arablinskiy, M.Y. Yakovlev, M.Y. Maksimova, M.M. Tanashyan; Moscow/RU*
- P-397 The anatomy of the circle of Willis is not strong enough predictive factor for prognosis of cross-clamping intolerance during carotid endarterectomy  
*P. Myrcha, A. Lewczuk, M. Kozak, D. Siemieniuk, T. Miłek, W. Woźniak, P. Ciostek; Warsaw/PL*
- P-398 Only thrombectomy in occlusion of anterior circulation cerebral arteries against rt-PA. What is better? Immediate outcome  
*R.L. Logvinenko, M.A. Domashenko, A.V. Arablinskiy, M.Y. Yakovlev, M.Y. Maksimova, M.M. Tanashyan, L.S. Kokov; Moscow/RU*
- P-399 Experience of GORE® VIABAHN® endoprosthesis in carotid blowout syndrome  
*A.S.-B.C. Chou; Hualien County/TW*
- P-400 Immediate and long-term results of stenting of the proximal branches of the aortic arch  
*A. Frantsevich, L.S. Kokov, R.L. Logvinenko, A.B. Varava; Moscow/RU*
- P-401 Endovascular management of carotid and vertebral artery dissections with the use of new-generation double layered stents and protection system – early and midterm results  
*P. Latacz<sup>1</sup>, M. Simka<sup>2</sup>, T. Popiela<sup>1</sup>; <sup>1</sup>Krakow/PL, <sup>2</sup>Opole/PL*
- P-402 Novel aneurysms neck reconstruction device for treatment of wide-neck bifurcation intracranial aneurysms: single center experience  
*K. Brauna, K. Kupcs, H. Kidikas; Riga/LV*
- P-403 Incidence, predictors and management of acute early carotid stent thrombosis. A single-center experience  
*L. Reppas, K. Palialexis, S. Spiliopoulos, C. Konstantos, K. Moulakakis, J. Kakisis, G.K. Tsigoulis, V. Zymvragoudakis, A.M. Lazaris, G. Sfyroeras, S. Vasdekis, G. Geroulakos, E. Brountzos; Athens/GR*

- P-404 Wada test: a valuable tool for pre-surgical investigation of intractable epilepsy  
*T. Kratimenos, A. Anagnostopoulou, D. Tomais, A. Hopkins, G. Almpani, D. Farsaris, I. Kalogeropoulos; Athens/GR*
- P-405 Mechanical thrombectomy in patients presenting after 6 hours from onset of acute ischemic stroke  
*M.P. Ganimede<sup>1</sup>, V. Semeraro<sup>1</sup>, A. Villonio<sup>2</sup>, N.M. Lucarelli<sup>1</sup>, S. Internò<sup>1</sup>, L. Macarini<sup>2</sup>, N. Burdi<sup>1</sup>; <sup>1</sup>Taranto/IT, <sup>2</sup>Foggia/IT*
- P-406 Thrombectomy with EmboTrap as a revascularization solution in acute ischemic stroke treatment when the ADAPT fails: a single center experience  
*V. Gavrilovic, A. Vit, B. Petralia, A. Pellegrin, T. Gorgatti, M. Sponza; Udine/IT*
- P-407 Impact of carotid Casper stent implantation on frequency of ischemic silent brain lesion occurrence  
*L.A. Sinitzyn, R. Medvedev, S. Skrylev, M.M. Tanashyan, T. Evdokimova, V. Schipakin, A. Koscheev; Moscow/RU*
- P-408 Comparative analysis of femoral and radial approaches in endovascular treatment of carotid artery stenosis  
*R.R. Khaifzov, T. Khaifzov, I. Idrisov, I. Shaymuratov, S. Pustovoytov, E. Abhalikova, D. Khasanova; Ufa/RU*
- P-409 Interventional radiologic management of trauma to the central nervous system  
*M. Leyva Vásquez Caicedo<sup>1</sup>, J. Tisnado<sup>2</sup>, J. Tisnado<sup>3</sup>, E. Quevedo<sup>4</sup>; <sup>1</sup>Madrid/ES, <sup>2</sup>Richmond, VA/US, <sup>3</sup>New York, NY/US, <sup>4</sup>Lima/PE*
- P-410 Intracranial aneurysms evaluation after coil embolization by magnetic resonance contrast enhanced angiography with temporal resolution (TWIST) on 3T  
*D. Dzelebdzic, M. Jovanovic, I. Vukasinovic, D. Damjanovic, S. Lavrnjic, S. Banjalic, K. Petrujkic, D. Ristic Balos, I. Nikolic, S. Gavrilovic; Belgrade/RS*
- P-411 Selective transvenous embolization of cavernous sinus dural arteriovenous fistulas: techniques and relevant vascular anatomy  
*H. Kiyosue; Yufu/JP*
- P-412 Bilateral inferior petrosal sinus sampling (BIPSS). Single-center experience  
*I.I. Sitkin, A. Malygina, P. Khandaeva, J. Belaya, G. Melnichenko, I. Dedov; Moscow/RU*
- P-413 The wonderful net rete mirabile – a case series  
*A.K. Gupta, H.S. Penderkar, A. Verma, S. Tiwari; Bangalore/IN*
- P-414 Intracranial dural arteriovenous fistula: the spectrum illustrated  
*A.K. Gupta, H.S. Penderkar; Bangalore/IN*

- P-415 Preoperative embolization of a progressing remnant juvenile angiofibroma in a complex location  
*K.V. Kauppinen<sup>1</sup>, A. Haapaniemi<sup>2</sup>, J. Moreno Negrete<sup>3</sup>, L. San Román Manzanera<sup>3</sup>, J.M. Macho Fernández<sup>3</sup>; <sup>1</sup>Turku/FI, <sup>2</sup>Helsinki/FI, <sup>3</sup>Barcelona/ES*
- P-416 Transfemoral thrombectomy in the cavernous sinus and superior ophthalmic vein  
*J.L. Bauer, K. Kansagra, K. Chao, L. Feng; Los Angeles, CA/US*  
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- P-417 Transcatheter coil embolisation of posttraumatic indirect carotid-cavernous fistula in a 25-year old male patient.  
*A. Nancheva Bogoevska, A. Gjoreski; Skopje/MK*
- P-418 Endovascular treatment for a giant extracranial carotid artery aneurysm secondary to a bacterial retropharyngeal abscess  
*J. Zhong, F. Islim, J.V. Patel, T.A.F.M. Patankar, T. Goddard; Leeds/UK*
- P-419 Endovascular treatment of intracranial wide-neck bifurcation aneurysms with Woven EndoBridge (WEB) device: a case series  
*M. Milnerowicz, M. Miś, M. Miś, A. Kacała, J. Garczarek; Wrocław/PL*

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- P-420 Evaluation of percutaneous trans-femoral implantation of side-hole port-catheter system with a coil-fixed-catheter-tip for hepatic arterial infusion chemotherapy  
*J. Hu, X. Wang, G. Cao, X. Wang, X. Zhu; Beijing/CN*  
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- P-421 Hepatic arterial infusion chemotherapy with Oxaliplatin and 5-fluorouracil with or without Sorafenib for hepatocellular carcinoma with major portal vein tumor thrombosis  
*J. Hu, G. Cao, X. Zhu, R. Yang, X. Wang, B. Xing, X. Wang; Beijing/CN*  
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- P-422 Lobar versus selective conventional transarterial chemoembolization – an interim report of a prospective pharmacokinetic study  
*L.J. Savic<sup>1</sup>, J. Chapiro<sup>1</sup>, T. White<sup>1</sup>, E. Funai<sup>1</sup>, E. Isufi<sup>1</sup>, E. Chen<sup>1</sup>, P. He<sup>2</sup>, M.A. Rudek<sup>2</sup>, H.S. Kim<sup>1</sup>, R. Ayyagari<sup>1</sup>, J. Pollak<sup>1</sup>, T. Schlachter<sup>1</sup>; <sup>1</sup>New Haven, CT/US, <sup>2</sup>Baltimore, MD/US*
- P-423 Pre-treatment 99mTc-mebrofenin hepatobiliary scintigraphy as a predictor of post-radioembolization clinical status  
*M. Ertreo<sup>1</sup>, S. Chowdhuri<sup>1</sup>, J.Y. An<sup>2</sup>, G. Esposito<sup>1</sup>, T. Caridi<sup>1</sup>, G.E. Lynskey<sup>1</sup>, D. Buckley<sup>1</sup>, E. Cohen<sup>1</sup>, J.T. Cardella<sup>1</sup>, D.H. Field<sup>1</sup>, J.B. Spies<sup>1</sup>, A.Y. Kim<sup>1</sup>; <sup>1</sup>Washington, DC/US, <sup>2</sup>Bethesda, MD/US*

- P-424 Mini-invasive treatment of benign bone lesion in pediatric age: diagnosis and therapeutic option. 4-years experience  
*P. Palumbo, F. Smaldone, F. Bruno, S. Quarchioni, F. Arrigoni, S. Mariani, L. Zugaro, A. Barile, C. Masciocchi; L'Aquila/IT*
- P-425 Effectiveness of DEB-TACE using radiopaque beads in hepatocellular carcinoma based on correlation of imaging response and explant histopathology  
*P. Ahlman, M. Doshi, T. Scagnelli, M. Garcia-Buitrago, R. Lencioni, G. Narayanan; Miami, FL/US*
- P-426 Patient survival following percutaneous radiofrequency ablation for histologically proven colorectal lung metastasis  
*J. Zhong, E. Palkhi, J. Smith, B. Bhartia, R. Milton, N. Chaudhuri, T.M. Wah; Leeds/UK*
- P-427 Percutaneous microwave ablation of renal tumors: evaluations of results and complications through a modified R.E.N.A.L. score  
*E.M. Fumarola, P. Biondetti, S.A. Angileri, C. Floridi, A.M. Ierardi, G. Carrafiello; Milan/IT*
- P-428 Higher response rate of trans-arterial embolization (TAE) can be achieved by the application of solid embolization agents in treatment for neuroendocrine tumor liver metastasis (NETLM)  
*Y. Liu, W. Yu, F. Lian, L. Shen, W. Chen, L. Jiaping, J. Chen; Guangzhou/CN*
- P-429 Intra-arterial computed tomography-enhancement mapping for response assessment of transarterial chemoembolization  
*B.C. Odisio<sup>1</sup>, E.Y. Lin<sup>1</sup>, G. Chintalapani<sup>2</sup>, E. Klotz<sup>3</sup>; <sup>1</sup>Houston, TX/US, <sup>2</sup>Houston, US, <sup>3</sup>Forchheim/DE*
- P-430 Bronchial artery embolization for the management of hemoptysis in primary lung cancer: A retrospective multicenter analysis  
*K.W. Yoon, H.-K. Yoon; Seoul/KR*  
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- P-431 The usefulness of liver parenchymal perfusion simulation using commercial 3-dimensional workstation and simulation software in conventional transcatheter arterial chemoembolization for hepatocellular carcinoma  
*M. Kinoshita<sup>1</sup>, K. Takechi<sup>2</sup>, Y. Arai<sup>2</sup>, R. Shirono<sup>2</sup>, Y. Nagao<sup>2</sup>, S. Izumi<sup>2</sup>, S. Noda<sup>1</sup>, S. Takao<sup>1</sup>, S. Iwamoto<sup>1</sup>, M. Harada<sup>1</sup>; <sup>1</sup>Tokushima/JP, <sup>2</sup>Komatsushima/JP*
- P-432 Portal vein damage after DEB-TACE: comparison with Lipiodol-TACE based on the evaluation with CT during arterial portography  
*M. Tamura<sup>1</sup>, S. Nakatsuka<sup>1</sup>, H. Torikai<sup>2</sup>, M. Mitsu<sup>1</sup>, J. Tsukada<sup>1</sup>, N. Ito<sup>1</sup>, M. Inoue<sup>1</sup>, H. Yashiro<sup>2</sup>, M. Jinzaki<sup>1</sup>; <sup>1</sup>Tokyo/JP, <sup>2</sup>Hiratsuka-city/JP*

- P-433 Prognostic role of colorectal cancer laterality in the outcome of transarterial treatment of liver metastasis  
*B. Sadeghi<sup>1</sup>, H. Javan<sup>2</sup>, S.S. Gunasekaran<sup>2</sup>, K.J. Nelson<sup>1</sup>, D.M. Fernando<sup>1</sup>, J. Katrivesis<sup>2</sup>, N. Abi-Jaoudeh<sup>2</sup>; <sup>1</sup>Irvine, CA/US, <sup>2</sup>Orange, CA/US*
- P-434 A study comparing the effects of intra-arterial vs intra-venous chemotherapy delivery for the treatment of pancreatic cancer  
*M. Rezaee, J. Wang, F. Zheng, A. Hussein, G. Ren, A.S. Thakor; Stanford, CA/US*
- P-435 Safety and feasibility of prostate artery embolization in the management of prostate cancer bleeding  
*H. Javan<sup>1</sup>, B. Sadeghi<sup>2</sup>, A. Ushinsky<sup>1</sup>, N. Abi-Jaoudeh<sup>1</sup>, K.J. Nelson<sup>2</sup>, D.M. Fernando<sup>2</sup>, E. Uchio<sup>1</sup>, J. Katrivesis<sup>1</sup>, P. Borghei<sup>3</sup>; <sup>1</sup>Orange, CA/US, <sup>2</sup>Irvine, CA/US, <sup>3</sup>Long Beach, CA/US*
- P-436 For patients with cholangiocarcinoma, does radioembolization and TACE have better outcomes than radioembolization alone?  
*J. Lescher, E. Meram, O. Ozkan, P.F. Laeseke; Madison, WI/US*
- P-437 Clinical value of Angio-CT guided splanchnic nerve block  
*S. Wada<sup>1</sup>, Y. Arai<sup>2</sup>, M. Sone<sup>2</sup>, S. Sugawara<sup>2</sup>, C. Itoh<sup>2</sup>, T. Hasegawa<sup>2</sup>, N. Umakoshi<sup>2</sup>, T. Kubo<sup>2</sup>; <sup>1</sup>Kanagawa/JP, <sup>2</sup>Tokyo/JP*
- P-438 Ablation volume measurement after percutaneous cryoablation using a two-cryo-probe technique for small hepatocellular carcinomas  
*H. Kim, J.H. Kwon, K. Han, J.Y. Won, W. Choi, Y.S. Kim, J. Lee, G.M. Kim, M.D. Kim, D.Y. Lee, D. Kim, S. Han; Seoul/KR*
- P-439 White coagulation and charring in hepatic tissues induced by a microwave ablation treatment: a comparison between ex-vivo and clinical data.  
*P. Scalise<sup>1</sup>, L. Crocetti<sup>1</sup>, N. Tosoratti<sup>2</sup>, C. Amabile<sup>2</sup>, S. Cassarino<sup>2</sup>, P. Rossi<sup>1</sup>, R. Cervelli<sup>1</sup>, R. Cioni<sup>1</sup>; <sup>1</sup>Pisa/IT, <sup>2</sup>Aprilia/IT*
- P-440 Ablation of small liver tumor invisible on ultrasound: jet-ventilation combined with electromagnetic needle guidance is the perfect solution  
*S. Volpi, G. Tsoumakidou, A. Hocquet, R. Duran, A. Loriaud, A. Denys; Lausanne/CH*
- P-441 Factors affecting overall and liver progression-free survival after 90Y radioembolization of heavily pre-treated colon cancer liver metastases patients  
*I. Kurilova<sup>1</sup>, R.G.H. Beets-Tan<sup>2</sup>, J. Flynn<sup>1</sup>, M. Gonen<sup>1</sup>, G.A. Ulaner<sup>1</sup>, E.N. Petre<sup>1</sup>, F.E. Boas<sup>1</sup>, E. Ziv<sup>1</sup>, L.A. Brody<sup>1</sup>, H. Yarmohammadi<sup>1</sup>, A.R. Deipolyi<sup>1</sup>, A. Cercek<sup>1</sup>, E. Klompenhouwer<sup>2</sup>, N.E. Kemeny<sup>1</sup>, C.T. Sofocleous<sup>1</sup>; <sup>1</sup>New York, NY/US, <sup>2</sup>Amsterdam/NL*
- P-442 Radioembolization with yttrium-90 resin microspheres in unresectable intrahepatic cholangiocarcinoma  
*T.H. Balli, K. Aikimbaev, F.C. Pişkin, B. Khalatai, B.İ. Güney, H.B. Onan, E. Aksungur; Adana/TR*

- P-443 Comparison of safety and efficacy of Doxorubicin DEB-TACE sized below and above 100  $\mu\text{m}$  in hepatocellular carcinoma  
*T.H. Balli, K. Aikimbaev, B. Khalatai, F.C. Pişkin, H.B. Onan, E. Aksungur; Adana/TR*
- P-444 Partial splenic artery embolization in cancer patients with thrombocytopenia  
*B. Kis, M. Mills, J. Smith, J. Choi, J. Strosberg, R. Komrokji, R. Kim; Tampa, FL/US*
- P-445 Clinical outcome of radiofrequency ablation and microwave ablation in small and medium size HCC  
*Y.-M. Lin, Y.-Y. Chiou; Taipei City/TW*
- P-446 Long-term prognostic factor for local tumor progression after iodized oil transarterial chemoembolization and subsequent RFA in patients with a small ( $\leq 3$  cm) subphrenic hepatocellular carcinoma  
*S. Kang, S. Ko, D. Hyun, S.K. Cho, S.W. Shin; Seoul/KR*
- P-447 Etiology of liver disease: impact on the incidence of portal vein tumor thrombosis in patients with HCC  
*A. Mähringer-Kunz, S. Schotten, D. Graafen, F.I. Meyer, S. Koch, P.R. Galle, A. Weinmann, C. Düber, R. Kloeckner; Mainz/DE*
- P-448 Vascular tumor invasion has a direct impact on liver function in patients with hepatocellular carcinoma  
*R. Kloeckner<sup>1</sup>, A. Mähringer-Kunz<sup>1</sup>, D. Pinto dos Santos<sup>2</sup>, S. Schotten<sup>1</sup>, D. Graafen<sup>1</sup>, F.I. Meyer<sup>1</sup>, F. Hahn<sup>1</sup>, S. Koch<sup>1</sup>, C. Düber<sup>1</sup>, P.R. Galle<sup>1</sup>, A. Weinmann<sup>1</sup>; <sup>1</sup>Mainz/DE, <sup>2</sup>Köln/DE*
- P-449 Percutaneous hepatic perfusion in patients with unresectable liver metastases from ocular melanoma using the Delcath system's second-generation (GEN2) hemofiltration system: a prospective phase II study  
*T.S. Meijer, E.M. De Leede, L.-F. De Geus-Oei, B. Boekestijn, H.J. Handgraaf, M. Fiocco, C.H. Martini, F.G. Tijl, M.E. Sitsen, A.R. van Erkel, R.W. Van der Meer, H.W. Kapiteijn, A.L. Vahrmeijer, M.C. Burgmans; Leiden/NL*
- P-450 EW-7197, a transforming growth factor-beta type I receptor kinase inhibitor, ameliorates acquired lymphedema in a mouse tail model  
*S.H. Yoon, K.Y. Kim, J.-H. Park, H.-Y. Song; Seoul/KR*
- P-451 Experience of RADPLAT for maxillary cancer-consideration on its usefulness and limitation  
*M. Kamiya<sup>1</sup>, H. Hiramatsu<sup>1</sup>, S. Inagawa<sup>2</sup>, T. Tanaka<sup>1</sup>, K. Konishi<sup>1</sup>, T. Komatsu<sup>1</sup>, K. Nakamura<sup>1</sup>; <sup>1</sup>Hamamatsu/JP, <sup>2</sup>Niitgata/JP*
- P-452 Initial experience of drug-eluting bead transarterial chemoembolization for hepatocellular carcinoma using 75-150  $\mu\text{m}$ : safety and efficacy  
*K. Park, H.P. Hong; Seoul/KR*

- P-453 MR-guided percutaneous cryoablation of bilateral multiple renal tumors in von Hippel-Lindau patients  
*T. Shimizu, Y. Sakuhara, N. Nishioka; Sapporo/JP*
- P-454 Complications and seeding in CT-guided high-dose-rate brachytherapy (CT-HDRBT) – 15 years experience  
*G. Böning, L. Büttner, M. Jonczyk, W.M. Lüdemann, B. Gebauer; Berlin/DE*
- P-455 Feasibility of ultra-high resolution cone-beam computed tomography (CBCT) for 3D volume imaging in context of conventional hepatic trans-arterial-chemoembolization (cTACE) and comparison to multi-detector-computed-tomography (MDCT)  
*L.S. Alizadeh, T.J. Vogl, R. Maeder, M.H. Albrecht; Frankfurt/DE*
- P-456 Transcatheter arterial chemoembolization of the right inferior phrenic artery: comparison of outcomes following N-butyl cyanoacrylate versus gelatin sponge embolization  
*D.I. Gwon, S.Y. Noh, W.J. Yang, S. Park, H.H. Chu, E. Jung, J.W. Kim, G.-Y. Ko; Seoul/KR*
- P-457 Adding the check point with microbubble – instantaneous confirmation of adequate zone of ablation  
*C. Shilagani, Y. Zhang, A. Gaffar, S. Maddineni, L. LeCompte; Valhalla, NY/US*
- P-458 Percutaneous microwave thermosphere ablation of pancreatic tumors  
*P. Biondetti, A.M. Ierardi, S.A. Angileri, P. Torcia, P. Rigamonti, U.G. Rossi, M. Cariati, G. Carraffello; Milan/IT*
- P-459 Lipiodol in angiography and CT as a new prognostic indicator for the efficiency of transarterial chemoembolization in therapy of hepatocellular carcinoma  
*M.C. Langenbach, T.J. Vogl, G. Said, R. Hammerstingl, T. Gruber-Rouh; Frankfurt/DE*
- P-460 Combined lipiodol embolization with hepatic arterial infusion chemotherapy (HAIC) to treat HCC with main portal vein invasion  
*H.L. Liang, C.-L. Chiang, W.-L. Tsai, J.-S. Cheng; Kaohsiung/TW*
- P-461 Chemical shift MRI of Lipiodol delivery after cTACE – multi-center experience in HCC patients  
*A. Villalobos<sup>1</sup>, A.C. Gordon<sup>2</sup>, R.J. Lewandowski<sup>2</sup>, L. Weiguo<sup>2</sup>, S. Brinckerhoff<sup>2</sup>, S. Giri<sup>2</sup>, X. Zhong<sup>3</sup>, S.A. Kannengiesser<sup>4</sup>, E. Gonda<sup>2</sup>, F.H. Miller<sup>2</sup>, R. Salem<sup>2</sup>, W.S. Rilling<sup>1</sup>, A.C. Larson<sup>2</sup>, S.B. White<sup>1</sup>; <sup>1</sup>Milwaukee, WI/US, <sup>2</sup>Chicago, IL/US, <sup>3</sup>Atlanta, GA/US, <sup>4</sup>Erlangen/DE*
- P-462 A large-bore uncovered metallic stent for the treatment of malignant superior vena cava syndrome  
*E. Jung, J.W. Kim, S. Park, S.Y. Noh, D.I. Gwon; Seoul/KR*

- P-463 Comparison of infection rates in patients with prior biliary interventions undergoing hepatic embolotherapy treated with single-drug moxifloxacin versus multi-drug antibiotic prophylaxis  
*R. Parikh<sup>1</sup>, O. Abousoud<sup>2</sup>, S. Hunt<sup>1</sup>, T. Gade<sup>1</sup>, M. Dagli<sup>1</sup>, J. Mondschein<sup>1</sup>, D. Sudheendra<sup>1</sup>, S.W. Stavropoulos<sup>1</sup>, M.C. Soulen<sup>1</sup>, G.J. Nadolski<sup>1</sup>; <sup>1</sup>Philadelphia, PA/US, <sup>2</sup>Camden, NJ/US*
- P-464 Therapeutic efficacy and safety of cone-beam computed tomography (CBCT) assisted chemoembolization for hepatocellular carcinoma within Milan criteria: comparative retrospective cohort study  
*J.H. Lee, I.J. Lee, H.B. Kim; Goyang-si/KR*  
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- P-465 LifePearl® anthracyclin registry in selective chemo-embolization of patients with unresectable hepatocellular carcinoma: PARIS study preliminary results  
*T. de Baère<sup>1</sup>, B. Guiu<sup>2</sup>, G. Verset<sup>3</sup>; <sup>1</sup>Villejuif/FR, <sup>2</sup>Montpellier/FR, <sup>3</sup>Brussels/BE*
- P-466 Carbon dioxide as alternative contrast media during transarterial chemoembolization for hepatocellular carcinoma  
*K. Shibuya, H. Tokue, M. Miyazaki, Y. Tsushima; Maebashi/JP*
- P-467 Hepatocellular carcinoma: radioembolization-induced liver disease occurrences using partition model for dose calculation  
*A. Hocquelet, R. Duran, N. Schaefer, A. Digkila, A. Denys; Lausanne/CH*  
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- P-468 Robot-assisted trans-arterial chemoembolization for treatment of colon rectal cancer hepatic metastases: first-in-man safety and efficacy evaluation of the Magellan System  
*C. Del Giudice, M. Waqaas, G. Amouyal, N. Moussa, O. Pellerin, M.R. Sapoval; Paris/FR*
- P-469 Electrochemotherapy of cholangiocellular carcinoma at hepatic hilum  
*L. Tarantino<sup>1</sup>, A. Nasto<sup>1</sup>, G. Busto<sup>1</sup>, R. Fristachi<sup>1</sup>, L. Cacace<sup>1</sup>, S. Bortone<sup>1</sup>, P. Tarantino<sup>2</sup>, R.A. Nasto<sup>1</sup>; <sup>1</sup>Pagani/IT, <sup>2</sup>Milano/IT*
- P-470 Prospective randomized trial: tumor response of colorectal liver metastases after transarterial chemoembolization with two different protocols using MRI  
*T.J. Vogl, M.C. Langenbach, C. Marco, R. Hammerstingl, J. Scholz, T. Gruber-Rouh; Frankfurt/DE*
- P-471 MR elastography (MRE) and MRI as response parameters of colorectal liver metastases (CRLM) under transarterial chemoembolization (TACE)  
*T.J. Vogl, Y. Haas, K. Eichler, B. Kaltenbach; Frankfurt/DE*
- P-472 Cone-beam computed tomography-guided percutaneous radiofrequency ablation of lung tumors: 1 year follow-up  
*K. Park, H.P. Hong, M.H. Rho; Seoul/KR*

- P-473 Percutaneous radiofrequency thermal ablation (RFA) of lung neoplasms using a new 15 G internally cooled jet-tip electrode: preliminary results  
*F. Carchesio, R. Iezzi, A. Posa, G. Veltri, R. Manfredi; Rome/IT*
- P-474 Transarterial chemoembolization with degradable starch microspheres (DSM-TACE) as second-line treatment in HCC patients dismissing or ineligible for Sorafenib  
*F. Carchesio, R. Iezzi, A. Posa, G. Veltri, A. Gasbarrini, R. Manfredi; Rome/IT*
- P-475 HIFU for the neuroendocrine pancreatic cancer: preliminary results  
*V.A. Solovov; Samara/RU*
- P-476 Y-90 microspheres radioembolization (TARE) of unresectable hepatic masses with portal vein thrombosis?  
*F. Somma, V. Stoia, N. Serra, G. Gatta, R. D'Angelo, F. Fiore; Naples/IT*
- P-477 Initial experience with Yttrium-90 microsphere radioembolization for adolescent hepatic malignancies  
*T. Appleton Figueira, R. Murthy, A.O. Kaseb, R. Avritscher, C. Herzog, B. Chasen, A. Mahvash; Houston, TX/US*
- P-478 Contrast clearance following hepatic transarterial embolization with radio-opaque and non-radio-opaque micro beads in swine  
*A.S. Mikhail<sup>1</sup>, W. Pritchard<sup>1</sup>, Q.M.B. De Ruiter<sup>1</sup>, I. Bakhtashvili<sup>1</sup>, J. Esparza-Trujillo<sup>1</sup>, D.L. Woods<sup>1</sup>, A.L. Lewis<sup>2</sup>, J. Karanian<sup>1</sup>, B.J. Wood<sup>1</sup>; <sup>1</sup>Bethesda, MD/US, <sup>2</sup>Camberley/UK*
- P-479 Microwave ablation of hepatocellular carcinoma using a new percutaneous device and results of combination therapy: preliminary results  
*M. Fiaz; Lahore/PK*
- P-480 Microwave ablation (MWA) of liver metastases from pancreatic neuroendocrine tumor (pNET): preliminary results with a new generation system  
*G. Brembilla, P. Marra, F. Ratti, S. Partelli, M. Salvioni, S. Gusmini, L. Aldrighetti, M. Venturini, F. De Cobelli; Milan/IT*
- P-481 Technique standardization and dose optimization of CBCT as guidance for iVATS procedure in small pulmonary nodules  
*I. Baralis, S. Bongiovanni, F. Pedrazzini, E. Peano, D. Ghirardo, A. Stanzi, G. Melloni, A. Balderi, M. Grosso; Cuneo/IT*
- P-482 The effect of statins on liver function in patients undergoing palliative endovascular therapy for liver cancer  
*R. Cochran<sup>1</sup>, I.G. Newton<sup>1</sup>, A. Pice<sup>2</sup>, R. Melikian<sup>2</sup>, H. Aryafar<sup>1</sup>; <sup>1</sup>La Jolla, CA/US, <sup>2</sup>San Diego, CA/US*

- P-483 Comparison between TARE and TACE in patients with intermediate and advanced HCC  
*I. Baralis, S. Bongiovanni, E. Peano, F. Pedrazzini, S. Chauvie, P. Salomone, A. Balderi, M. Grosso; Cuneo/IT*
- P-484 Occlusafe balloon occlusion TACE in HCC treatment: initial experience  
*A. Dapoto, R. Nani, D. Zannoni, G. Preziosa, R. Agazzi, S. Sironi; Bergamo/IT*
- P-485 Type of progression in metastatic colorectal patients after treatment with radioembolization  
*J. Jongen, J. van Roekel, M.L.J. Smits, S. Elias, M. Koopman, O. Kranenburg, I.H.M. Borel Rinkes, M.G.E.H. Lam; Utrecht/NL*
- P-486 Evaluation of DSM-TACE effectiveness in patients with intermediate stage HCC: our preliminary experience  
*M. Femia, A.M. Ierardi, M. Petrillo, S.A. Angileri, C. Floridi, G. Carrafiello; Milan/IT*
- P-487 Combination of preoperative ultrasonographic mapping and radio-guided occult lesion localization (ROLL) in patients with locally recurrent/persistent papillary thyroid cancer: a pilot study  
*A.M. Elsaadany, M. Alrowaily; Riyadh/SA*
- P-488 Irreversible electroporation in central renal tumor  
*A. Camacho Martínez, J.M. Abadal Villayandre, E. Galvez, M.J. Alvarez; Madrid/ES*
- P-489 Selective internal radiotherapy (SIRT) of unresectable HCC: correlation of potential predictive parameters  
*J. Kahn, W.M. Lüdemann, D. Pustelnik, B. Gebauer, D. Geisel, D. Schnapauff, G. Wieners; Berlin/DE*
- P-490 Percutaneous and arterial interventional oncology for metastatic adrenocortical carcinoma  
*M. Mauda-Havakuk<sup>1</sup>, E. Levy<sup>1</sup>, V. Krishnasamy<sup>1</sup>, V. Anderson<sup>1</sup>, F. Antonio<sup>2</sup>, M. Edgerly<sup>1</sup>, M.S. Hughes<sup>1</sup>, J. del Rivero<sup>1</sup>, B.J. Wood<sup>1</sup>; <sup>1</sup>Bethesda, MD/US, <sup>2</sup>New York, NY/US*
- P-491 Stereotactically navigated percutaneous microwave ablation (MWA) compared to conventional MWA: a matched pair analysis  
*L.P. Beyer, L. Lürken, B. Pregler, J. Schaible, P. Wiggermann; Regensburg/DE*
- P-492 Electroporation based ablation techniques : an indication for peri-hilar liver tumors?  
*L. Tarantino<sup>1</sup>, A. Nasto<sup>1</sup>, G. Busto<sup>1</sup>, S. Bortone<sup>1</sup>, R. Fristachi<sup>1</sup>, L. Cacace<sup>1</sup>, P. Tarantino<sup>2</sup>, R.A. Nasto<sup>2</sup>, M. Romano<sup>2</sup>; <sup>1</sup>Pagani/IT, <sup>2</sup>Milano/IT*

- P-493 Vascular lake phenomenon as a predictor of tumor response in HCC patients that underwent DEB-TACE  
*R.N. Cavalcante, F. Nasser, J.M. Motta-Leal-Filho, B.B. Affonso, F.L. Galastri, B.D. Fina, R.G. Garcia, N. Wolosker; São Paulo/BR*
- P-494 Comparative study of absolute ethanol versus n-butyl-2-cyanoacrylate in percutaneous portal vein embolization before hepatectomy  
*S. Sugawara, Y. Arai, M. Sone, C. Ito, S. Wada, T. Hasegawa, N. Umakoshi, T. Kubo; Tokyo/JP*
- P-495 Selective internal radioembolization therapy with Yttrium-90 for hepatic metastasis from uveal melanoma: a retrospective case series  
*J. Zheng, Z. Irani, D. Lawrence, K. Flaherty, R. Arellano; Boston, MA/US*
- P-496 Trans-arterial chemoembolization with doxorubicin-eluting beads in the treatment of hepatocellular carcinoma rupture  
*H. Li; Changsha/CN*
- P-497 Effectiveness of automated tumor-feeder detection software (ATDS) using CT arteriography images in super-selective transarterial chemoembolization for hepatocellular carcinoma  
*T. Kubo, Y. Arai, M. Sone, S. Sugawara, C. Itoh, S. Wada, T. Hasegawa, N. Umakoshi, H. Kuwamura; Tokyo/JP*
- P-498 ICE-sentials of cryoablation: current concepts and applications in interventional radiology  
*F. Alabdulghani, S. Brennan, C. Farrelly, L.P. Lawler, T. Geoghegan, H.K. Moriarty, U. Salati; Dublin/IE*
- P-499 Combined therapies in liver metastases  
*N. Almeida Costa, P.M.M. Lopes, M.J.M. Sousa, B. Gonçalves; Porto/PT*  
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*N.B. Mani, S.K. Kim, M.D. Darcy; St. Louis, MO/US*
- P-501 The technical enablement of MR-guided prostate cryoablation: lessons learnt  
*T. Gibson, T. Dudderidge, A. Darekar, A.J. King, D.J. Breen; Southampton/UK*
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*J. Cornman-Homonoff, D. Holzwanger, S. Kishore, D.C. Madoff; New York, NY/US*
- P-503 Everything you want to know about cryoablation of lung tumors in 10 points  
*E. Geledan, C. Le Rest, J.B. Battistuzzi, V. Catena, X. Buy, J. Palussière; Bordeaux/FR*

- P-504 Emerging role of nano-radio-frequency ablation (NaRFA) in the treatment of hepatocellular carcinoma  
*J.T. Moon; Albany, NY/US*
- P-505 Applications of cone beam CT in embolisation of liver tumours  
*C. Liu, T. Cavenagh, M. Gonsalves, S. Ameli-Renani; London/UK*
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*J. Smith, S. Fujimoto, J. Lee, D. Jin; Loma Linda, CA/US*
- P-507 Iodized oil pleural effusion: a rare complication of TACE  
*U.G. Rossi<sup>1</sup>, P. Torcia<sup>2</sup>, A.M. Ierardi<sup>2</sup>, G. Carrafiello<sup>2</sup>, M. Cariati<sup>2</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>Milan/IT*
- P-508 Retrieval of a tip embedded IVC filter using the endobronchial forceps technique  
*B. Thomson, B. Kawa, N. Patel, A. Rabone, C. Elwood, K. Fai, P. Ignatus, A. Shaw; Maidstone/UK*
- P-509 Double balloon-occluded transarterial chemoembolization (double B-TACE) for hepatocellular carcinomas located in the caudate lobe  
*S. Soga, Y. Suyama, K. Yamada, H. Yoshikawa, H. Shinmoto; Tokorozawa/JP*
- P-510 Long-term survival in a case of unresectable methachronous liver metastasis, converted to resectable by TACE and subsequently treated by curative resection  
*N. Paksashvili, T. Ninikashvili, M. Mizandari; Tbilisi/GE*
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- P-512 Case report: Transarterial chemoembolization for NUT midline carcinoma of the liver  
*T. Aramaki, R. Sato, K. Yoza, K. Iwai, M. Moriguchi, K. Asakura, M. Endo; Shizuoka/JP*
- P-513 Delayed biliary toxicity after repeated DSM-TACE  
*U.M. Rozzani, G. Luppi, N. Marotti, I. Avancini; Trento/IT*
- P-514 Radiofrequency ablation(RFA) for lung tumor with artificial pneumothorax  
*S. Hamamoto, A. Yamamoto, M. Hamuro, K. Kageyama, T. Matsuoka, K. Murai, S. Ogawa, M. Nakano, A. Jogo, E. Sohgawa, T. Okuma, Y. Miki; Osaka/JP*
- P-515 Y90 radioembolization in an elderly Abernethy patient with a proven HCC  
*T. Cascella, R. Lanocita, E. Civelli, G. Greco, S. Gitto, A. Pellegrinelli, M. Bongini, A. Marchianò, C. Spreafico; Milan/IT*

- P-516 Treatment of renal cell carcinoma complicated by a large arteriovenous malformation  
*S.A. Chapman, G. Garzillo; London/UK*
- P-517 RFA of HCC combined with percutaneous portal vein occlusion using a balloon catheter  
*D. Kato<sup>1</sup>, B. Takahashi<sup>2</sup>, N. Miyamoto<sup>2</sup>, D. Abo<sup>1</sup>; <sup>1</sup>Sapporo/JP, <sup>2</sup>Obihiro Hokkaido/JP*
- P-518 Cutaneous branches embolization during DEB TACE leading to skin necrosis  
*J. González Plaza, A. Illade Fornos, A. Martínez Vázquez, E. Ladera González, V.J. Ferro Valero, M. Casal Rivas; Vigo/ES*
- P-519 Percutaneous ablation for bleeding remission in hemorrhaging angiosarcoma of the pleura  
*D.K. Filippiadis, S. Spiliopoulos, K. Palialexis, C. Konstantos, A.D. Kelekis, E. Brountzos, N.L. Kelekis; Athens/GR*
- P-520 Percutaneous IRE in unresectable body pancreatic cancer  
*A. Martinez Vazquez, A. Illade Fornos, J. González Plaza, E. Ladera González, R. Mendez Rodriguez, M. Casal Rivas; Vigo/ES*
- P-521 Ruptured hepatocellular carcinoma following Y90 radioembolization: a brief report of two cases  
*J. Smith, A. Nasiri, S. Fujimoto, M. Volk, D. Jin; Loma Linda, CA/US*
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- P-523 Intra-operative 3-D laparoscopic ultrasound guided irreversible electroporation of a solitary liver metastasis for margin accentuation prior to surgical resection  
*R. Ahmed, P. Tantrige, A. Hussain, S.A. Chapman, E.W. Johnston, N. Kibriya, A. Koundouraki, D. Lewis, P. Kane, S.M. Gregory, K. Menon, M. Papoulas, P. Peddu; London/UK*
- P-524 Radiofrequency ablation of reninoma: a new challenge for interventional radiologists  
*N. Gennaro, R. Muglia, V. Pedicini; Rozzano/IT*  
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*C. Samanci, Y. Onal, M.R. Umutlu, B. Acunas; Istanbul/TR*

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- P-526 Hepatic arterial embolization with indocyanine green for intraoperative liver segmentation.  
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- P-527 Ex vivo comparison between thyroid-dedicated bipolar and monopolar radiofrequency electrodes  
*R.G. Yoon, J.H. Baek, Y.J. Choi, J.H. Lee, S.R. Chung; Seoul/KR*
- P-528 Endophlebectomy of the common femoral vein and arteriovenous fistula creation as adjuncts to venous stenting for post-thrombotic syndrome  
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- P-529 Intranodal lymphatic glue embolization for the treatment of post-procedural groin lymphatic leaks  
*A. Smolock, G.J. Nadolski, M. Itkin; Philadelphia, PA/US*  
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*T. Yokoyama<sup>1</sup>, H. Kondo<sup>1</sup>, S. Inui<sup>2</sup>, R. Zako<sup>1</sup>, S. Toshimasa<sup>1</sup>, M. Yamamoto<sup>1</sup>, J. Toda<sup>3</sup>, S. Furui<sup>1</sup>, H. Oba<sup>1</sup>; <sup>1</sup>Tokyo/JP, <sup>2</sup>Saitama Tokorozawa/JP, <sup>3</sup>Chiba/JP*
- P-531 Postsurgical neonatal refractory chylothorax treated with percutaneous intranodal lymphangiography  
*K. Matsunari, N. Hashizume, K. Watanabe, H. Fujisawa; Kanagawa/JP*
- P-532 Hepatic venous outflow obstruction in liver transplant patients: venography, pressure gradients, or biopsy  
*E. Meram, V. Zavaletta, P.F. Laeseke, O. Ozkan; Madison, WI/US*
- P-533 The usefulness of Amplatzer vascular plug (AVP) for preoperative embolization before distal pancreatectomy with en bloc celiac axis resection (DP-CAR)  
*T. Fujii, W. Fukumoto, K. Chosa, Y. Baba, K. Awai; Hiroshima/JP*
- P-534 Lymphangiography and post-lymphangiographic MDCT for preclinical lymphatic interventions in a rabbit model  
*T. Matsumoto, K. Tomita, S. Suda, K. Hashida, T. Hasebe; Hachioji/JP*
- P-535 Teaching interventional radiology in Sierra Leone  
*T. Asghar<sup>1</sup>, T. Peachey<sup>1</sup>, D. van Leerdam<sup>2</sup>, T. Gresnigt<sup>2</sup>, M. Grootjans<sup>2</sup>, J. Vas Nunes<sup>2</sup>, H. Matheron<sup>2</sup>, O. Hamilton<sup>2</sup>, H. Bolkan<sup>2</sup>; <sup>1</sup>Sheffield/UK, <sup>2</sup>Masanga/SL*

- P-536 Segmental adrenal venous sampling is superior to diagnose aldosterone producing adenoma  
*H. Tannai, S. Matsui, A.D. Obara, Y. Kawahara, Y. Koike, C. Sugisawa, A. Suzuki, T. Takiguchi, J. Saito; Yokohama City, Kanagawa Pref./JP*
- P-537 Therapeutic nodal lymphangiography to lymphatic leakage after kidney transplantation  
*S. Ogawa; Osaka/JF*
- P-538 Peri- and post-procedural complications in patients undergoing C-Arm-computed tomography (CACT) guided balloon angioplasty (BPA)  
*J.B. Hinrichs, S.K. Maschke, J. Renne, T. Werncke, K.I. Ringe, H.M. Winther, K.M. Olsson, M.M. Hoepfer, F. Wacker, B.C. Meyer; Hannover/DE*
- P-539 Impact of hybrid emergency room on practice time for trauma hemostasis  
*Y. Sasaki<sup>1</sup>, H. Kondo<sup>1</sup>, H. Kuwamura<sup>1</sup>, R. Zako<sup>1</sup>, T. Yokoyama<sup>1</sup>, S. Toshimasa<sup>1</sup>, M. Yamamoto<sup>1</sup>, J. Toda<sup>2</sup>, S. Furui<sup>1</sup>, H. Oba<sup>1</sup>; <sup>1</sup>Tokyo/JF, <sup>2</sup>Chiba/JF*
- P-540 Radiological anatomy of cardiovascular system in matured microminipigs as a pre-clinical research model for the interventional radiology  
*H. Kawada, M. Takasu, T. Miyoshi, Y. Tanahashi, S. Syoda, R. Iwasaki, F. Hyodo, S. Goshima, T. Mori, M. Matsuo; Gifu/JF*
- P-541 Endovascular embolisation strategies for pulmonary arteriovenous malformations  
*M. Kuczyńska, K. Pyra, Ł. Światłowski, J. Sobstyl, E. Kuklik, T. JargieHo; Lublin/PL*
- P-542 Technical report and early feasibility study of novel "snuffbox" radial access in visceral intervention  
*U. Pua; Singapore/SG*
- P-543 Perceived barriers to a career in interventional radiology: results of a trainee survey  
*A. Greenwood<sup>1</sup>, T. Carlsson<sup>2</sup>, G. Collin<sup>2</sup>, B. Odedra<sup>1</sup>; <sup>1</sup>Gloucester/UK, <sup>2</sup>Bristol/UK*
- P-544 Hepatic lymphatic embolization for treatment of ascites secondary to right congestive heart failure  
*M. Sheng, D. Kwon, G.J. Nadolski, M. Itkin; Philadelphia, PA/US*
- P-545 Recanalization of post-catheterization radial artery occlusion  
*A. Kaledin, P. Podmetin; St. Petersburg/RU*
- P-546 Liver transplant priority and results of loco-regional treatment in HCC  
*P. Gemma<sup>1</sup>, F. Barbosa<sup>1</sup>, S. Di Sandro<sup>1</sup>, P. Brambillasca<sup>1</sup>, R. Vercelli<sup>2</sup>, F. Rigioli<sup>1</sup>, C. Migliorisi<sup>2</sup>, M. Solcia<sup>1</sup>, L. De Carli<sup>1</sup>, A.G. Rampoldi<sup>2</sup>; <sup>1</sup>Milano/IT, <sup>2</sup>Milan/IT*

- P-547 Early quality of life after catheter directed thrombolysis for pulmonary embolism: results from an interventional radiology thrombosis clinic  
*J. Smirniotopoulos, R. Winokur, J. Horowitz, A. Sista; New York, NY/US*
- P-548 Female medical student impression of interventional radiology – what can we do to improve this?  
*B. Huqsen, B. Connor, A. Holden; Auckland/NZ*
- P-549 Are newly qualified doctors adequately exposed to interventional radiology in the United Kingdom?  
*Z. Alsafi<sup>1</sup>, S. Ramachandran<sup>2</sup>, V. Bhrugubanda<sup>3</sup>, A. Alsafi<sup>1</sup>; <sup>1</sup>London/UK, <sup>2</sup>Cambridge/UK, <sup>3</sup>Preston/UK*
- P-550 Fluoroscopic subtraction Eustachian tubography: initial feasibility test in a cadaver model  
*K.Y. Kim<sup>1</sup>, W.S. Kang<sup>2</sup>, J.-H. Park<sup>2</sup>, H.J. Park<sup>2</sup>, H.-Y. Song<sup>2</sup>; <sup>1</sup>Jeonju/KR, <sup>2</sup>Seoul/KR*  
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*J.J. Shim<sup>1</sup>, J. Kim<sup>2</sup>, J.H. Won<sup>2</sup>; <sup>1</sup>Bucheon/KR, <sup>2</sup>Suwon/KR*
- P-552 Left vs right radial access: a randomized comparative study of routine catheterization in heart transplant patients (RADIAL 2 Heart Transplant Study)  
*C.A. Robles<sup>1</sup>, V. Martín-Yuste<sup>2</sup>, S. Brugaletta<sup>2</sup>, M. Trilla-Corominas<sup>2</sup>, X. Freixa<sup>2</sup>, F. Pérez-Villa<sup>2</sup>, A. Castell-Lavilla<sup>2</sup>, A. Regueiro<sup>2</sup>, M. Sabaté<sup>2</sup>; <sup>1</sup>Seville/ES, <sup>2</sup>Barcelona/ES*
- P-553 Academic research productivity in paediatric interventional radiology  
*J. Zhong<sup>1</sup>, A. Nanapragasam<sup>2</sup>, A.M. Barnacle<sup>3</sup>, N. Tahir<sup>1</sup>; <sup>1</sup>Leeds/UK, <sup>2</sup>Newcastle-upon-Tyne/UK, <sup>3</sup>London/UK*
- P-554 Protein losing enteropathy following thoracic duct ligation: diagnosis and treatment  
*D. Kwon, M. Sheng, G.J. Nadolski, M. Itkin; Philadelphia, PA/US*
- P-555 Partial uterine fibroid embolization for women who wish to conceive  
*J. Pisco, J.M. Pisco, T. Bilhim, N.V. Costa, D. Torres, A.G. Oliveira; Lisbon/PT*  
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- P-556 Clinical outcome of repeated prostatic artery embolization  
*J.M. Pisco, T. Bilhim, N.V. Costa, L.C. Pinheiro, D. Torres, A.G. Oliveira; Lisbon/PT*  
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- P-557 Clinical evaluation of an electromagnetic navigation system for CT-guided microwave ablation of abdominal tumors  
*K.I. Ringe<sup>1</sup>, V.D. Vo Chieu<sup>1</sup>, D. Iacchetti<sup>2</sup>, F. Wacker<sup>1</sup>; <sup>1</sup>Hannover/DE, <sup>2</sup>La Tronche/FR*

- P-558 Towards the integration of robotic concepts into the interventional oncology workflow of combined focused ultrasound and radiation therapy  
*J. Berger<sup>1</sup>, M. Unger<sup>1</sup>, L. Landgraf<sup>1</sup>, D. McLeod<sup>2</sup>, T. Neumuth<sup>1</sup>, A. Melzer<sup>1</sup>; <sup>1</sup>Leipzig/DE, <sup>2</sup>Dresden/DE*
- P-559 Ultrasound therapy system for high throughput in vitro analysis  
*L. Landgraf<sup>1</sup>, S. Tretbar<sup>2</sup>, J. Oevermann<sup>2</sup>, C. Dege<sup>1</sup>, M. Fournelle<sup>2</sup>, X. Zhang<sup>1</sup>, A. Melzer<sup>1</sup>; <sup>1</sup>Leipzig/DE, <sup>2</sup>St. Ingbert/DE*
- P-560 Interventional psychoprofilaxis  
*O.B. Sandoval, A.M. Suarez Anzorena, F.L. Moreno, F. Togni, F.J. Suarez Anzorena Rosasco; Buenos Aires/AR*
- P-561 Comparison of the incident rate of pneumothorax following CT-guided marking prior to video-assisted thoracic surgery  
*E. Sakata<sup>1</sup>, M. Yabuta<sup>2</sup>, Y. Ishizaka<sup>1</sup>, A. Okumura<sup>1</sup>, T. Koyama<sup>1</sup>; <sup>1</sup>Kurashiki/JP, <sup>2</sup>Tokyo/JP*
- P-562 Undergraduate exposure to interventional radiology: outcomes following a 10-week skills workshop  
*B.M. Moloney, M.J. Mullins, J. Sheehan, P. McAnena, M. Kerin, G.J. O'Sullivan; Galway/IE*
- P-563 Therapeutic efficacy of intra-nodal lymphangiography for chylo-leakages after open aortic surgery in 116 patients  
*S. Hase, T. Nakagawa, M. Kashima, N. Moriya; Kawasaki-city, Kanagawa/JP*
- P-564 Imaging and minimally invasive procedures performed in the management of children with porto-systemic shunts  
*R. Miraglia, F. Milana, L. Maruzzelli, S. Caruso, F. Di Francesco, J. de Ville de Goyet; Palermo/IT*
- P-565 Breath easy: airway management in the interventional radiology operating room  
*H. Dermendjian, K. Kansagra, J. Zhang, R. Patino, C.H. Lam, G. Vatakencherry; Los Angeles, CA/US*
- P-566 Treatment of pseudoaneurysms: role of interventional radiology  
*Q. Sarioglu, A.E. Capar, U. Belet; Izmir/TR*
- P-567 Imaging and intervention in peripheral vascular trauma: a comprehensive review for emergency radiology trainee  
*S. Gamanagatti, A. Kumar; Delhi/IN*  
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*M. Yamamoto, S. Inui, T. Yokoyama, S. Toshimasa, J. Toda, H. Kondo, H. Oba; Tokyo/JP*

- P-569 The role of interventional radiology in the diagnosis and treatment of uretero-iliac fistulas  
*T. MacKinnon<sup>1</sup>, M. Hadi<sup>1</sup>, H.M.O. Elhassan<sup>1</sup>, A. Macdonald<sup>1</sup>, A.J. Wigham<sup>2</sup>, C.R. Tapping<sup>1</sup>;*  
*<sup>1</sup>Oxford/UK, <sup>2</sup>London/UK*
- P-570 Get the filter out of here – complex IVC filter retrieval techniques, a pictorial review  
*P.K. Kavali<sup>1</sup>, P. Shelton<sup>1</sup>, N.B. Mani<sup>2</sup>, R. Ramaswamy<sup>2</sup>, O. Akinwande<sup>3</sup>, M.D. Darcy<sup>2</sup>;*  
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- P-571 The increasing incidence of portomesenteric thrombosis and interventional radiology's role in management  
*M. Mathew, A. Mai, R.C. Zvavanjanja, Z. Bhatti, A.K. Pillai; Houston, TX/US*
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*Y. Zhang, C. Lugo, L. Graham, H. Sogawa, S. McCabe; Valhalla, NY/US*
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*S.Y. Lam, H.Y. Lau; Hong Kong/HK*
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*A. Ruge, A. VL, A. George M; Bangalore/IN*
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*M. Mathew, A. Bosserman, J. Stringam, C. Guevara, A.K. Pillai; Houston, TX/US*
- P-576 Interventional radiology operational flow efficiency  
*S.M. Abualghanam; Riyadh/SA*
- P-577 Diagnosis and interventional therapy of lymphatic malformations in infants  
*W. Uller; Regensburg/DE*
- P-578 A review of the role of IR in the management of trauma patients within a networked trauma centre  
*J. Skinner, M. Murphy, M. Macanovic, N.F. Gafoor, R. Miles, I.J. Walton, P.J. Coates;*  
*Plymouth/UK*
- P-579 Decision modeling and value-of-information analysis: underutilized tools in interventional radiology  
*E. Levy, M. Castro; Bethesda, MD/US*
- P-580 Intranodal lymphangiography as a diagnostic and therapeutic method for managing postoperative lymphatic leaks  
*H. Goessmann<sup>1</sup>, W. Uller<sup>1</sup>, V. Teusch<sup>2</sup>, W.A. Wohlgemuth<sup>2</sup>;*  
*<sup>1</sup>Regensburg/DE, <sup>2</sup>Halle/DE*

- P-581 Percutaneous CT-guided ablation of adrenal adenomas  
*J. Macedo, I. Abreu, M. Barros, L.A. Ferreira, F. Alves, F.C. Alves; Coimbra/PT*
- P-582 The PEER course: expanding and developing endovascular skills across professional disciplines for novel use in trauma and prehospital care  
*M. Chana, W. Fleming, J. Manson, S. Sadek, G. Grier; London/UK*
- P-583 How to make low cost ultrasound phantoms for training in interventional radiology (with emphasis on lower resource settings)  
*T. Asghar<sup>1</sup>, T. Peachey<sup>1</sup>, H. Matheron<sup>2</sup>, D. van Leerdam<sup>2</sup>, H. Bolkan<sup>2</sup>; <sup>1</sup>Sheffield/UK, <sup>2</sup>Masanga/SL*
- P-584 Pulmonary vein stenting for the management of vein isolation ablation induced pulmonary vein stenosis  
*M. Hadi, R. Rippel, T. Xu, H.M.O. Elhassan, R. Uberoi; Oxford/UK*
- P-585 Peninsula radiology academy open day – impact and influence on junior doctors and medical students, our institution experience  
*Y.K.K. Chan, A. Gurung, S. McGlade, N.F. Gafoor; Plymouth/UK*
- P-586 Pelvic slow flow venous malformation embolization with polidocanol foam guided by transrectal ultrasound  
*D. Oliveira, L. Cardarelli-Leite, T. Leite, F. Urakawa, A. Fratezi, F.C. Carnevale; São Paulo/BR*
- P-587 Hepatic vein stenting in a 7 weeks/old infant with Budd-Chiari syndrome using an antegrade approach from inferior accessory hepatic vein  
*R. Miraglia, L. Maruzzelli, S. Caruso, J. de Ville de Goyet; Palermo/IT*
- P-588 Interdisciplinary complication management of dislodged TLIF-spacer in pulmonary artery  
*A.S. Kunz, T. Klink, T.A. Bley, R. Kickuth; Wuerzburg/DE*
- P-589 A case of trans-arterial embolization for intraoral bleedings complicated with suppurative parotitis  
*S. Kasuya, H. Kikuchi, T. Inaoka, Y. Kitazawa, T. Nakatsuka, H. Masuda, N. Kitamura, H. Terada; Sakura/JP*
- P-590 Two cases of insulinoma diagnosed by the selective arterial secretin injection test with low concentration of calcium gluconate  
*T. Fujii, Y. Baba, W. Fukumoto, K. Chosa, K. Awai; Hiroshima/JP*
- P-591 Thoracic duct embolisation – managing a late presentation of thoracic duct leak following Ivor-Lewis oesophagogastratomy  
*T. Gordon, G. Weir; Edinburgh/UK*

- P-592 Retrieval and removal of a migrated covered stent from left pulmonary artery.  
*M. Salsano, P. Singh, J. Freedman; Birmingham/UK*
- P-593 Massive acute pulmonary artery haemorrhage embolisation  
*P. Tantrige, T. Ammar, D. Huang; London/UK*
- P-594 Hybrid surgery for post-thrombotic syndrome: a case report  
*P.N. Lima, L. Antunes, G. Anacleto, A. Gonçalves, Ó. Gonçalves; Coimbra/PT*
- P-595 Percutaneous snaring of two retroperitoneally dislocated cystogastrostomy drains originally placed for treatment of a pancreatic pseudocyst  
*A. Leoncini, M. Maffei, F. Del Grande, R.C. Balzarotti Canger, V.O. Tobe, S. Cappio; Lugano/CH*
- P-596 First percutaneous transhepatic mitral valve repair with the mitraclip system  
*F.S. Brito Jr, V.O. Carvalho, R.B. Martins, J. Mariani Jr, P.A. Lemos Neto, C.H. Fischer, B.B. Affonso, F.L. Galastri, F. Nasser, R.G. Garcia; São Paulo/BR*
- P-597 Presurgical coil embolization of a bleeding sacral mass in a 1 kilogram premature newborn using umbilical artery catheter access, a novel approach and technique  
*L.A. Campos, R. Schenning; Portland, OR/US*
- P-598 Role of MRI in identifying the location of cisterna chyli and its successful percutaneous cannulation and embolisation in two cases of thoracic duct injury  
*M.K. Yadav, M. Unni; Trivandrum/IN*
- P-599 Successful treatment of symptomatic hemangioma by bland embolization – case report  
*T. Azrumelashvili, M. Mizandari; Tbilisi/GE*
- P-600 Ureteric herniation into the sciatic foramen  
*M.G. Fadel, C. Louis, A. Tay, M. Bolgeri; London/UK*  
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- P-601 Multidisciplinary revisited: Percutaneous sclerotherapy of a symptomatic uvular venous malformation  
*P.J. Rochon<sup>1</sup>, A. Terella<sup>2</sup>; <sup>1</sup>Denver, CO/US, <sup>2</sup>Aurora, CO/US*
- P-602 Lung sequestration. Pre-surgical embolization.  
*C. Jimenez Zapater, J. Jordá Lope, M. Bustamante Sanchez, B. García Martínez, E. Marín Díez; Santander/ES*  
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- P-603 Embolization of inferior pancreaticoduodenal artery aneurysm with celiac stenosis or occlusion: three cases report and review of the literature  
*H.S. Jung<sup>1</sup>, C.H. Jeon<sup>2</sup>, J.H. Park<sup>3</sup>; <sup>1</sup>Pusan/KR, <sup>2</sup>Busan/KR, <sup>3</sup>Goseong/KR*

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*A. Izzo, M. Varrassi, M.V.M. Micelli, P. Palumbo, G. Bianchi, S. Carducci, A.V. Giordano, C. Masciocchi; L'Aquila/IT*

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*T. Leite<sup>1</sup>, B. Linard<sup>2</sup>, E. Bortolini<sup>2</sup>, B.B. Affonso<sup>2</sup>, C.H. Nomura<sup>2</sup>, F.C. Carnevale<sup>2</sup>, J.M. Motta-Leal-Filho<sup>2</sup>; <sup>1</sup>Patos De Minas, Minas Gerais, Mg/BR, <sup>2</sup>São Paulo/BR*
- P-607 Carbon-coated self-expandable stents in patients with atherosclerotic iliac artery disease  
*N. Troisi, S. Panci, E. Chisci, S. Michelagnoli; Florence/IT*
- P-608 Utility of 2D perfusion angiography to predict wound healing in patients undergoing isolated femoropopliteal endovascular revascularization  
*N. Troisi, S. Panci, S. Bacchi, D. Incerti, L. Lovecchio, G.L. Dedola, S. Michelagnoli; Florence/IT*
- P-609 Outcomes of elective percutaneous peripheral revascularization in outpatients: 10-year single center experience  
*S. Malekzadeh<sup>1</sup>, F. Doenz<sup>1</sup>, T. Rolf<sup>1</sup>, C. Constantin<sup>2</sup>, A.-M. Jouannic<sup>1</sup>, S.D. Qanadli<sup>1</sup>; <sup>1</sup>Lausanne/CH, <sup>2</sup>Geneva/CH*
- P-610 The effectiveness of the paclitaxel-coated Luminor<sup>®</sup> balloon catheter versus an uncoated balloon catheter in superficial femoral and popliteal arteries in preventing vessel restenosis or reocclusion: 12 months results of a randomized-controlled trial  
*U. Teichgräber; Jena/DE*
- P-611 Endovascular treatment using combination of multiple endovascular techniques with or without surgical thromboembolectomy for acute lower limbs ischemia  
*T. Ueda<sup>1</sup>, S. Murata<sup>2</sup>, H. Tajima<sup>3</sup>, F. Sugihara<sup>1</sup>, D. Yasui<sup>1</sup>, H. Saitou<sup>1</sup>, I. Tanaka<sup>1</sup>, S.-I. Kumita<sup>1</sup>; <sup>1</sup>Tokyo/JP, <sup>2</sup>Chiba/JP, <sup>3</sup>Kawasaki, Kanagawa/JP*
- P-612 Efficacy and safety of duplex-guided polidocanol foam sclerotherapy for venous malformations  
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*F. de Crescenzo, A. Bozzi, A. Raso, R. Gandini; Rome/IT*
- P-615 Post-dilatation of an interwoven nitinol stent using a paclitaxel-eluting balloon for revascularization of complex femoro-popliteal lesions  
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*B. Migliara; Peschiera Del Garda/IT*
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*M. Brodmann<sup>1</sup>, T. Zeller<sup>2</sup>, L. Spak<sup>3</sup>, J.-M. Corpataux<sup>4</sup>, J.K. Christensen<sup>5</sup>, K.F. Keirse<sup>6</sup>, G. Nano<sup>7</sup>, H. Schröder<sup>8</sup>, C.A. Binkert<sup>9</sup>, G. Tepe<sup>10</sup>; <sup>1</sup>Graz/AT, <sup>2</sup>Bad Krozingen/DE, <sup>3</sup>Kosice/SK, <sup>4</sup>Lausanne/CH, <sup>5</sup>Kolding/DK, <sup>6</sup>Tienen/BE, <sup>7</sup>Milan/IT, <sup>8</sup>Berlin/DE, <sup>9</sup>Winterthur/CH, <sup>10</sup>Rosenheim/DE*
- P-618 6 months follow-up of tack optimized balloon angioplasty combined with drug-coated balloon of superficial femoral artery lesions: single center experience  
*T.-C. Sabou, F. Scheer, C. Kopetsch, R. Andresen, C. Wissgott; Heide/DE*
- P-619 Real-world experience with a paclitaxel coated balloon for the treatment of atherosclerotic infrainguinal arteries. Twenty four-month results of the BIOLUX P-III all-comers registry  
*G. Tepe<sup>1</sup>, M. Brodmann<sup>2</sup>, T. Zeller<sup>3</sup>, L. Spak<sup>4</sup>, J.-M. Corpataux<sup>5</sup>, J.K. Christensen<sup>6</sup>, K.F. Keirse<sup>7</sup>, G. Nano<sup>8</sup>, C.A. Binkert<sup>9</sup>, H. Schröder<sup>10</sup>; <sup>1</sup>Rosenheim/DE, <sup>2</sup>Graz/AT, <sup>3</sup>Bad Krozingen/DE, <sup>4</sup>Kosice/SK, <sup>5</sup>Lausanne/CH, <sup>6</sup>Kolding/DK, <sup>7</sup>Tienen/BE, <sup>8</sup>Rome/IT, <sup>9</sup>Winterthur/CH, <sup>10</sup>Berlin/DE*  
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- P-620 Real-world experience with a paclitaxel-coated balloon for the treatment of atherosclerotic infrainguinal arteries. Twenty four-month results of the BIOLUX P-III all comers registry in superficial femoral arteries  
*C.A. Binkert<sup>1</sup>, M. Brodmann<sup>2</sup>, T. Zeller<sup>3</sup>, L. Spak<sup>4</sup>, J.-M. Corpataux<sup>5</sup>, J.K. Christensen<sup>6</sup>, K.F. Keirse<sup>7</sup>, G. Nano<sup>8</sup>, H. Schröder<sup>9</sup>, G. Tepe<sup>10</sup>; <sup>1</sup>Winterthur/CH, <sup>2</sup>Graz/AT, <sup>3</sup>Bad Krozingen/DE, <sup>4</sup>Kosice/SK, <sup>5</sup>Lausanne/CH, <sup>6</sup>Kolding/DK, <sup>7</sup>Tienen/BE, <sup>8</sup>Rome/IT, <sup>9</sup>Berlin/DE, <sup>10</sup>Rosenheim/DE*
- P-621 Emergency implantation of Bentleys BeGraft peripheral stent-graft system in the management of vessels injuries: preliminary results  
*M.A. Ruffino, M. Fronda, A. Discalzi, D. Righi, P. Fonio; Turin/IT*

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- P-623 Early- and long-term patency after endovascular treatment of patients with infrarenal aortic stenosis  
*A. Bercez, M. Vértes, V. Bérczi, B. Nemes, K. Huttli, E. Dósa; Budapest/HU*
- P-624 Near-infrared angiography in diabetic patients with critical limb ischemia: a pilot study  
*Z. Djemilova, P. Grachev, G. Galstyan, I.I. Sitkin, V. Loshenov, K. Lin'kov; Moscow/RU*
- P-625 The Lutonix® global drug coated balloon registry real world patients with below the knee disease – interim 12 month outcomes  
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- P-626 9 months results of real-life use of the latest generation of balloon expandable DES in below-the-knee treatment  
*P. Goverde; Antwerp/BE*
- P-628 Lutonix drug coated balloon long lesion study – 24 month outcomes  
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*G. Falcone, C. Raspanti, G. Gabbani, E. Casamassima, M. Citone, F. Mondaini, F. Fanelli; Florence/IT*
- P-631 Acute upper limb ischemia in neonates: management with local tPA infusion  
*A. El-Ali, L. Grunwaldt, S. Yilmaz; Pittsburgh, PA/US*
- P-632 Visceral artery aneurysms: Initial and mid-term outcomes of treatment by transcatheter coil embolization  
*O. Ikeda<sup>1</sup>, Y. Tamura<sup>2</sup>, S. Inoue<sup>1</sup>, Y. Yamashita<sup>1</sup>; <sup>1</sup>Kumamoto/JP, <sup>2</sup>Kumamoto-shi/JP*
- P-633 Use of retrograde access for the recanalization of infrapopliteal occlusions. Where and how to do it? How to continue the procedure?  
*D. Contreras Padilla, A.J. Mantilla Pinilla, M.D. Pascual Robles, S. Gil Sánchez, J. Irurzun, F. Sanchez Blanco, R. Perez Lopez; Alicante/ES*
- P-634 Innovative true-lumen vessel re-entry: bailout arterial and venous applications of the Outback™ catheter  
*J.P. Das<sup>1</sup>, H. Abbas<sup>1</sup>, R. Nourzair<sup>1</sup>, I. Ahmed<sup>1</sup>, N. Thulasidasan<sup>1</sup>, U. Raja<sup>1</sup>, P. Gkoutzios<sup>1</sup>, K.N. Katsanos<sup>2</sup>, A. Diamantopoulos<sup>1</sup>; <sup>1</sup>London/UK, <sup>2</sup>Patras/GR*

- P-635 Embolization of retroperitoneal iliaco-gonadal shunt  
*M. Nakamura, R. Yoshida; Izumo/JP*
- P-636 A strange case of foot pain: an atypical aneurism  
*A. Paladini<sup>1</sup>, A. Borzelli<sup>2</sup>, R. Niola<sup>2</sup>, F. Amodio<sup>2</sup>, E. Cavaglià<sup>2</sup>, G. Cangiano<sup>2</sup>, F. Giurazza<sup>2</sup>, F. Corvino<sup>2</sup>, M. Silvestre<sup>2</sup>, G.E. Vallati<sup>1</sup>; <sup>1</sup>Rome/IT, <sup>2</sup>Naples/IT*
- P-637 Case of successful endovascular treatment of intrahepatic portosystemic fistula of 1 month old infant using Amplatzer vascular plug II complicated with intraoperative perforation of fistula by guiding catheter  
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*D. Cornell, A. Wadhvani, M. Nutley, A. Mirakhur; Calgary, AB/CA*
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*I. Semin; Arkhangelsk/RU*
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*E. Robinson, H. Abbas, L. Mihaila, R. Nourzaie, J.P. Das, K. Chircop, B. Modarai, H. Zayed, P. Gkoutzios, A. Diamantopoulos; London/UK*
- P-643 Infrapopliteal in-stent Phoenix atherectomy, a new tool in the IRs armoury  
*A.K. Gupta, N. Thulasidasan, A. Diamantopoulos; London/UK*
- P-644 An unusual case of subintimally malpositioned iliacstent due to unrecognized chronic abdominal aortic dissection  
*S.S. Amin<sup>1</sup>, B. Schmuck<sup>2</sup>, R.P. Thomas<sup>3</sup>, A. Chavan<sup>1</sup>; <sup>1</sup>Oldenburg/DE, <sup>2</sup>Bremen/DE, <sup>3</sup>Marburg/DE*
- P-645 Staged bilateral stenting of vertebral arteries in a patient with occlusions of both internal carotid arteries  
*A. Pankov, N. Zakaryan, A. Shelesko, V. Kirakosyan; Moscow/RU*

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*A.M. Alsaadany, M. Sharahili, H.S. Alsuhaibani, S. Binkhamis; Riyadh/SA*

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*M. Cabri, O.M. van Delden, K.P. van Lienden; Amsterdam/NL*

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*S. Ockert, M. Heinrich, T.K. Kaufmann, R. Seelos; Lucerne/CH*

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*T. Takata<sup>1</sup>, H. Kondo<sup>2</sup>, M. Yamamoto<sup>2</sup>, S. Furu<sup>2</sup>, K. Shiraishi<sup>2</sup>, T. Kobayashi<sup>1</sup>, T. Okamoto<sup>1</sup>, H. Oba<sup>2</sup>, J. Kotoku<sup>1</sup>; <sup>1</sup>Itabashi-ku/JP, <sup>2</sup>Tokyo/JP*

P-653 Radiation dose reduction with "ultra low radiation" protocol during arteriovenous dialysis access interventions.  
*K. Damodharan, J. Tsai, N.K. Venkatanarasimha, A. Gogna, C.S. Tan, S. Chandramohan; Singapore/SG*

P-654 75% X-ray dose reduction in angiography – comparing kinetic imaging with conventional DSA  
*M. Gyano, B. Nemes, D. Veres, D. Szöllösi, S. Osváth, K. Szigeti, P. Sótonyi; Budapest/HU*

P-655 Dyna-CT guidance, fluoroscopy time and radiation dose in bilateral prostatic arterial embolisation.  
*C. Perazzini, B. Plateau, E. Dumoussset, L. Sabourin, L. Boyer, L. Cassagnes, P. Chabrot; Clermont-Ferrand/FR*

P-656 Indirect arterial portography in transarterial chemoembolization: potential for reduced dose?  
*C.E. O'Brien, A. Weir, B. Kelly, J. Duignan, A. O'Brien, R. Ryan; Dublin/IE*

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*L. Mascagni<sup>1</sup>, M.A. Tipaldi<sup>1</sup>, F. Laurino<sup>1</sup>, G. Orgera<sup>1</sup>, M.E. Krokidis<sup>2</sup>, M. Rossi<sup>1</sup>; <sup>1</sup>Rome/IT, <sup>2</sup>Cambridge/UK*
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*K. Tomita, T. Matsumoto, S. Suda, K. Hashida, S. Shoji, H. Zakoji, T. Hasebe; Hachioji, Tokyo/JP*
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*C.H. Jeon, C.W. Kim, H. Kwon; Busan/KR*  
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*T. Oda; Osakasayama/JP*
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*A. Harada, T. Yamada; Tokyo/JP*
- P-663 Renal artery embolization for vascular lesions following Nephron-sparing surgery: a five-year experience  
*E.M. Amodeo, A. Contegiacomo, A. Paladini, D. Coppolino, N. Attempati, A. Cina, C. Di Stasi, R. Manfredi; Rome/IT*
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*H.I. de Sousa Guerreiro, G. Adam, M. Regier; Hamburg/DE*
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*C. Hazar, R. Frood, E. Palkhi, S. Puppala; Leeds/UK*

- P-667 Renal artery variants: origins other than the aorta  
*R. Rehwald<sup>1</sup>, J.M. Böhm<sup>2</sup>, A. Abousi<sup>1F</sup>, T. Oberlader<sup>2</sup>, N.S. Scheiber<sup>2</sup>, M. Ouaret<sup>2</sup>, P. Rehder<sup>2</sup>, J. Petersen<sup>2</sup>, B. Glodny<sup>2</sup>; <sup>1</sup>Cambridge/UK, <sup>2</sup>Innsbruck/AT*
- P-668 Management of traumatic parenchymal injuries of the spleen  
*C. Scheurig-Muenkler, H. Ruhnke, T.J. Kroencke; Augsburg/DE*
- P-669 Vascular complications after liver transplant  
*E. Villacastín-Ruiz, H. Calero-Aguilar, R. Pintado-Garrido, S. Plaza-Loma, A. Ginés-Santiago, M. Hernández-Herrero, A.A. Montes-Tomé, M. Alonso-Lacabe, F.X. Brunie-Vegas, M. Fajardo-Puentes; Valladolid/ES*
- P-670 Splenic arterial embolisation: a review of techniques and appropriate intervention  
*S. Ang, B. Hawthorn, J.-Y. Chun, S. Ameli-Renani, L. Mailli, L. Ratnam; London/UK*
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*P.S. Najran, J.K. Bell, D. Mullan; Manchester/UK*
- P-673 Effective and safe supraselective transcatheter embolisation of renal angiomyolipoma. 10 cases review. Single centre experience.  
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- P-674 Pseudoaneurysm complicating acute pancreatitis: what do we know and what can we do?  
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- P-675 A case of giant common hepatic artery aneurysm successfully treated byTAE with isolation technique via pancreatic duodenal arcade  
*K. Masuda, S. Takenaga, K. Morikawa, H. Ashida; Tokyo/JP*
- P-676 Blunt renal artery trauma: Interventional radiology management  
*U.G. Rossi<sup>1</sup>, A. Valdata<sup>1</sup>, F. Pinna<sup>1</sup>, L.C. Pescatori<sup>2</sup>, P. Torcia<sup>3</sup>, A.M. Ierardi<sup>3</sup>, G. Carrafiello<sup>3</sup>, M. Cariat<sup>3</sup>; <sup>1</sup>Genova/IT, <sup>2</sup>San Donato Milanese/IT, <sup>3</sup>Milan/IT*
- P-677 Splenic artery pseudoaneurysm and splenic infarction induced by a benign gastric ulcer  
*S.E. Park<sup>1</sup>, H.C. Cho<sup>1</sup>, S. Cho<sup>1</sup>, S.M. Lee<sup>2</sup>; <sup>1</sup>Changwon/KR, <sup>2</sup>Jinju/KR*

- P-678 Spontaneous mediastinum hematoma due to rupture of bilateral bronchial arteries by TAE with NBCA  
*K. Masuda, S. Takenaga, K. Morikawa; Tokyo/JP*
- P-679 Endovascular and direct puncture embolization of hepatic artery pseudoaneurysms with fistula to the portal vein  
*M. Leyva Vásquez Caicedo, C.J. Gonzalez Nieto, J.E. Armijo Astrain, J.V. Méndez Montero; Madrid/ES*
- P-680 Stent-assisted coil-jailing technique for embolization of wide-neck renal artery aneurysm in a patient with a solitary kidney  
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- P-681 Management of bilateral renal chimney stent thrombosis with thromboaspiration and PTA  
*M. Orlandi, S. Cipollari, P.G. Nardis, M. Corona, P. Lucatelli, M. Bezzi; Rome/IT*
- P-682 Hepatic arterial hypoperfusion syndrome (HAHS)  
*E.C. Celebioglu, S. Akcalar, S. Bilgic, O. Kirimker, U. Sanlidilek; Ankara/TR*
- P-683 Reperfusion of treated renal artery aneurysm: an infective relation?  
*L. Giorgi, I. Bargellini, L. Crocetti, O. Perrone, R. Cioni, D. Caramella; Pisa/IT*
- P-684 Endovascular treatment with flow diverter of aneurysms in the splenic artery: Images, intervention and follow up of two cases.  
*P. Largo Flores, A.M. Basail, I. Diaz Lorenzo, J. Cuesta Perez; Madrid/ES*
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*E. Wajswol, V. Chandra, D. Klyde, A. Kumar; Newark, NJ/US*
- P-686 Onyx embolisation for the management of acute haemorrhage of an infant's Wilms' tumour: a case report  
*M.F. de Almeida Costa e Craveiro da Rocha, K.D. Jethwa, M. Haneef, A. Shah; Nottingham/UK*
- P-687 Ischemic colitis due to a inferior mesenteric arterio-venous malformation: a rare case of successful endovascular treatment  
*M.F. Nogueira<sup>1</sup>, R.C. Gonzalez<sup>2</sup>, S.A. Mendez<sup>2</sup>, J.G. Patiño<sup>2</sup>, A.S. García<sup>2</sup>; <sup>1</sup>Matosinhos/PT, <sup>2</sup>Madrid/ES*  
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- P-688 Coil embolization of mesenteric arterio-venous fistula with portal hypertension  
*S. Molinaro, R. Russo, M.A. Ruffino, D. Rossato, A. Discalzi, P. Fonio; Turin/IT*

- P-689 Successful endovascular therapy for renal artery occlusion due to chronic atrial fibrillation: A case report  
*H. Muranishi<sup>1</sup>, T. Okabe<sup>2</sup>, Y. Komura<sup>1</sup>; <sup>1</sup>Sakaide-City, Kagawa/JP, <sup>2</sup>Osaka/JP*
- P-690 Successful endovascular therapy for coral reef aorta with renal artery stenosis  
*S. Nagatomi, H. Yamamoto, D. Kanamori; Osaka City/JP*
- P-691 High flow renal arteriovenous fistula causing hypertension – Plug and coil embolization  
*P.K. Kavali, P. Shelton, A. Shetty; Saint Louis, MO/US*
- P-692 Treatment of renal artery stenosis in a solitary kidney using cutting balloon angioplasty in a paediatric patient.  
*T. Hall, A. Williams, F. Hussain, R. O'Neill; Nottingham/UK*
- P-693 Endovascular repair of infected superior mesenteric aneurysm using the stent graft: A case report  
*Y. Murakami, K. Anai, K. Futatsuya, S. Kakeda, N. Ohnari, Y. Korogi; Kitakyushu/JP*
- P-694 New approach for hepatic arterial infusion chemotherapy (HAIC), using steerable microcatheter and outer cannula of puncture needle (SMOC)  
*Y. Kawahara, Y. Koike, H. Tannai, B. Kiss, M. Yonezu, A.D. Obara, S. Matsui; Yokohama City, Kanagawa Pref./JP*
- P-695 Through-and-through technique in superior mesenteric artery stenting via celiac artery collateral for totally occlusion  
*L.G.M. Valle, V.O. Carvalho, R.B. Martins, P.M. Falsarella, D.L.N. Martins, F.A.C. Junior, A. Rahal Jr, J.M. Motta-Leal-Filho, B.B. Affonso, F.L. Galastri, R.G. Garcia, F. Nasser; São Paulo/BR*
- P-696 Gastroduodenal artery pseudoaneurysm bleeding into a pancreatic pseudocyst– successful treatment with coils embolization  
*C. Maciel, P. Vilares Morgado, J. Paquete; Porto/PT*
- P-697 Embolisation of a visceral aneurysm of the distal tract of a mesocolic branch with origin from splenic artery: tips and tricks  
*G. Capurri, C. Marcato, E. Epifani, A. Andreone, I. Paladini, M. Fantoni, R. Zannoni; Parma/IT*
- P-698 Interventional management of hepatic rupture after laparoscopic adrenalectomy  
*J.A. Hwang<sup>1</sup>, H.N. Lee<sup>1</sup>, S.K. Cho<sup>2</sup>, S.W. Shin<sup>2</sup>, W.-H. Lee<sup>1</sup>; <sup>1</sup>Cheonan/KR, <sup>2</sup>Seoul/KR*

- P-699 Visceral artery aneurysm with bleeding involving inferior mesenteric artery in neurofibromatosis type I successfully treated by embolization  
*S.W. Ji, U.R. Kang, Y.H. Kim; Daegu/KR*
- P-700 Multiple renal aneurysms involving the main branch. Percutaneous resolution with combined technique of coils and Flow diverting stent.  
*J.R. Mieres, R. Cárdenas, C. Fernández, O. Santaera, R. Farfan, A.E. Rodríguez; Buenos Aires/AR*
- P-701 Glue embolization technique under inflow and outflow control by balloon occlusion for renal arteriovenous malformation  
*H. Yamaguchi, A. Yamamoto, J. Tamai, Y. Kobayashi, S.-I. Kumita; Tokyo/JP*
- P-702 Endovascular treatment of a complex renal artery aneurysm with a p64 flow modulation device  
*M.F. Nogueira<sup>1</sup>, R.C. González<sup>2</sup>, A.A. Vega<sup>2</sup>; <sup>1</sup>Porto/PT, <sup>2</sup>Madrid/ES*

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- P-703 Comparison of efficacy and safety of transjugular intrahepatic portosystemic shunt (TIPS) creation using 8- VS 10-mm PTFE-covered stents for the treatment of refractory ascites in patients with cirrhosis and portal hypertension  
*G. Kroma, J. Lopera, A. Garza-Berlenga, R. Suri, J. Walker, A.M. Zafar, P. Mandal, A. Haq, L. Abazid, M. Vela; San Antonio, TX/US*
- P-704 The future liver remnant volume (FLR) in partial associating liver partition and P4 vein ligation combining trans-ileocecal portal vein embolization for staged hepatectomy (Modified ALPPS-TIPE)  
*M. Maruyama, M. Nakamura, H. Araki, R. Yoshida, S. Ando, T. Yoshizako, H. Kitagaki; Izumo/JP*
- P-705 Effect of additional segment 4 portal vein embolisation compared with right portal vein embolisation alone on future liver remnant in patients with colorectal cancer liver metastases  
*C.J. Hammond, J.V. Patel, S. Ali, H. Haq, P. Lodge; Leeds/UK*
- P-706 Efficiency of endovascular treatment for portal venous thrombosis after living donor liver transplantation and its relationship with thrombus property  
*K. Tokunaga, A. Furuta, S. Kohno, R. Imamine, S. Kawahara, H. Shimizu, S. Arizono, H. Isoda, K. Togashi; Kyoto/JP*

- P-707 Persistence of gastric or esophageal varices on final trans-TIPS angiography increases TIPS revision rate after PTFE-covered stent creation  
*L.C. Pescatori<sup>1</sup>, B. Moulin<sup>2</sup>, O. Chevallier<sup>2</sup>, M. Latournerie<sup>2</sup>, S. Gehin<sup>2</sup>, M. Midulla<sup>2</sup>, R. Loffroy<sup>2</sup>; <sup>1</sup>San Donato Milanese/IT, <sup>2</sup>Dijon/FR*
- P-708 The utility of ICGK-F (future liver remnant plasma clearance rate of indocyanine green) for predicting post-hepatectomy liver failure (PHLF) and increasing rate of %FLR (future liver remnant volume to total liver volume) after PVE (portal vein embolization) using absolute ethanol compared with that of gelatin particles  
*M. Maruyama, M. Nakamura, H. Araki, R. Yoshida, S. Ando, T. Yoshizako, H. Kitagaki; Izumo/JP*
- P-709 Efficacy of transjugular intrahepatic portosystemic shunt for refractory ascites in patients with renal dysfunction  
*A.C. Burgos, A. Riaz, L. Kulik, R.J. Lewandowski, B. Thornburg; Chicago, IL/US*
- P-710 Usefulness of 4D-CT in balloon-occluded retrograde transvenous obliteration (BRTO) for gastric varices  
*Y. Furuta, M. Shimohira, S. Kazushi, K. Ohta, T. Goto, Y. Sawada, Y. Shibamoto; Nagoya/JP*
- P-711 Novel approach for antegrade obliteration of gastric varices utilizing intravascular ultrasound  
*R. Melikian, H. Aryafar; San Diego, CA/US*
- P-712 Transjugular intrahepatic portosystemic shunt using a new controlled expansion e-PTFE covered stent: single center experience with short term follow-up  
*R. Miraglia, L. Maruzzelli, I. Petridis, R. Volpes, F. Tuzzolino, A. Luca; Palermo/IT*
- P-713 Safety and effectiveness of portal vein embolization utilizing n-Butyl cyanoacrylate for contralateral lobe hypertrophy prior to liver resection: a systematic review and meta-analysis  
*E. Wajswol, T. Jazmati, A. Kumar; Newark, NJ/US*  
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*T. Araki, H. Okada, A. Imaizumi, H. Onishi; Yamanashi/JP*
- P-715 Long-term effects of endovascular intervention on portal venous inflow disturbance following liver transplantation  
*H.D. Jung; Anyangsi/KR*
- P-716 Embolization of parastomal and small bowel ectopic varices utilizing a transhepatic antegrade approach  
*H. Basseri, S.B. Nair; Hamilton, ON/CA*

- P-717 Recanalization of transjugular intrahepatic portosystemic shunts occlusion with the Rösch-Uchida stiffening cannula  
*C. Konstantos<sup>1</sup>, S. Spiliopoulos<sup>1</sup>, K. Palialexis<sup>1</sup>, N. Vasiniotis Kamarinos<sup>1</sup>, L. Reppas<sup>2</sup>, M. Tsitskari<sup>1</sup>, D.K. Filippiadis<sup>1</sup>, A.D. Kelekis<sup>1</sup>, E. Brountzos<sup>1</sup>; <sup>1</sup>Athens/GR, <sup>2</sup>Chaidari/GR*
- P-718 Clinical outcome analysis of TIPS using ePTFE covered stentgrafts in patients with liver cirrhosis and refractory ascites  
*M.B. Pitton, T. Zimmermann, S. Schotten, R. Kloeckner, J. Mittler, A. Weinmann, C. Düber; Mainz/DE*
- P-719 Comparison between a conventional glue and a new non adhesive ethylene vinyl alcohol (EVOH) based embolic agent in right portal vein embolization (PVE): a preliminary study  
*M.M. Panzeri, M. Venturini, P. Marra, L. Augello, F. De Cobelli, A. Del Maschio; Milan/IT*
- P-720 Feasibility and efficacy of transjugular intrahepatic portosystemic stent-shunt in liver transplant recipients  
*P.P. Goffette, O. Ciccarelli, E. Bonacorsi, L. Coubeau, X. Wittebole, J.P. Lerut; Brussels/BE*
- P-721 Prospective clinical trial of portal vein embolization – evaluation of liver hypertrophy at 14 days and 28 days – is it necessary to wait so long?  
*J.H.M. Luz, É. Coimbra, T. Bilhim, F.V. Gomes, M.T. Correia, N.V. Costa; Lisbon/PT*
- P-722 TIP of the ICE: transjugular intrahepatic portosystemic shunt (TIPS) with intracardiac echocardiography (ICE)  
*S. Kao, J. Park, N. Koney, G. Tse, M. Walsworth, A. Chen, S. Padia; Los Angeles, CA/US*
- P-723 Porto-mesenteric thrombosis complicating factor V Leiden deficiency: the role of combined mechanical and chemical thrombolysis  
*B. Dhillon<sup>1</sup>, B. Koo<sup>2</sup>, T. Ali<sup>1</sup>; <sup>1</sup>Norwich/UK, <sup>2</sup>Cambridge/UK*
- P-724 Balloon-occluded retrograde transvenous obliteration using N-Butyl Cyanoacrylate–Lipiodol–Ethanol mixture for gastric varices  
*M. Nakai, A. Ikoma, N. Higashino, T. Inagaki, T. Sonomura; Wakayama/JP*
- P-725 Rare case of adult-onset portosystemic encephalopathy caused by patent ductus venosus treated with endovascular coil embolization  
*H. Muranishi, Y. Komura; Sakaide-City, Kagawa/JP*
- P-726 Ruptured duodenal varices successfully treated with balloon occluded retrograde obliteration (BRTO) through right gonadal vein  
*Y. Masuda, H. Tateishi, T. Kariyasu, K. Kuroki, Y. Kinoshita, H. Shiga, M. Watanabe, K. Yokoyama; Tokyo/JP*

- P-727 Dual balloon-occluded embolotherapy after endoscopic injection sclerotherapy for duodenal variceal bleeding: a case report  
*H. Tahara, K. Shibuya, K. Otachi, E. Hayashi, K. Kishi, K. Horiuchi, K. Yuasa, D. Kaburagi, N. Sohara; Maebashi/JP*
- P-728 A case of endovascular treatment with stent graft for a portal pseudoaneurysm after a pancreatoduoduodenectomy  
*S. Kasuya, H. Kikuchi, R. Takagi, A. Sato, M. Ando, T. Inaoka, T. Nakatsuka, H. Masuda, N. Kitamura, H. Terada; Sakura/JP*
- P-729 Gastric varix with pericardiophrenic drainage vein refractory to balloon-occluded retrograde transvenous obliteration (BRTO) successfully treated by percutaneous transhepatic obliteration (PTO).  
*Y. Munetomo<sup>1</sup>, S. Yamazoe<sup>2</sup>, Y. Hasegawa<sup>1</sup>, A. Baba<sup>2</sup>, Y. Kobashi<sup>3</sup>, T. Mogami<sup>2</sup>; <sup>1</sup>Tokyo/JP, <sup>2</sup>Chiba/JP, <sup>3</sup>Fujisawa/JP*
- P-730 Innovatine percutaneous endovascular technique to treat a giant portal vein aneurism  
*C. Massa Saluzzo, G. Bonalumi, G. Mazzotta; Pavia/IT*
- P-731 A hybrid interventional radiological and endoscopic treatment of gastroesophageal varices: a case report  
*K. Azama, F. Ganaha, J. Ito, Y. Iraha, M. Toguchi, J. Heianna, S. Murayama; Okinawa/JP*
- P-732 Balloon-occluded retrograde transvenous obliteration with additional carbon dioxide injection following liquid sclerosing agent: report of three cases  
*K. Oji<sup>1</sup>, M. Maruno<sup>1</sup>, H. Kiyosue<sup>1</sup>, S. Matsumoto<sup>1</sup>, H. Mori<sup>1</sup>, S. Tanoue<sup>2</sup>; <sup>1</sup>Yufu/JP, <sup>2</sup>Kurume/JP*
- P-733 Chronic Budd Chiari syndrome, mesenteric and portal venous thrombosis endovascular management  
*J.A. Avila Armendariz, J.F. Acosta; Chihuahua/MX*
- P-734 A rare case of congenital extrahepatic portosystemic shunt  
*Y. Matsui, Y. Nozawa, T. Higuchi, Y. Munetomo, H. Ashida; Tokyo/JP*
- P-735 Percutaneous trans-splenic embolization and partial splenic embolization for bleeding gastric varices due to sinistral portal hypertension  
*N. Kinota, B. Takahashi, Y. Nakamura, N. Miyamoto; Obihiro Hokkaido/JP*
- P-736 Acute venous thrombosis of spleno-mesenteric portal axis in a young woman with signs of intestinal suffering: Recanalization with TIPS and local fibrinolysis  
*P.M. Brambillasca<sup>1</sup>, F. Barbosa<sup>1</sup>, R. Vercelli<sup>1</sup>, C. Migliorisi<sup>1</sup>, S. Marco<sup>1</sup>, M. Annalisa<sup>2</sup>, A.G. Rampoldi<sup>1</sup>; <sup>1</sup>Milan/IT, <sup>2</sup>Messina/IT*

- P-737 A case of selective superior mesenteric artery infusion of urokinase for acute portal vein and superior mesenteric vein thrombosis caused by ileocecalitis  
*Y. Nozawa<sup>1</sup>, H. Ashida<sup>1</sup>, Y. Matsui<sup>2</sup>, T. Higuchi<sup>3</sup>, Y. Munetomo<sup>1</sup>; <sup>1</sup>Tokyo/JP, <sup>2</sup>Shizuoka/JP, <sup>3</sup>Chiba/JP*
- P-738 Transsplenic recanalization of chronic splanchnic vein thromboses  
*A. Kobe, G. Puippe, T. Pfammatter; Zürich/CH*
- P-739 Portal stenting in patient with PTLN  
*C.A. Barragan Leal, O. Rivero; Bogota/CO*
- P-740 Trans-splenic endovascular stenting of a portal vein stricture in the setting of treated pancreatic cancer  
*T.H. Shore, A. Goh, R. Maher; St Leonards, NSW/AU*
- P-741 Successful interventional therapy of simultaneous arterial and hemorrhoidal bleeding in a patient with alcohol induced liver cirrhosis  
*A. Sträter<sup>1</sup>, J. Nadjiri<sup>1</sup>, A. Huber<sup>2</sup>; <sup>1</sup>Munich/DE, <sup>2</sup>Fürstfeldbruck/DE*
- P-742 Successful treatment of duodenal varix bleeding with CARTO (Coil-Assisted Retrograde Transvenous Obliteration) through mesocaval shunt  
*Y.H. Kim, U.R. Kang, S.W. Ji; Daegu/KR*
- P-743 TIPS for acute Budd-Chiari syndrome  
*D.V. Meccia, O. Perrone, I. Bargellini, A. Boccuzzi, D. Caramella, R. Cioni; Pisa/IT*
- P-744 Portal system approach for embolization of rectal variceal bleeding as first manifestation of liver cirrhosis  
*P. Largo Flores, A.M. Basail, J. Cuesta Perez; Madrid/ES*
- P-745 Transhepatic portal venous drainage for pylephlebitis of the portal vein  
*Y. Takeuchi, H. Ashida, O. Sato; Kyoto/JP*

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*T. Yokota, H. Miura, O. Tanaka, Y. Yamahana, M. Yamashita, T. Yoshikawa, Y. Tsuji, T. Tanaka, S. Saruya, T. Hirota, K. Yamada; Kyoto/JP*
- P-747 Image-guided percutaneous renal cryoablation: five years experience, results and follow-up  
*A.A.P. Azevedo, V.O. Carvalho, P.M. Falsarella, A. Rahal Jr, M.R.G. Queiroz, G.C. Lemos, R.G. Garcia; São Paulo/BR*

- P-748 Take aim – FIRE: uni versus bilateral prostatic artery embolization for adenomatous BPH  
*C.R. Tapping<sup>1</sup>, A. Macdonald<sup>1</sup>, M.W. Little<sup>2</sup>, P. Boardman<sup>1</sup>; <sup>1</sup>Oxford/UK, <sup>2</sup>Reading/UK*
- P-749 3 years post-Prostate Artery Embolization (PAE): do the symptomatic improvements remain?  
*D. Maclean, J. Long, S. Modi, M.R. Harris, J. Dyer, N. Hacking, T.J. Bryant; Southampton/UK*
- P-750 Assessing the patient perceived effectiveness of varicocele embolization in the treatment of varicocele related orchalgia: a single center 15 year experience  
*M. Sheehan; Dublin/IE*
- P-751 Prostatic artery embolisation for the treatment of lower urinary tract symptoms and catheter-dependent urinary retention in patients with benign prostatic hyperplasia  
*R. Das, M.G. Fadel, S. Katmawi-Sabbagh; London/UK*
- P-752 Percutaneous nephrostomy in neonatal period: indication, technique, complications and outcome – a single centre experience  
*T. Ključevšek, V. Pirnovar, D. Ključevsek; Ljubljana/SI*
- P-753 Prostatic artery embolization in urinary catheter-dependent patients  
*R. Monreal Beortegui, A. Sáez de Ocariz García, S. Solchaga Álvarez, P.J. Giral Villalta, S. Napal Lecumberri, F. Urtasun Grijalba, I. Insausti Gorbea; Pamplona/ES*
- P-754 Percutaneous nephrolithotomy in Galdako-modified Valdivia position; A single centre experience  
*S. Tripathi, D. Allen, L. Ajayi, D. Yu, A. Goode; London/UK*
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*D. Torres, N.V. Costa, T. Bilhim, J.M. Pisco; Lisbon/PT*
- P-756 A novel percutaneous technique to replace obstructed urinary stents with transurethral approach  
*V. Magnano San Lio<sup>1</sup>, M. Cariat<sup>2</sup>, M. Midulla<sup>3</sup>, G. Giordano<sup>1</sup>; <sup>1</sup>Catania/IT, <sup>2</sup>Milan/IT, <sup>3</sup>Dijon/FR*
- P-757 Establishing a prostate artery embolisation (PAE) service  
*M.W. Little<sup>1</sup>, J. Briggs<sup>1</sup>, A. Speirs<sup>1</sup>, M. Gibson<sup>1</sup>, C.R. Tapping<sup>2</sup>, F. Ahmad<sup>1</sup>; <sup>1</sup>Reading/UK, <sup>2</sup>Oxford/UK*

- P-758 Transcatheter embolization for control of intractable hematuria from prostate cancer  
*A. Ushinsky<sup>1</sup>, H. Javan<sup>1</sup>, J. Katrivesis<sup>1</sup>, P. Borghei<sup>2</sup>, K. Nelson<sup>1</sup>, D. Fernando<sup>1</sup>, R. Houshyar<sup>1</sup>, E. Uchio<sup>1</sup>, N. Abi-Jaoudeh<sup>1</sup>; <sup>1</sup>Orange, CA/US, <sup>2</sup>Long Beach, CA/US*
- P-759 Percutaneous nephrostomy in non-dilated renal collecting system: Tips, tricks and pitfalls  
*A.A. Khankan<sup>1</sup>, T. Al-Hazmi<sup>2</sup>, M. Brembali<sup>1</sup>, A. Kenawi<sup>1</sup>; <sup>1</sup>Jeddah/SA, <sup>2</sup>Makkah/SA*
- P-760 Treatment of intractable lower urinary tract fistulas with ethanol  
*A. Nanapragasam<sup>1</sup>, S.U. Mahmood<sup>2</sup>, S. Mafeld<sup>3</sup>, P.J. Haslam<sup>1</sup>; <sup>1</sup>Newcastle-upon-Tyne/UK, <sup>2</sup>Leicester/UK, <sup>3</sup>Newcastle/UK*
- P-761 Ureteral-arterial fistula presenting as a rare complication of a routine nephroureteral stent exchange  
*J. Lam, S.A. Bass; Hartford, CT/US*
- P-762 Prostatic abscess a newly reported complication of prostatic artery embolization, what is wrong?  
*I. Alrashidi, F. Garad, A. Alruhaimi, H. El-Tholoth, M. Said, F. Alahmari; Riyadh/SA*
- P-763 Percutaneous repair of ureteral incarceration in inferior lumbar (Petit's) hernia  
*F. Zandrino, S. Tettoni, I. Galesio, M. Belletti, F. Misisch, S. Barbero; Alessandria/IT*

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*M.E. Barbati, A. Gombert, K. Schleimer, C.H. Wittens, H. Jalaie; Aachen/DE*
- P-765 Endovascular stent placement for chronic post-thrombotic symptomatic ilio-femoral venous obstructive lesions: a single-center study of safety, efficacy and quality-of-life improvement  
*L.C. Pescatori<sup>1</sup>, K. Guillen<sup>2</sup>, O. Chevallier<sup>2</sup>, N. Falvo<sup>2</sup>, C. Galland<sup>2</sup>, S. Gehin<sup>2</sup>, M. Midulla<sup>2</sup>, R. Loffroy<sup>2</sup>; <sup>1</sup>San Donato Milanese/IT, <sup>2</sup>Dijon/FR*
- P-766 Venous ports associated thrombosis  
*M.A. Cherkashin, D. Puchkov, N. Berezina, D. Kuplevatskaya, P. Yablonsky; Saint-Petersburg/RU*
- P-767 IVC Filters – indications, retrievals and complications; a 2.5 year single centre experience  
*T. Carlsson, T. Ward; Taunton/UK*

- P-768 Tip malposition of peripherally inserted central catheters: a retrospective study to compare bedside insertion to fluoroscopically guided placement by one operator  
*M. Grange<sup>1</sup>, A.A. Chouiter<sup>2</sup>; <sup>1</sup>Boudry/CH, <sup>2</sup>Neuchâtel/CH*
- P-769 Vacuum-assisted aspiration thrombectomy for treatment of acute massive pulmonary embolism  
*A. Massmann<sup>1</sup>, P.M. Lepper<sup>1</sup>, P. Fries<sup>1</sup>, H. Wilkens<sup>1</sup>, M. Held<sup>2</sup>, A. Buecker<sup>1</sup>, B. Huasen<sup>3</sup>; <sup>1</sup>Homburg/DE, <sup>2</sup>Würzburg/DE, <sup>3</sup>Manchester/UK*
- P-770 Relationship between 131I-6β-Iodomethyl-19-Norcholesterol adrenal scintigraphy lateralization and aldosterone level on adrenal venous sampling  
*A. Saiga, H. Nagano, Y. Kubota, A. Akutsu, J. Hashiba, S. Tsuchiya, R. Iwata, T. Horikoshi, T. Kono, K. Yokote, T. Uno; Chiba City/JP*
- P-771 Does combining catheter-directed thrombolysis to aspiration thrombectomy reduce post-thrombotic syndrome for acute deep vein thrombosis when compared to aspiration thrombectomy alone?  
*S.J. Lee, G.S. Jeon, Y. Kim, J.T. Lee; Seongnam-si, Gyeonggi-do/KR*
- P-772 The utility of intra-procedural CT during adrenal venous sampling to confirm accurate catheterization of the right adrenal vein  
*K. Maruyama, K. Sofue, T. Okada, M.A.S. Hamada, K. Sasaki, H. Horinouchi, T. Gentsu, R. Tani, E. Ueshima, Y. Koide, M. Yamaguchi, K. Sugimoto, T. Murakami; Kobe/JP*
- P-773 Image fusion guidance with pre-procedural CT with real-time fluoroscopy for adrenal venous sampling  
*S. Morita, H. Yamazaki, K. Endo, S. Suzaki, K. Kamoshida, K. Suzuki, S. Sakai; Tokyo/JP*
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*S.S. Joshi, R. Basapure, A.S. Joshi; Mumbai/IN*
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*D. Cummings, J. Sung, M. Lilly, R. Nelson, J. Walsh; Brooklyn, NY/US*
- P-776 Endovenous treatment of acute iliofemoral vein thrombosis with mechanical aspiration thrombectomy system – early clinical outcomes  
*E. Beropoulos<sup>1</sup>, B. Huasen<sup>2</sup>, S.P. D'Souza<sup>3</sup>, T. Bisdas<sup>1</sup>; <sup>1</sup>Muenster/DE, <sup>2</sup>Auckland/NZ, <sup>3</sup>Preston/UK*
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*M. Kumar, J.S. R, A.M. Haris, V. Alagappan; Hyderabad/IN*

- P-778 Evaluating the effect of direct oral anticoagulants versus warfarin on rates of thrombosis related failure of IVC filter retrieval  
*H. Basseri, F. Gastaldo, S.B. Nair, S. Schulman, G. Yip; Hamilton, ON/CA*
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*Y. Nouri, J.W. Kim, G.-Y. Ko; Seoul/KR*
- P-780 Radiographic and pathologic characteristics of IVC filters in a swine model: towards a predictive model for evaluation of filter performance and retrieval technology  
*J. Karanian, R. Seifabadi, E. Jones, R.M. Guidry, V. Krishnasamy, J. Esparza-Trujillo, I. Bakhtushvili, A. Cheng, W. Pritchard, B.J. Wood; Bethesda, MD/US*
- P-781 Inferior vena cava filter retrieval: a national survey  
*P.S. Dhillon, S. Habib; Nottingham/UK*
- P-782 Emergent extended-transjugular intrahepatic porto systemic shunt in Budd-Chiari syndrome with acute thrombosis of splenoportal axis  
*S. Gamanagatti, S. Shalimar, S. Acharya; Delhi/IN*  
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- P-783 Adrenal vein sampling is the preferred method in differential diagnosis of primary aldosteronism subtypes  
*I.I. Sitkin, A.A. Mamykina, N. Romanova, G. Kolesnikova, N. Platonova, E. Troshina, D. Belzevich; Moscow/RU*
- P-784 Retrieval of complex IVC filters via dual access using TIPPS catheter  
*M. Hadi, T. Xu, H.M.O. Elhassan, A. Macdonald, R. Uberoi, A.J. Wigham; Oxford/UK*
- P-785 There is no "I" in team... but there is in IVC and IR – a multidisciplinary, multimodality approach to IVC filter retrieval  
*J. Do<sup>1</sup>, K. Kansagra<sup>2</sup>, G. Vatakencherry<sup>2</sup>, A. Keny<sup>2</sup>, A. Rudikoff<sup>2</sup>, A. Hernandez Conte<sup>2</sup>; <sup>1</sup>Philadelphia, PA/US, <sup>2</sup>Los Angeles, CA/US*  
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- P-786 Successful percutaneous retrieval of inferior vena cava filter migrated to right atrium  
*Y. Shinjo<sup>1</sup>, K. Hashimoto<sup>2</sup>, S. Hamaguchi<sup>2</sup>, T. Asada<sup>1</sup>, K. Yagihashi<sup>1</sup>, T. Yamada<sup>1</sup>; <sup>1</sup>Yasashi-cho, Asahi-ku, Yokohama-shi/JP, <sup>2</sup>Kawasaki/JP*
- P-787 Staged hemodynamic correction of operated congenital heart disease.  
*V. Privorotskiy, D. Zverev, N. Borisova; St. Petersburg/RU*

- P-788 How can Interventional Radiology change patient's path from palliative care to active treatment with a single step procedure?  
*T. Simpanen, V. Serafimov; Dartford/UK*  
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- P-789 Balloon-occluded retrograde transvenous obliteration for gastric varices via azygous vein: a case report  
*M. Yabuta<sup>1</sup>, K. Yagihashi<sup>2</sup>, R. Miyazawa<sup>1</sup>, T. Suzuki<sup>1</sup>; <sup>1</sup>Tokyo/JP, <sup>2</sup>Kawasaki, Kanagawa/JP*
- P-790 Extensive porto-spleno-mesenteric vein thrombosis treated with percutaneous pharmecommechanical thrombectomy  
*R.N. Cavalcante, G. Centofanti, M. Krutman, K. Nishinari; São Paulo/BR*

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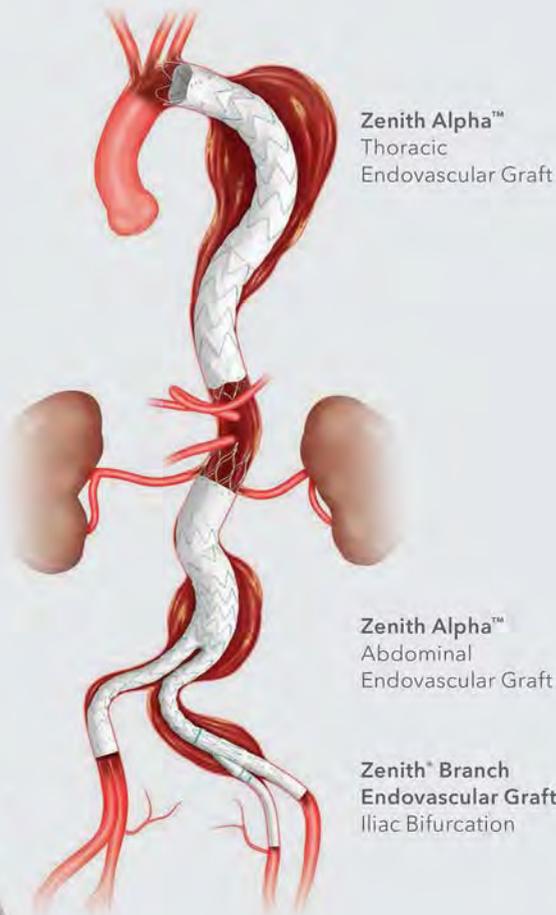
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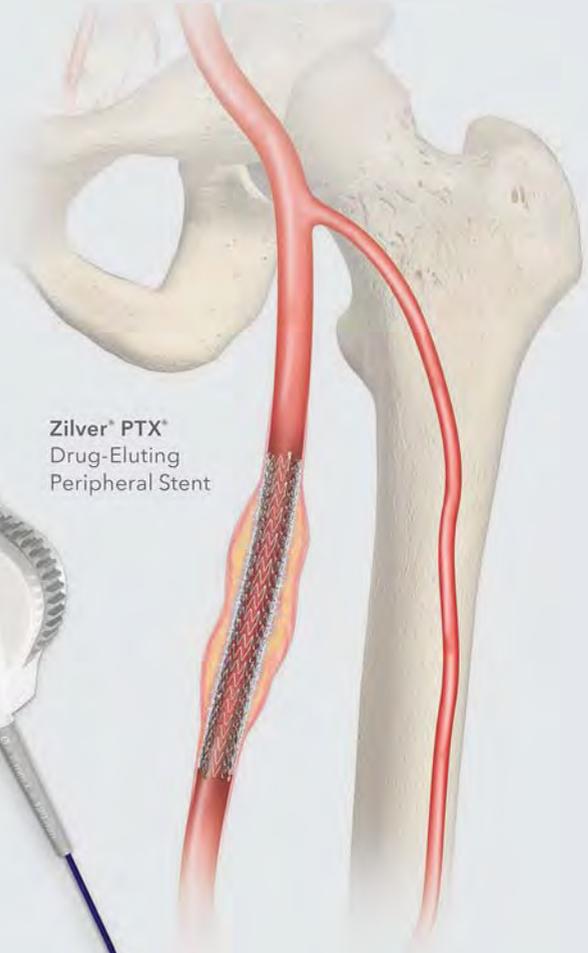


\* The Zenith Alpha™ Endovascular System consists of Zenith Alpha Thoracic Endovascular Graft, Zenith Alpha Abdominal Endovascular Graft, and Zenith Alpha Spiral-Z® Endovascular Leg.

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Peripheral Stent



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CMOSline represents a system configuration that is based on a Ziehm Imaging CMOS flat-panel detector, <sup>1</sup>Ziehm Vision RFD Hybrid Edition represents a group of optional hardware and software that creates an option package on the device named Ziehm Vision RFD.



CMOSLINE



ziehm imaging

## Satellite Symposia

### Saturday, September 22

13:00-14:00, Auditorium 8

#### **Biotronik AG**

#### **SY 401 InteREACTIVE debate on CLI treatment, a multidisciplinary approach for multilevel disease**

Debate on CLI treatment options between panel and audience based on pre-recorded challenging cases

*Moderators: K. Deloose (Dendermonde/BE), J.C. van den Berg (Lugano/CH)*

*Panellists: Y. Gouëffic (Nantes/FR), M. Lichtenberg (Arnberg/DE), G. Tepe (Rosenheim/DE)*

13:00-14:00, Room 3.A

#### **PharmaCept GmbH**

#### **SY 402 Updates 2018: DSM-TACE in lung-Ca, ICC and HCC**

*Moderators: R. Iezzi (Rome/IT), T.J. Vogl (Frankfurt/DE)*

- 402.1 Regional chemoperfusion and -embolisation of primary and secondary lung tumours: present and future  
*T.J. Vogl (Frankfurt/DE)*
- 402.2 TPCE with DSM: systematic analysis of local and systemic effects in a porcine model  
*P. Isfort (Aachen/DE)*
- 402.3 First survival data for patients with recurrent ICC treated with DSM-TACE after liver resection  
*C.K. Kuhl (Aachen/DE)*
- 402.4 DSM-TACE for locally advanced HCC – experiences of Berlin and Rome  
*T. Albrecht (Berlin/DE)*

Q & A

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13:00-14:00, Auditorium 2

**Philips**

**SY 403 Emerging clinical applications in interventional radiology**

*Moderators: H. Kobeiter (Créteil/FR), J.M. Pisco (Lisbon/PT)*

- 403.1 Perfusion angiography: a new outcome parameter for revascularisation  
*J.A. Reekers (Amsterdam/NL)*
- 403.2 Advanced 3D imaging in prostatic artery embolisation  
*T. Bilhim (Lisbon/PT)*
- 403.3 The role of automatic feeder detection in TACE  
*H. Kobeiter (Créteil/FR)*

16:15-16:35, Room 3.A

**Qmedics AG**

**SY 609 Should we ignore the moveability of our arteries? Towards the development of a novel movement-specific stent portfolio**

- 609.1 Should we ignore the moveability of our arteries? Towards the development of a novel movement-specific stent portfolio  
*M. Ferraro (Flurlingen/CH)*

## Sunday, September 23

08:00-08:20, Auditorium 2

**Endologix International B.V.**

### **SY 802 Durability with Ovation: results from the ENCORE analysis**

*Moderator: L. Maene (Aalst/BE)*

- 802.1 An introduction to ENCORE: a contemporary analysis of 1296 patients  
*A. Holden (Auckland/NZ)*
- 802.2 Clinical experience and lessons learned with Ovation  
*P. Szopiński (Warsaw/PL)*

08:00-08:20, Room 3.A

**Straub Medical AG**

### **SY 803 Safe and effective treatment of occluded veins with purely mechanical thrombectomy**

*Moderators: M. Lichtenberg (Arnsberg/DE), R. Loffroy (Dijon/FR)*

- 803.1 Single and multicentre data on treatment of iliofemoral DVT with mechanical thrombectomy  
*M. Lichtenberg (Arnsberg/DE)*
- 803.2 Overview of treatment strategies for iliofemoral DVT. The different clot removal devices – pros and cons  
*T. Heller (Rostock/DE)*

11:30-12:30, Auditorium 1

**Boston Scientific**

**SY 1102 The growing evidence base on drug eluting technologies: a new focus on drug eluting stent**

*Moderator: M.J. Lee (Dublin/IE)*

- 1102.1 The breaking results of the IMPERIAL randomised control trial of Eluvia vs Silver PTX  
*S. Müller-Hülsbeck (Flensburg/DE)*
- 1102.2 Insights into drug delivery in peripheral arterial disease  
*Y. Gouëffic (Nantes/FR)*
- 1102.3 Taking Eluvia to below the knee. The SAVAL trial design  
*H. van Overhagen (The Hague/NL)*
- 1102.4 Taking Eluvia into critical limb ischaemia. The Muenster experience  
*T. Bisdas (Münster/DE)*
- 1102.5 Evidence based algorithm for peripheral arterial disease interventions  
*K.N. Katsanos (Patras/GR)*

11:30-12:30, Auditorium 8

**Sirtex**

**SY 1103 SIR-Spheres Y-90 resin microspheres continuously improving outcomes for patients**

*Moderators: T.K. Helmberger (Munich/DE), R. Sharma (London/UK)*

Welcome and introduction

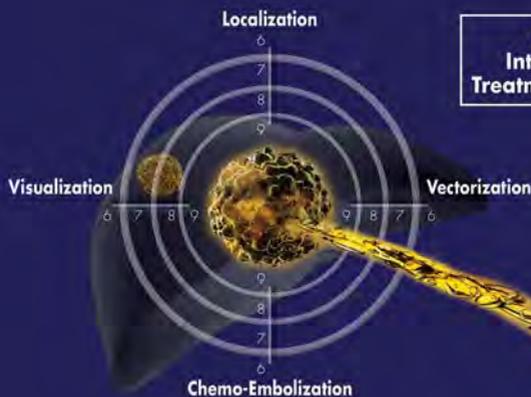
- 1103.1 mCRC: evidence and safety for SIR-Spheres Y-90 resin microspheres versus TACE  
*H. Mehrzad (Birmingham/UK)*
- 1103.2 HCC: upregulation of the immune response with SIR-Spheres Y-90 resin microspheres  
*B. Sangro (Pamplona/ES)*
- 1103.3 HCC: new insights for better patient selection and treatment strategies with SIR-Spheres Y-90 resin microspheres  
*M. Ronot (Clichy/FR)*
- 1103.4 mNETs: further clinical data for SIR-Spheres Y-90 resin microspheres  
*A.J.A.T. Braat (Utrecht/NL)*
- 1103.5 Guidelines: position of SIR-Spheres Y-90 resin microspheres  
*T.K. Helmberger (Munich/DE)*

Panel discussion

# LIPIODOL® ULTRA FLUID

Ethyl ester of iodized fatty acids of poppy seed oil

## Lipiodol® efficacy & safety for improved overall survival in HCC<sup>1,2,3,4</sup>



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Contrast for Life

**LIPIODOL® ULTRA-FLUID, Composition:** Ethyl ester of iodized fatty acids of poppy seed oil 10 ml, corresponding to an iodine content of 480 mg/ml. **Indications (\*\*):** In diagnostic radiology - Hysterosalpingography - Ascending urethrography - lymphography - Sialography - Fistulography and exploration of abscesses - Exploration of Irontal sinuses - Pre and post-operative cholangiography. In interventional radiology - Visualization and localization by selective intra-arterial use during CT of liver lesions in adults with known or suspected hepatocellular carcinoma. - Visualization, localization and vectorization during Trans-Arterial Chemo-Embolization (TACE) of hepatocellular carcinoma at intermediate stage, in adults. - Selective embolization in combination with Hystero (glue) particularly for orthotopic malformation or aneurysms. - Selective injections of LIPIODOL ULTRA-FLUID into the hepatic artery for diagnostic purposes where a spiral CT scan is not practical. In endocrinology - Prevention of severe cases of iodine deficiency. **Toxicology and method of administration (\*\*):** have to be adapted according to the type of examination, the territories explored, the age and weight of the patient. The volume to be administered depends on the particular requirements of the technique and the size of the patient. **Contraindications:** Hypersensitivity to LIPIODOL ULTRA-FLUID. - Confirmed hyperthyroidism. - Patients with traumatic injuries, recent haemorrhage or bleeding - Hysterosalpingography during pregnancy or acute pelvic inflammation - Bronchography. In interventional radiology [Trans-Arterial Chemo-Embolization], Administration in liver areas with dilated bile ducts unless drainage has been performed. **Special warnings and special precautions for use (\*\*):** There is a risk of hypersensitivity regardless of the dose administered. - Lymphography: Pulmonary embolism may occur immediately or after few hours to days from inadvertent systemic-vascular injection or intravasation of LIPIODOL ULTRA-FLUID. Perform radiological monitoring during LIPIODOL ULTRA-FLUID injection and avoid use in patients with severely impaired lung function, cardiorespiratory failure or right-sided cardiac overload. - Hypersensitivity: all iodinated contrast agents can lead to minor or major hypersensitivity reactions, which can be life-threatening. These hypersensitivity reactions are of an allergic nature (known as anaphylactic reactions if they are serious) or a non-allergic nature. They can be immediate (occurring within 60 min) or delayed (not occurring until up to 7 days later). Anaphylactic reactions are immediate and can be fatal. They are dose-independent, can occur right from the first administration of the product, and are often unpredictable; avoid use in patients with a history of sensitivity to other iodinated contrast agents, bronchial asthma or allergic disorders because of an increased risk of a hypersensitivity reaction to LIPIODOL ULTRA-FLUID. Thyroid: can cause hyperthyroidism in predisposed patients. Lymphography saturates the thyroid with iodine for several months and thyroid exploration should be performed before radiological examination. **Chemo-Embolization:** Trans-Arterial Chemo-Embolization is not recommended in patients with decompensated liver cirrhosis (Child-Pugh A8), advanced liver dysfunction, macroscopic invasion and/or extra-hepatic spread of the tumour. Renal insufficiency must be prevented by correct hydration before and after the procedure. Oesophageal varices must be carefully monitored. Hepatic intra-arterial treatment can progressively cause an irreversible liver insufficiency in patients with serious liver malfunction and/or undergoing close multiple sessions. The risk of superinfection in the treated area is normally prevented by administration of antibiotics. **Embolization with glue:** An early polymerisation reaction may exceptionally occur between LIPIODOL ULTRA-FLUID and certain surgical glues, or even certain batches of glue. Before using new batches of LIPIODOL ULTRA-FLUID or surgical glue, the compatibility of LIPIODOL ULTRA-FLUID and the glue must be tested in vitro. **Interaction with other medicinal products and other forms of interaction (\*\*):** Mefenolol, Beta blockers, vasoactive substances, angiotensin-converting enzyme inhibitors, angiotensin-receptor antagonists, Diuretics, Interferon. **Fertility, pregnancy and lactation (\*\*):** LIPIODOL ULTRA-FLUID must only be used in pregnant women if absolutely necessary and under strict medical supervision. Breastfeeding should be discontinued if LIPIODOL ULTRA-FLUID must be used. **Effects on ability to drive and use machines:** The effects on the ability to drive and to use machines have not been investigated. **Undesirable effects (\*\*):** Most adverse effects are dose-related and dosage should therefore be kept as low as possible. Hypersensitivity, anaphylactic reaction, anaphylactoid reaction, vomiting, diarrhoea, nausea, fever, pain, dyspnoea, cough, hypothyroidism, hyperthyroidism, thyroiditis, pulmonary embolism, cerebral embolism, retinal vein thrombosis, lymphoedema aggravation, hepatic vein thrombosis, granuloma. **Overdose (\*\*):** The total dose of LIPIODOL ULTRA-FLUID administered must not exceed 20 ml. **Pharmacodynamic properties (\*\*):** Pharmacotherapeutic group: X-ray contrast media, iodinated; ATC code: V08A D01. **Water-insoluble iodinated contrast medium. Presentation (\*\*):** 10 ml glass ampoule. **Marketing authorization holder (\*\*):** Guerbet - BP 57400 - F-95943 Roissy CoG cedex - FRANCE. Information: tel: 33 (0) 1 49 91 50 00. **Revision:** April 24<sup>th</sup>, 2018.

(\*) For complete information please refer to the local Summary of Product Characteristics (SPC).  
(\*\*) Indications, volumes and presentations may differ from country to country.

**Reporting of suspected adverse reactions is important as it helps to continuously assess the benefit-risk balance. Therefore, Guerbet encourages you to report any adverse reactions to your health authorities or to our local Guerbet representative.**  
Countries in which cTACE indication is registered: France, Japan, South Korea, Austria, Peru, Turkey, Hungary, Czech Republic, Mongolia, Argentina, The Netherlands, Vietnam, Mexico, Thailand, Taiwan, Brazil, Cambodia, Portugal, Ireland, Hong Kong & Philippines.

For a copy of the SPC, please contact a member of Guerbet.

- Ikeda M. et al., Prospective Study of Transcatheter Arterial Chemoembolization for Unresectable Hepatocellular Carcinoma: An Asian Cooperative Study between Japan and Korea. J. Vasc. Interv. Radiol. 2013; 24: 490-500
- Lo C.M. et al., Randomized Controlled Trial of Transarterial Lipiodol Chemoembolization for Unresectable Hepatocellular Carcinoma Hepatology 2002; 35: 1164-1171
- Uvel J.M. et al., Arterial embolization or chemoembolization versus symptomatic treatment in patients with unresectable hepatocellular carcinoma: a randomized controlled trial The Lancet 2002; 359: 1734-1739
- Uvel J.M. et al., Systematic Review of Randomized Trials for Unresectable Hepatocellular Carcinoma: Chemoembolization Improves Survival Hepatology 2003; 37: 429-442
- EASL/EORTC Clinical Practice Guidelines: Management of hepatocellular carcinoma. J. Hepatol. 2012; 56: 908-943
- Japan Society of Hepatology, Recommendation, Chapter 5, Hepatology Research 2010; 40 (Suppl.1) 96-112
- Buix J. & Sherman M. AASLD Practice Guidelines, American Association for Study of the Liver Diseases; Hepatology 2011; 53: 1020-1022
- Chinese guidelines 2011 edition, Chin. Clin. Oncol. 2012; 1:10

11:30-12:30, Auditorium 6

**BTG**

**SY 1104 EKOS acoustic pulse thrombolysis: setting the standard in thrombolysis therapy**

*Moderator: K.M. Sterling (Alexandria, VA/US)*

- 1104.1 Over 200 arterial thrombolysis cases with EKOS – sharing experience from the Netherlands  
*R. Lely (Amsterdam/NL)*
- 1104.2 EKOS acoustic pulse treatment for acute and chronic DVT  
*M. Dumantepe (Istanbul/TR)*
- 1104.3 OPTALYSE long-term data: multiple protocols – one safe & effective treatment for pulmonary embolism  
*K.M. Sterling (Alexandria, VA/US)*

13:00-14:00, Auditorium 6

**Guerbet**

**SY 1201 Perfecting your embolisation technique**

*Moderator: G. Maleux (Leuven/BE)*

- 1201.1 When and how to use Lipiodol with glue  
*R. Loffroy (Dijon/FR)*
- 1201.2 Rebirth of lymphangiography  
*M. Itkin (Philadelphia, PA/US)*
- 1201.3 Prevent non-target embolisation for preserving healthy tissue  
*M. Tal (Tel Aviv/IL)*

Conclusion and Q&A

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13:00-14:00, Auditorium 1

**Terumo Europe**

**SY 1202 FemPop treatment options from access to closure**

*Moderator: S. Müller-Hülsbeck (Flensburg/DE)*

- 1202.1 Introduction  
*S. Müller-Hülsbeck (Flensburg/DE)*
- 1202.2 Leave nothing behind – the new generation DCB is ready  
*M. Lichtenberg (Arnsberg/DE)*
- 1202.3 Traditional Nitinol stents are there to stay  
*Y. Gouëffic (Nantes/FR)*
- 1202.4 Double layer stents – innovation that pushes the limit  
*K. Deloose (Dendermonde/BE)*
- 1202.5 From access to closure  
*M.G. Manzi (Abano Terme/IT)*
- 1202.6 Conclusion  
*S. Müller-Hülsbeck (Flensburg/DE)*

13:00-14:00, Auditorium 8

**Medtronic Ltd**

**SY 1203 Evidence based approach to liver, lung and kidney microwave ablation**

*Moderator: G. Carrafiello (Milan/IT)*

- 1203.1 Evidence review of Emprint microwave ablation  
*P.L. Pereira (Heilbronn/DE)*
- 1203.2 The role of the IR  
*F. Orsi (Milan/IT)*
- 1203.3 Case based discussion  
*R. Sharma (London/UK)*
- 1203.4 Case based discussion  
*D. Ribero (Turin/IT)*

14:30-15:30, Auditorium 2

**Straub Medical AG**

**SY 1303 Rotarex®S – The ‘swiss army knife’ for treatment of complex arterial occlusions**

*Moderator: M. Bulvas (Prague/CZ)*

- 1303.1 Mechanical debulking in peripheral interventions: a multitask and effective tool in a widening scenario. Current evidence and technical tips  
*B.L. de Freitas (Leipzig/DE)*
- 1303.2 Importance of mechanical debulking in popliteal artery chronic occlusions  
*M. Bulvas (Prague/CZ)*
- 1303.3 Debulking instead of stenting in chronic arterial occlusions  
*M. Takes (Basel/CH)*
- 1303.4 Vessel preparation before DEB – the Leipzig experience with Rotarex®S  
*S. Braunlich (Halle/DE)*
- 1303.5 Clinical and cost effectiveness of Rotarex®S in bypass occlusions  
*B. Migliara (Peschiera del Garda/IT)*
- 1303.6 Endovascular techniques in acute mesenteric ischaemia: novel approaches for a challenging scenario  
*B.L. de Freitas (Leipzig/DE)*

15:40-16:00, Room 1.15

**Alvimedica**

**SY 1304 NiTiDES: an innovative approach for the treatment of SFA lesions**

*Moderator: D. Scheinert (Leipzig/DE)*

- 1304.1 Introduction  
*A. Kahlberg (Milano/IT)*
- 1304.2 Innovating SFA lesion treatment with NiTiDES  
*R. Langhoff (Berlin/DE)*
- 1304.3 ILLUMINA study clinical results  
*D. Scheinert (Leipzig/DE)*
- 1304.4 Discussion
- 1304.5 Conclusion  
*A. Kahlberg (Milano/IT)*

15:40-16:00, Room 3.B

**Abbott Vascular International**

**SY 1305 Next generation technology for SFA/POP treatment**

*Moderator: K. Deloose (Dendermonde/BE)*

- 1305.1 Present and future of DCB technologies  
*J.C. van den Berg (Lugano/CH)*
- 1305.2 TRANSCEND DCB study overview  
*M. Brodmann (Graz/AT)*
- 1305.3 Going a step ahead with Supera usage  
*K. Deloose (Dendermonde/BE)*

16:15-16:35, Room 5.B

**B. Braun Melsungen AG**

**SY 1410 CONSEQUENT less metal – spot stenting & DCB in fempop lesions**

*Moderator: G. Tepe (Rosenheim/DE)*

- 1410.1 Reduce metallic footprints: advantages of short stents vs. long stents in fempop treatment  
*R. Langhoff (Berlin/DE)*
- 1410.2 Less is more: indications, treatment and evidence of VascuFlex Multi-LOC  
*K. Deloose (Dendermonde/BE)*
- 1410.3 It's the combination that matters: fempop cases with DCB & spot stents  
*M.G. Manzi (Abano Terme/IT)*

## Monday, September 24

07:40-08:20, Room 3.A

**Gore & Associates**

### **SY 1601 New evidence using cTIPS with controlled expansion to treat portal hypertension**

*Moderator: F. Fanelli (Florence/IT)*

- 1601.1 Reviewing new guidelines for the treatment of portal hypertension complications. What has changed?  
*R. Loffroy (Dijon/FR)*
- 1601.2 Initial experience using the GORE® VIATORR® with controlled expansion and the GORE TIPS set  
*R. Miraglia (Palermo/IT)*
- 1601.3 1-year results of a case control study using cTIPS with controlled expansion in patients presented with ascites  
*J. Trebicka (Bonn/DE)*

11:30-12:30, Auditorium 8

**Canon Medical Systems**

### **SY 1902 The role of cross-modality imaging in oncology diagnostics and treatment**

*Moderator: A. Denys (Lausanne/CH)*

- 1902.1 Improving clinical pathways with Angio CT in abdominal IR  
*B. Guiu (Montpellier/FR)*
- 1902.2 Interventional oncology in a state-of-the-art Angio CT environment  
*A. Gangi (Strasbourg/FR)*

11:30-12:30, Auditorium 1

**BD**

**SY 1903 Stenosis in AV access. Evidence-based solutions**

*Moderator: P.M. Kitrou (Patras/GR)*

- 1903.1 Update on stenosis in AV access  
*P. Ponce (Lisbon/PT)*
- 1903.2 LUTONIX® DCB in AV access. Evidence. Global registry  
*T.M. Steinke (Duesseldorf/DE)*
- 1903.3 COVERA® vascular covered stent: latest data and interesting cases  
*B. Dolmatch (Mountain View, CA/US)*
- 1903.4 AV treatment – an algorithmic approach  
*P.M. Kitrou (Patras/GR)*
- 1903.5 Endovascular fistula creation with the WavelinQ EndoAVF System  
*R. Shahverdyan (Hamburg/DE)*

11:30-12:30, Auditorium 6

**Penumbra**

**SY 1904 Penumbra's latest solutions for embolisation, vessel occlusion, and thrombectomy**

*Moderator: J.F. Benenati (Miami, FL/US)*

- 1904.1 The importance of packing density: how Ruby Coil helps to improve long term recanalisation rates  
*M. Gonsalves (London/UK)*
- 1904.2 Dense occlusion with a purposefully designed Packing Coil  
*F. Wolf (Vienna/AT)*
- 1904.3 Power aspiration with Indigo System – evolution and clinical data  
*J.F. Benenati (Miami, FL/US)*
- 1904.4 How the Indigo System has changed my practice: thrombus removal in the periphery  
*F. Elmasri (Lakeland, FL/US)*
- 1904.5 Dec clotting hemodialysis vascular access: early experience with Indigo CATD  
*L.P. Moramarco (Pavia/IT)*

Debate and discussion



13:00-14:00, Auditorium 6

**Guerbet**

**SY 2001 From fundamentals to new frontiers in HCC management**

*Moderator: P.L. Pereira (Heilbronn/DE)*

- 2001.1 Updated clinical data on cTACE  
*R. Lencioni (Pisa/IT)*
- 2001.2 A new medical device towards cTACE standardisation  
*T. de Baère (Villejuif/FR)*
- 2001.3 How to use Lipiodol® to guide local treatments and biopsies?  
*T.J. Vogl (Frankfurt/DE)*

Conclusion and Q&A

13:00-14:00, Auditorium 1

**Cook Medical**

**SY 2002 Treating PAD in the SFA: "Challenge the status quo"**

*Moderator: M.D. Dake (Stanford, CA/US)*

- 2002.1 Introduction  
*M.D. Dake (Stanford, CA/US)*
- 2002.2 Exploring the future of DES: XPEDITE  
*E. Blessing (Karlsbad/DE)*
- 2002.3 Zilver PTX vs. bypass: first look at 6 month results: ZILVERPASS  
*M. Bosiers (Hamme/BE)*
- 2002.4 Zilver PTX pairs well with any balloon  
*A. Finn (Gaithersburg, MD/US)*
- 2002.5 Follow the data: your 2018 treatment algorithm  
*M.D. Dake (Stanford, CA/US)*
- 2002.6 Summary, discussion and debate  
*M.D. Dake (Stanford, CA/US)*

13:00-14:00, Auditorium 8

**Terumo Europe**

**SY 2003 Pushing boundaries in loco regional treatments of liver cancer**

*Moderators: B. Guiu (Montpellier/FR), R. Iezzi (Rome/IT)*

2003.1 Introduction and objectives

*R. Iezzi (Rome/IT)*

**Building a bright future for DEM-TACE**

2003.2 New perspectives in DEM-TACE

*M. Bezzi (Rome/IT)*

2003.3 Optimising DEM-TACE – case presentation

*F. Veloso Gomes (Lisbon/PT)*

2003.4 Discussion

**From evolution to revolution in SIRT**

2003.5 Imagine SIRT with dosimetric quantification

*M.G.E.H. Lam (Utrecht/NL)*

2003.6 New SIRT opportunities – case presentation

*I. Bargellini (Pisa/IT)*

2003.7 Discussion

2003.8 Take home messages

*B. Guiu (Montpellier/FR)*

14:30-15:30, Auditorium 8

**Medtronic**

**SY 2104 Strategies and innovative solutions for success in complex peripheral vascular disease**

*Moderators: F. Fanelli (Florence/IT), K.N. Katsanos (Patras/GR)*

2104.1 Introduction

*F. Fanelli (Florence/IT)*

2104.2 What are the DCB data from real world global trials telling us?

*G. Goyault (Strasbourg/FR)*

2104.3 Calcium: the achilles heel of endovascular treatments

*C. Nolte-Ernsting (Mühlheim/DE)*

2104.4 What are the consequences of dissections and how can we avoid them?

*J.C. van den Berg (Lugano/CH)*

2104.5 Closing remarks

*K.N. Katsanos (Patras/GR)*

14:30-15:30, Room 3.A

**Cardionovum**

**SY 2105 Can nanocrystalline PTX particles improve DCB treatment outcomes, confidence and reduce procedural stress?**

*Moderators: M. Bosiers (Hamme/BE), M. Lichtenberg (Arnsberg/DE)*

- 2105.1 Introduction and learning objectives
- 2105.2 The LEGDEB registry: 2-year experience with Legflow in de novo and restenotic SFA patients  
*P. Goverde (Antwerp/BE)*
- 2105.3 Long femoropopliteal lesions – results from the ultrasound core lab of the Reflow trial  
*K. Deloose (Dendermonde/BE)*
- 2105.4 Selecting the most suitable treatment option for CLI patients: the role of atherectomy and SAFEPAX  
*P.H. Haarbrink (Nijmegen/NL)*
- 2105.5 Identifying drivers of long-term success in AV fistula? Lessons learned from the Aperto DCB registry  
*M. Tozzi (Varese/IT)*
- 2105.6 Conclusions and closing remarks

16:15-16:35, Room 5.A

**AR Baltic Medical**

**SY 2209 Drug eluting balloon new frontiers**

*Moderator: A. Ruebben (Vilnius/LT)*

- 2209.1 Elutax 3<sup>rd</sup> generation DCB – short and mid-term results of treating BTK lesions with DCBs  
*F. Strozzi (Reggio Emilia/IT)*
- 2209.2 Usage of DCB in non-vascular lesions – initial results and future perspectives  
*I. Lazar (Miskolc/HU)*
- 2209.3 Discussion

16:15-16:35, Room 3.B

**Balt**

**SY 2210 Squidperi liquid embolic agent solution: current use and beyond the boundaries**

*Moderator: H. Kobeiter (Créteil/FR)*

- 2210.1 How Squidperi liquid embolic agent could be considered to treat established indications  
*M. Venturini (Milan/IT)*
- 2210.2 High-end embolisation of arterio-venous malformations with Squidperi  
*W.A. Wohlgemuth (Halle/DE)*

## Tuesday, September 25

13:00-13:30, Auditorium 2

### **Bentley**

#### **SY 2801 Why we do what we do**

*Moderator: R.G. McWilliams (Liverpool/UK)*

- 2801.1 The usage of BX covered stents as a bridging stent in complex aortic aneurysms  
*E. Verhoeven (Nuremberg/DE)*
- 2801.2 Covered stents as a lifesaver in renal/visceral and iliac injuries  
*M.A. Ruffino (Turin/IT)*
- 2801.3 CERAB: the tailor made solution for Aortoiliac Occlusive Disease (AOID)  
*P. Goverde (Antwerp/BE)*

13:00-14:00, Auditorium 6

### **Siemens Healthineers**

#### **SY 2802 Expanding precision medicine in interventional radiology**

*Moderators: W.E.A. Saad (Ann Arbor, MI/US), M.R. Sapoval (Paris/FR)*

- 2802.1 Evaluating treatment endpoints in interventional oncology with Angio-CT systems  
*B.C. Odisio (Houston, TX/US)*
- 2802.2 Nexaris Angio-CT: expanding precision medicine in the percutaneous treatment of pelvic metastases  
*S.M. Tutton (Milwaukee, WI/US)*
- 2802.3 Image guidance in PAE – reducing radiation dose and improving patient experience  
*C.R. Habermann (Hamburg/DE)*

13:30-14:00, Auditorium 2

### **Getinge**

#### **SY 2803 Long term results in the treatment of complex aortic diseases – the importance of trusted, reliable, proven, covered stents**

*Moderator: A. Winterbottom (Cambridge/UK)*

- 2803.1 Long term results of bridging stent-grafts in FEVAR/BEVAR  
*E. Verhoeven (Nuremberg/DE)*
- 2803.2 Bridging stents in fenestrated arch repair  
*T. Kölbel (Hamburg/DE)*



Vascular & Endovascular  
Challenges Update

15–18 APRIL 2019  
MONDAY–THURSDAY

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and introducing  
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EDUCATION INNOVATION EVIDENCE



## Learning Centres at CIRSE 2018

The Learning Centres will provide an excellent opportunity for all congress delegates to test the latest interventional devices, gain hands-on experience with new equipment and talk to industry representatives.

The following companies will provide Learning Centres:

**Abbott Vascular**

**BD**

**Boston Scientific**

**BTG**

**Cook Medical**

**Cordis, a Cardinal Health Company**

**Guerbet**

**Medtronic**

**Merit Medical**

**Straub Medical AG**

**Terumo**

Please note that CIRSE is not responsible for the information provided at the Learning Centres.

### **Learning Centre programmes**

*(as per printing date)*

## Abbott Vascular

### Meet the Expert Hands-on Workshops

Abbott has developed an interactive programme for CIRSE 2018. During peer-to-peer expert sessions, attendees will have the opportunity to learn more about Abbott solutions for PAD and embolisation treatments.

Areas that will be covered include:

#### **Guidewires: design and clinical usage**

The guidewires workshops will provide attendees with the opportunity to learn from expert physicians how peripheral guidewires are designed, how to use them and best selection strategies.

#### **Sunday, September 23, 11:15-12:15**

*M. Manzi (Abano Terme/IT)*

#### **Monday, September 24, 11:15-12:15**

*J.C. van den Berg (Lugano/CH)*

#### **Vascular Plugs: embolisation therapy workshops**

Vascular plugs are designed to provide optimal embolisation through single-device solution, full cross-sectional vessel coverage and controlled, precise deployment. Join the sessions to learn more about the different designs, clinical indications and how to do a safe and effective placement using Abbott simulators.

#### **Saturday, September 22, 11:00-12:00**

*C.A. Binkert (Winterthur/CH)*

#### **Saturday, September 22, 13:30-14:30**

*M.R. Sapoval (Paris/FR)*

#### **Sunday, September 23, 14:00-15:00**

*M.A. De Gregorio (Zaragoza/ES), J.A. Guirola (Zaragoza/ES)*

**Vessel Closure: best practices**

During this technical workshop, attendees will have the opportunity to learn best practices in arterial and venous femoral access and closure (small and large bore), and to practice with vessel closure wet models.

**Sunday, September 23, 09:45-10:45 – Small Bore**

*A. Diamantopoulos (London/UK)*

**Monday, September 24, 09:45-10:45 – Large Bore**

*L. Patrone (London/UK)*

**SFA: new technologies**

Join this session to know more about the latest innovations for SFA treatment including the presentation of Supera Pro.

**Saturday, September 22, 15:00-16:00**

*K. Deloose (Dendermonde/BE)*

To learn more about Abbott Learning Centre programme, please contact Abbott representatives or visit the Abbott booth.

*Supera Pro is a trademark of the Abbott Group of Companies.*

*Products intended for use by or under the direction of a physician. Prior to use, it is important to read the package insert thoroughly for instructions for use, warnings and potential complications associated with use of this device. Information contained herein is for distribution for Europe, Middle East and Africa ONLY. Please check the regulatory status of the device before distribution in areas where CE marking is not the regulation in force.*

*Abbott International BVBA*

*Park Lane, Culliganlaan 2B, 1831 Diegem, Belgium, Tel: 32.2.714.14.11*

*For more information, visit our website at [vascular.abbott.com](http://vascular.abbott.com)*

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## BD

Location: BD Learning Centre  
Booth Number: 31

### **Meet the Expert session – DCB treatment algorithm for dysfunctional fistula**

**Sunday, September 23, 10:30-11:30**

*S.O. Trerotola (Philadelphia, PA/US)*

Overview:

- LUTONIX® AV clinical trials updates
- How DCBs fit into the treatment algorithm for dysfunctional fistulae
- Technical tips and tricks for DCBs
- Lessons learned from the LUTONIX® AV IDE clinical trial

*To register:*

*Please email Lidia Valles (Lidia.Valles@crbard.com) to register your interest. Please note that places are limited. Registering your interest does not guarantee registration.*

### **Meet the Expert session – Deep venous interventions: from basic to challenging cases with the VENOVO™ venous stent system**

**Sunday, September 23, 12:30-13:30**

*R. de Graaf (Friedrichshafen/DE)*

Overview:

The session will cover an overview of endovascular deep venous intervention including tips and tricks followed by a VENOVO™ venous stent system demonstration. Dr. R. De Graaf will show his basic and challenging deep venous cases, including recorded live cases. Participants are welcome to bring their DV cases with them and ask open questions.

*To register:*

*Please email Lidia Valles (Lidia.Valles@crbard.com) to register your interest. Please note that places are limited. Registering your interest does not guarantee registration.*

**Meet the Expert session – Treat the dysfunctional AV access. How would you do it?****Sunday, September 23, 14:00-15:00***B. Dolmatch (Mountain View, CA/US), P.M. Kitrou (Patras/GR)*

## Overview:

The training will show cases from different anatomical regions (cephalic arch, outflow veins, venous-graft anastomosis, arterio-venous anastomosis etc.) and how to treat them.

- Update of BD covered stents. The road to COVERA®. – Dr. Dolmatch
- LUTONIX® DCB for the treatment of dysfunctional dialysis access. – Dr. Kitrou
- “How would you do it?” presentation of cases in specific regions. – Dr. Dolmatch & Dr. Kitrou

*To register:*

*Please email Lidia Valles (Lidia.Valles@crbard.com) to register your interest. Please note that places are limited. Registering your interest does not guarantee registration.*

**Meet the Expert session – Managing challenging CLI cases****Monday September 24, 14:00-15:00***M. Palena (Abano Terme/IT)*

## Overview:

This session will give the opportunity to discuss challenging CLI cases with one of the most knowledgeable experts on diabetic foot management. Dr Palena will share tips & tricks on how to access and treat BTK/BTA lesions and present his successful experience with LUTONIX®.

*To register:*

*Please email Lidia Valles (Lidia.Valles@crbard.com) to register your interest. Please note that places are limited. Registering your interest does not guarantee registration.*

## Boston Scientific

Boston Scientific has developed a dedicated Meet the Expert programme in their Learning Centre room with focus on the following areas:

### **Deepen your insights into interventional oncology health economics**

*H. Rio Tinto (Lisbon/PT)*

*Cristina Giretti – Senior Manager Health Economics and Market access (Milan/IT)*

**Saturday, September 22, 13:30-14:30**

Learning objectives:

- Understand the basics of health economic evaluations with tangible examples applied to oncology and interventional oncology of HCC
- Deepen the health economics of DEB-TACE
- Be able to compare the cost efficacy of the treatment with other oncological medical treatments

### **How should I treat a patient presenting with acute iliofemoral DVT?**

*R. de Graaf (Friedrichshafen/DE)*

**Saturday, September 22, 15:00-16:00**

Learning objectives:

- Exchange with a leading expert on venous stenting (when, why, how?)
- Learn best practices to optimise performance of Wallstent Uni™ and/ or Vici stent in venous indications

### **Do's and don'ts in BTK arteries**

*J.C. van den Berg (Lugano/CH)*

**Sunday, September 23, 10:45-11:45**

Learning objectives:

- Exchange with a leading expert on BTK treatment
- Learn best practices using 0.014" guidewires
- Discuss cases of challenging lesions

### **Collaborative & effective approach to changing PAE guidelines**

*N. Hacking (Southampton/UK)*

**Sunday, September 23, 12:00-13:00**

Learning objectives:

- Learn a step by step process of how Dr Hacking worked with NICE, BAUS and BSIR to bring about change in treatment guidelines for patients with BPH in the UK

**PAE technique**

*F. Wolf (Vienna/AT)*

**Sunday, September 23, 13:00-14:00**

Learning objectives:

- Learn the different procedural steps of embolising a patient with BPH
- Understand which patient can benefit
- Learn post embolisation care and management

**Actively increase your referrals!**

*P.N.M. Lohle (Tilburg/NL), U. Teichgräber (Jena/DE), F. Wolf (Vienna/AT)*

**Sunday, September 23, 14:30-16:00**

Learning objectives:

- Learn from leading experts on PAE and UAE how to increase referrals
- Discuss concrete actions and their benefice and how to implement them

**Do's and don'ts in retrograde approach**

*M. Palena (Abano Terme/IT)*

**Monday, September 24, 10:30-11:30**

Learning objectives:

- Discuss different techniques of below the knee arteries revascularisation
- Learn best practice, tips and tricks using 0.014" guidewires

**IMPERIAL: first head-to-head DES SFA trial**

*S. Müller-Hülsbeck (Flensburg/DE), J. Kokate (Minneapolis, MN/US),*

*J. Diaz-Cartelle (Boston, MA/US)*

**Monday, September 24, 13:00-14:00**

Learning objectives:

- Understand the Level 1 data from IMPERIAL, the first trial comparing two DES for the SFA
- Learn about the science behind ELUVIA, the only DES offering sustained drug release beyond 1 year

**Eliminating the clot: the role of Angiojet in mechanical thrombectomy**

*A.J. Wigham (London/UK)*

**Monday, September 24, 14:00-15:00**

Learning objectives:

- Exchange with a leading expert on best practices for thrombectomy with Angiojet™ system
- Discuss the benefits of ZelanteDVT catheter for DVT patients
- Identify patients who could benefit from Angiojet thrombectomy therapy

**Embohrroid technique***V. Vidal (Marseille/FR)***Monday, September 24, 15:30-16:30**

Learning objectives:

- Learn the different procedural steps of embolising a patient with haemorrhoids
- Understand which patient can benefit
- Learn post embolisation care and management

**Hands-On Workshop – medical students****Tuesday, September 25, 10:00-12:00**

The session will be broken down into 5 rotations enabling the medical students to get hands-on with different products, their history and reason for manufacturing, and when and how they are used:

1. Embozene TANDEM™ Microspheres, Embozene™ Microspheres & PVA
2. Pushable Coils
3. Detachable Coils
4. Interlock deployment through Direxion into flow model
5. Feedback on needs of Jr Drs

Registration via CIRSE

**Hands-On Workshop – residents & young IRs****Tuesday, September 25, 13:00-15:00**

The session will be broken down into 5 rotations enabling the IRs to get hands-on with different products, their history and reason for manufacturing, and when and how they are used:

1. Embozene TANDEM™ Microspheres, Embozene™ Microspheres & PVA
2. Pushable Coils
3. Detachable Coils
4. Interlock deployment through Direxion into flow model
5. Feedback on needs of residents & young IRs

Registration via CIRSE

Boston Scientific Learning Centre will remain open for delegates who would like to learn more about our broad range of high performance solutions in the vascular, embolisation and interventional oncology fields.

To learn more about our Learning Centre programme, please visit our booth.

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## BTG

### **Learning Centre: DC Bead LUMI™ practical workshop**

Meet the BTG R&D team who will take you through the technical considerations for successful delivery of DC Bead LUMI™. Learn about the development of the technology and the benefits that radiopacity can offer for TACE procedures through case discussions.

30 minute hands-on sessions plus Q&A, maximum 5 participants per session.

Session Times every day from 11:00-11:30 and 14:00-14:30

# WELCOME TO BTG AT CIRSE 2018

We're excited to be here and to have a packed educational programme planned for the next four days. Our booth will feature a variety of product and therapy presentations and hands-on demonstrations with expert clinicians and technical specialists.

## EDUCATIONAL THEATRE

PRESENTED BY CLINICAL AND TECHNICAL EXPERTS

AT THE BOOTH |  
REFRESHMENTS  
AVAILABLE

### Innovation in cryoablation – ICEfx™

- ICEfx™ Technology
- How ICEfx™ is used in clinical practice

### Innovation in cryoablation – Visual-ICE™ MRI

- Visual-ICE™ MRI Technology
- MRI-guided focal prostate cryotherapy

### Lung cryoablation

- Patient selection
- Critical structures and managing complications

### DC Bead LUMI™

- Techniques and technical considerations for the advanced user
- Clinical experience one year on

### DEBIRI™ for the treatment of liver metastases from colorectal cancer

- Clinical experience and insights
- Is your pain protocol optimised?

### TheraSphere™ for the treatment of cholangiocarcinoma

- Rationale for SIRT in cholangio
- The MISPHEC Trial

### Simplicit<sup>90Y</sup>™ for personalised dosimetry

- Why dose matters in SIRT

STOP BY THE BOOTH FOR A COPY OF  
THE FINAL PROGRAMME INCLUDING  
SPEAKERS AND TIMINGS

*Outline programme above correct at time  
of going to press and subject to change.*

CRYO  
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GALIL TECHNOLOGY

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# SYMPOSIUM

SUNDAY | SEPT 23 | 11:30-12:30 |  
AUDITORIUM 6

EKOS™

## EKOS™ ACOUSTIC PULSE THROMBOLYSIS: SETTING THE STANDARD IN THROMBOSIS THERAPY

**Over 200 Arterial Thrombolysis Cases with EKOS™ – Sharing Experience from The Netherlands**

*Dr Rutger Lely Amsterdam, The Netherlands*

**EKOS™ Acoustic Pulse Treatment for Acute and Chronic DVT**

*Dr Mert Dumantepe Istanbul, Turkey*

**OPTALYSE Long-Term Data: Multiple Protocols – One Safe and Effective Treatment for PE**

*Dr Keith Sterling Virginia, USA*

Don't forget to get hands-on with BTG products at these CIRSE HDT sessions.  
*Participation is free of charge. Please register via your CIRSE account.*

**SATURDAY | SEPT 22 | 09:30-11:00 (PMT-HDT 1) & 12:30-14:00 (PMT-HDT 2)  
PERIPHERAL MECHANICAL THROMBECTOMY**

*Coordinators: T Jahnke Neumünster, Germany DK Tsetis Iraklion, Greece*

**TUESDAY | SEPT 25 | 09:30-11:00 (EMT-HDT 5) & 12:30-14:00 (EMT-HDT 6)  
EMBOLISATION: MATERIALS AND TOOLS - PARTICULATE AGENTS**

*Coordinators: TJ Kroencke Augsburg, Germany AG Rampoldi Milan, Italy*

**TUESDAY | SEPT 25 | 09:30-11:00 (TA-HDT 5)  
TUMOUR ABLATION – CRYOABLATION AND LASER ABLATION**

*Coordinators: AH Mahnken Marburg, Germany G Tsoumakidou Lausanne, Switzerland*

DCBeadLUMI™

EKOS™

Simplicity<sup>90</sup>™

TheraSphere™

## Cook Medical

The following presentations take place on the Cook booth:

### EndoWars

EndoWars is a simulator competition for fellows to test their endovascular skills by successfully placing a Zilver® PTX® stent in the SFA in the shortest amount of time. All attendees are welcome to try their hand, but only fellows can join the competition.

Dr. Fabrizio Fanelli, professor of radiology and director of the vascular and interventional radiology department at Careggi University Hospital in Florence, Italy, will introduce EndoWars and take the challenge at 11:30, Saturday, September 22. Fellows will then work to beat his time.

### Saturday, September 22 – Monday, September 24 11:30-16:00

### Meet the Experts

Visit the Cook booth to listen and talk to some of the world's leading venous experts. Enjoy an opportunity to ask questions and network in an informal setting:

#### Sunday, September 23, 10:00-10:45

#### Pelvic vein embolisation, our approach in The Whiteley Clinic

P. Diwakar (London/UK)

#### Monday, September 24, 10:00-10:45

#### Treatment of patients with chronic venous obstructions, our approach

G.J. O'Sullivan (Galway/IE), R. de Graaf (Friedrichshafen/DE)

## Cordis, a Cardinal Health Company

Visit the Cordis booth and join us at our Experience Suite to improve your expertise during simulation sessions on EVAR procedure, SFA treatment and complex peripheral CTO cases.

Attend these sessions if you want to:

- understand how to improve outcomes in AAA treatment and to learn more about the latest development in EVAR technology – INCRAFT™ AAA Stent Graft System;
- familiarize with device selection for SFA treatment based on lesion complexity and perform SFA cases with S.M.A.R.T. FLEX™ Vascular Stent System;
- have insights on how technology drives performance and enhance your skills with OUTBACK ELITE™ Re-Entry Catheter;
- learn more about advantages of MYNXGRIP® Vascular Closure Device.

**How to participate:**

No need to register to get your personalised demonstrations. Our experts will welcome you at Cordis booth (14) to attend the following experience suites:

**INCRAFT™ AAA Stent Graft System experience suite**

**Saturday, September 22, 10:00-18:00**

**Sunday, September 23, 09:00-18:00**

**Monday, September 24, 09:00-18:00**

**Tuesday, September 25, 09:00-14:30**

**MYNXGRIP® Vascular Closure Device experience suite**

**Saturday, September 22, 10:00-18:00**

**Sunday, September 23, 09:00-18:00**

**Monday, September 24, 09:00-18:00**

**Tuesday, September 25, 09:00-14:30**

**OUTBACK Elite™ Re-Entry Catheter experience suite**

**Saturday, September 22, 10:00-18:00**

**Sunday, September 23, 09:00-18:00**

**Monday, September 24, 09:00-18:00**

**Tuesday, September 25, 09:00-14:30**

**S.M.A.R.T. Flex™ Vascular Stent System experience suite**

**Saturday, September 22, 10:00-18:00**

**Sunday, September 23, 09:00-18:00**

**Monday, September 24, 09:00-18:00**

**Tuesday, September 25, 09:00-14:30**

Sponsored by Cordis, a Cardinal Health Company  
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Important information: Prior to use, refer to the instructions for use supplied with this device for indications, contraindications, side effects, suggested procedure, warnings and precautions

The use of INCRAFT® AAA Stent Graft System requires that physicians be specifically trained in endovascular abdominal aortic aneurysm repair techniques, including experience with high resolution fluoroscopy and radiation safety. Cordis Corporation will provide training specific to the INCRAFT® AAA Stent Graft System.

As part of its continuous product development policy, Cordis reserves the right to change product specifications without prior notification.

Please contact your Cordis representative for additional product availability information.

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## Guerbet

Guerbet, Interventional Imaging, is offering interactive programmes on novel devices designed to secure your embolisation procedures.

Join Guerbet experts within our Innovation Labs for interactive hands-on sessions:

### September 22-25, 2018

#### Learn more on cTACE mixture preparation using Vectorio®

**Saturday, Sunday, Monday, Tuesday**

11:00-11:30

14:00-14:30

Innovation Lab Vectorio®

#### Discover Sequire® Control Reflux microcatheter – Flow dynamics based technology

**Saturday, Sunday, Monday, Tuesday**

11:00-11:30

14:00-14:30

Innovation Lab Sequire®

#### Agenda dedicated to students:

##### cTACE mixture preparation

**Saturday, Sunday, Monday, Tuesday**

10:00-10:30

15:00-15:30

Innovation Lab Vectorio®

##### Flow directed embolisation with Sequire® Control Reflux microcatheter

**Saturday, Sunday, Monday, Tuesday**

9:30-10:00

Innovation Lab Sequire®

Please note that seats are limited to 8 delegates per session. Registration is required to Monia Berree (monia.berree@guerbet.com).

## Medtronic

### Saturday, September 22

- 11:00-11:45 Microwave ablation LUNG; *T.J. Vogl*  
12:30-13:15 Venous stent design; *Medtronic speaker*  
14:00-14:45 How do you treat calcium? Hands-on directional atherectomy; *M. Treitl*  
15:30-16:15 Latest developments in embolisation technologies; *Medtronic speaker*

### Sunday, September 23

- 09:30-10:15 Venous stent design; *Medtronic speaker*  
11:00-11:45 Microwave ablation KIDNEY; *F. De Cobelli*  
12:30-13:15 RESCUE ME! Must have tools to get you out of complex situations;  
*Y. Bausback*  
14:00-14:45 Latest developments in embolisation technologies; *Medtronic speaker*  
15:30-16:15 Venous stent design; *Medtronic speaker*

### Monday, September 24

- 09:00-09:45 Microwave ablation LIVER; *F. Orsi*  
10:00-10:45 Microwave ablation KIDNEY; *G. Carrafiello*  
11:00-11:45 Venous stent design; *Medtronic speaker*  
12:30-13:15 Directional atherectomy with CO<sub>2</sub> angiography: when and how?; *T. Bisdas*  
14:00-14:45 Microwave ablation LIVER; *K.I. Ringe*  
15:30-16:15 How do you minimise dissection? Chocolate balloon from bench to routine clinical practice; *G. Schuetz*

### Tuesday, September 25

- 09:30-10:15 Latest developments in embolisation technologies; *Medtronic speaker*  
11:00-11:45 Directional atherectomy with CO<sub>2</sub> angiography: when and how?; *T. Bisdas*  
12:30-13:15 Venous stent design; *Medtronic speaker*

## Merit Medical

You are invited to join us at the Merit Education Experience Centre and learn more about Merit Medical's innovative products, therapies and education programmes.

Our Meet the Expert sessions offer the opportunity to ask and learn about specialised topics through didactic presentations and hands-on training.

We are planning sessions on the following topics:

1. Don't Go Left. An overview of the Surfacor® Inside-Out® access catheter system which enables catheter placement in patients with occluded upper central veins. Will include patient selection and hands-on practice using an anatomical model.  
*Moderator: G. Sengölge (Vienna/AT)*
2. Left distal transradial access for drug-eluting microsphere TACE. From stick to haemostasis we will show the benefits of left distal radial access step by step at 4 different stations.  
*Moderator: D. Klass (Vancouver, BC/CA)*
3. STAR™ tumour ablation system in treatment of metastatic spine disease. An overview of spinal metastatic disease and the use of RF ablation in its treatment. The STAR™ tumour ablation system and published clinical evidence regarding safety and efficacy will be reviewed. Hands-on sessions for both ablation and vertebral augmentation technology will be conducted.
4. Learn the minimally invasive technique of prostatic artery embolisation (PAE). The session will feature didactic presentations on rationale, evidence and techniques for PAE, overview of anatomy and prostate vascularity and tips for material selection.
5. Transradial fibroid embolisation as a day-case procedure.  
*Moderator: M. Little (Reading/UK)*
6. Bone biopsy: choose your path – hands on and case studies with Pr. Laredo  
*Moderator: J.D. Laredo (Paris/FR)*  
Sunday only: ThinkBiopsy™: Open workshop time with soft tissue and bone biopsy devices and models

The complete programme will be available on CIRSE's website and congress app. There are limited spots available, please register via [Merit-CIRSE@merit.com](mailto:Merit-CIRSE@merit.com) or at our booth.

## Straub Medical

### Management of arterial and venous occlusive diseases with mechanical debulking

Topics:

- Clinical and economic benefits of mechanical debulking
- Indications, treatment specifics and success rates of Rotarex®S and Aspirex®S interventions
- In-vitro demonstration of Rotarex®S and Aspirex®S catheters

Please register at our booth no. 18.

[www.straubmedical.com](http://www.straubmedical.com)

## Terumo Europe

Terumo would like to invite you to come to our interactive personalised learning centre. You will have the opportunity to have hands-on experience especially using latest simulator models focusing on

### Ablation, access, B TACE and embolisation

You can have 1 to 1 session and ask questions related to interventional oncology (TATO, Occlusafe, LifePearl and QuiremSpheres) and embolisation products (Azur and HydroPearl) that can support you in the treatment of liver cancer, BPH, acute bleeding and other diseases.

### Peripheral interventions and vascular closure

You will be able to learn about our latest innovations in carotid artery stenting and below-the-knee and FemPop procedures. Furthermore, our vascular closure specialists will be available for questions and for guiding you through the procedure on a model.

# Interdisciplinary Endovascular Aortic Symposium

# IDEAS

2 0 1 8

September 23-25

Lisbon / Portugal



## Training Village

Delegates have the opportunity to participate in free hands-on workshops to enhance their understanding of the available medical devices and procedures in the field of thoracic and abdominal aortic treatments.

Register onsite for one of the highly valued workshops at the desk at the entrance of the Training Village. Our friendly staff will be available throughout the day to assist with any questions about upcoming workshops and signing up.



Browse the training village programme at [www.aorticideas.org](http://www.aorticideas.org)



**INNOVATION | EDUCATION | INTERVENTION**  
Cardiovascular and Interventional Radiological Society of Europe

## IDEAS Training Village



The Training Village offers physicians the chance to engage with leading medical device companies who provide technologies and devices in the field of thoracic and abdominal aortic treatments. Delegates have the opportunity to participate in free hands-on workshops to enhance their understanding of the available medical devices.

This year, three industry partners will provide exclusive hands-on workshops giving participants the chance to communicate with expert proctors on these devices. Workshops are generally planned to cover specific devices and techniques in order to provide an understanding of the treatment procedure, preoperative planning, device usage and postoperative management.

### Location

Room 1.10

### How to participate:

All delegates wishing to participate in a Training Village workshop can register onsite at the desk at the entrance of the Training Village. Our friendly staff will be available throughout the day to assist with any questions about upcoming workshops and signing up. When registering for a workshop, you will receive a ticket for that workshop accordingly. You will need to present this at the entrance of the Training Village when your workshop starts.

Please feel free to stop by the desk at the entrance of the Training Village for any questions you might have.

*Kindly note: IDEAS Training Village is a non-CME activity. A valid CIRSE Registration is required to be able to attend and/or pre-register for sessions in the IDEAS Training Village.*

## Bentley

**Sunday, September 23** 14:00-15:30 / 15:30-17:00

### **The CERAB technique – a tailor made solution for the treatment of aortoiliac occlusive disease**

*Coordinators: P. Goverde (Antwerp/BE), A. Ruffino (Turin/IT)*

Learning goals:

- Why CERAB – clinical results & step by step (video)
- Wire selection and handling
- Stent placement in the aorta
- Stent placement in the iliacs
- Tips and tricks



# Trusted. Reliable. Proven.

## Advanta V12 Balloon Expandable Covered Stent.

- Unparalleled implant volume
- More than 15 years of experience
- Strong clinical evidence with over 250 publications
- Superior patency with a reduction in re-intervention rates at 5 years<sup>1</sup>

1. Mwitayayi BP, Sharma S, Daneshmand A, et al. Durability of the balloon-expandable covered versus bare-metal stents in the Covered versus Balloon Expandable Stent Trial (COBEST) for the treatment of aortoiliac occlusive disease. *J Vasc Surg.* 2016. Jul;64(1):83-94.

Visit [getinge.com](https://www.getinge.com) to learn more.

**GETINGE** 

## Getinge

*in cooperation with Medtronic*

**Monday, September 24** 09:30-12:00

### **The chimney endovascular technique in the treatment of juxtarenal aneurysms: “from alpha to omega”**

*Coordinators: K.P. Donas (Münster/DE), F. Azevedo (Münster/DE)*

The workshops provide the needed information to perform the chimney technique in a standardized and uniform manner including pre-operative planning, the procedure step by step and tips to optimize the clinical outcome.

## Medtronic

*in cooperation with Getinge*

**Sunday, September 23** 10:00-12:30

### **ChEVAR with the Endurant™ Stent Graft System**

*Coordinators: K.P. Donas (Münster/DE), F. Azevedo (Münster/DE)*

During this interactive workshop, the participants will gain deeper insight about the CE-approved indications and procedural steps of performing a ChEVAR procedure with the Endurant™ Stent Graft System. The facilitators will use case and video presentations as well as an aortic model to demonstrate the technique and transform the according knowledge to the participants.

Upon completion of the event, participants will be able to:

- Recall the indications for ChEVAR with the Endurant™ Stent Graft System
- Describe the optimal OR-setup and material needed for ChEVAR
- State the procedural steps for performing a ChEVAR procedure for a single chimney



# CIRSE 2018

Dinner & Farewell Party

Tuesday, September 25

Doors open at 19:30

**Come join us to celebrate the end  
of another successful Annual Congress!**

**The CIRSE 2018 Dinner and Party will take place  
throughout several venues in the very special Páteo  
Alfacinha venue, promising an exciting foray into  
Portuguese architecture and tradition.**

Dinner tickets

*(cocktail reception, dinner, complimentary drinks, entertainment):*

EUR 75 each

Party only

*(doors open 22:00, includes free drinks and entertainment):*

EUR 25 each

**Don't miss out!**

Buy your tickets at the "Hotel | Social Events | City Information"  
desk, located in the entrance hall of the congress centre.

*CIRSE supports compliance with ethical standards. Therefore, CIRSE emphasises that the present offer (made by Buzz DMC in cooperation with Kuoni Congress) is directed to participants of CIRSE 2018 and recommends that the participants who want to accept the present offer shall bear any and all costs in this context themselves.*

*Kindly note that entrance to the CIRSE 2018 Dinner & Farewell Party is NOT included in the CIRSE 2018 registration fee!*

## Hands-on Device Training Sponsors

This year's Hands-on Device Training sessions are kindly supported by the following industry partners:

### **A closer look at closure devices**

- Abbott
- Terumo Europe

### **Central lines and ports**

- Cook Medical
- Grupo Logsa
- Smiths Medical

### **Embolisation: materials and tools – coils & plugs**

- Abbott
- Cook Medical
- Penumbra Europe GmbH
- Terumo Europe

### **Embolisation: materials and tools – liquid agents**

- Antia Therapeutics AG
- BALT International
- GEM SRL

### **Embolisation: materials and tools – particulate agents**

- BTG
- Cook Medical
- Medtronic
- Merit Medical
- Sirtex Medical Europe GmbH
- Terumo Europe

### **Peripheral mechanical thrombectomy**

- Argon Medical Devices
- EKOS a BTG International group company
- Penumbra Europe GmbH
- Straub Medical AG

### **Stroke thrombectomy**

- Balt
- Penumbra Europe GmbH
- Stryker Neurovascular
- Terumo Europe

### **Tumour ablation – MWA**

- AngioDynamics
- ECO Medical
- Endocare, Inc.
- H.S. Hospital Service Spa
- NeuWave / Ethicon
- Terumo Europe

### **Tumour ablation – RFA**

- H.S. Hospital Service Spa
- Merit Medical
- Olympus

### **Tumour ablation – Cryoablation, laser ablation and irreversible electroporation**

- AngioDynamics
- BTG
- CLS
- Endocare, Inc.

### **Tumour ablation – Image guidance**

- Bracco
- CAScination AG
- Medtronic
- NeuWave / Ethicon

### **Varicose veins**

- EVLA Expert Ltd.
- Medtronic
- Olympus
- RF Medical Co., Ltd.

### **Vertebral augmentation**

- IZI Medical Products, LLC
- Medtronic
- Merit Medical
- Stryker Interventional Spine

For detailed information on sessions, please refer to pages 33-37.

For further information about the industry partners, please refer to pages 259-308 of the Technical Exhibitors Guide.

If you are interested in obtaining product information outside of sessions, please visit the respective company booth in the exhibition area.

## Safe Sedation Training Sponsors

The Safe Sedation Training sessions are kindly supported by Medtronic and organised in cooperation with the AQA Simulation Center.

For detailed information on the Safe Sedation Training sessions, please refer to page 38.

## Simulation Training Sponsors

The Simulation Training sessions are kindly supported by:

- 3D Systems
- Abbott
- Biotronik
- Boston Scientific
- Cordis, Cardinal Health
- Cook Medical
- Medtronic
- Mentice
- Merit Medical
- Terumo Europe

For detailed information on the Simulation Training sessions, please refer to pages 39-42.

For further information about the industry partners, please refer to pages 259-308 of the Technical Exhibitors Guide.



## **HOW TO MAKE YOUR ANGIO SUITE SMART AND SAFE!**

Interventional radiologists are exposed to high levels of radiation in daily practice and therefore face particular health risks. Learn how to reduce and protect against exposure, as well as the health hazards linked to high levels of occupational exposure to radiation – consult our best-practice guides and information materials, or take a seat and listen to a brief talk hosted by our Subcommittee or industry partners (*see mini-talk programme on the next pages*).

### **Explore state-of-the-art protective technologies**

Discuss the latest products for protection and dose management with select industry partners, who will be on hand at the RPP exhibition to address any questions you may have.



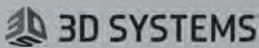
### Radiation Protection Quiz

Don't forget to test your radiation protection skills with our electronic quiz, which you can fill out via the CIRSE app!



RPP Quiz

The CIRSE Radiation Protection Pavilion is proudly supported by:

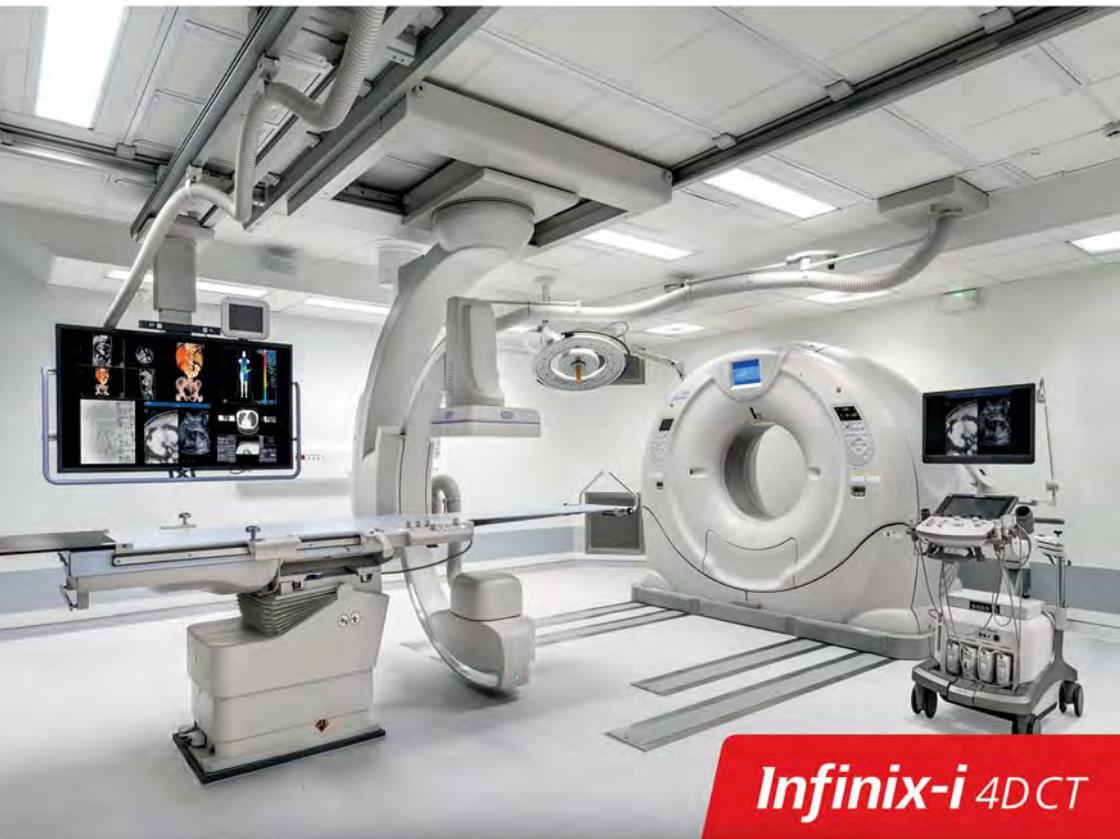


# Mini-Talks in the Pavilion – Programme

	Time	Mini-Talk	Speaker
<b>SAT</b> SEPT 22	12:45 – 13:00	Opening ceremony	W. Jaschke <i>(Innsbruck/AT)</i>
	13:00 – 13:15	Dose management programmes	E. Brountzos <i>(Athens/GR)</i>
	13:15 – 13:30	Staff safety procedures (MDT X-RAY)	D. Janssen <i>(Hilvarenbeek/NL)</i>
	13:30 – 13:45	BSS Directive and its implementation	G. Paulo <i>(Coimbra/PT)</i>
<b>SUN</b> SEPT 23	09:30 – 09:45	The use of real time dosimetry in optimising radiation protection (Raysafe/Fluke)	F. Celén <i>(Billdal/SE)</i>
	09:45 – 10:00	High dose procedures: how to manage dose in biliary drainage	M. Freund <i>(Innsbruck/AT)</i>
	11:00 – 11:15	Peak skin dose: trigger level to implement dose optimisation and patient oriented best practice (Bracco)	A.G. Rampoldi <i>(Milan/IT)</i>
	11:15 – 11:30	High dose procedures: how to manage dose in transradial access	A. Buecker <i>(Homburg/DE)</i>
	12:30 – 12:45	X-ray dose reduction in angiography (Kinepict)	S. Osváth <i>(Budakeszi/HU)</i>
	12:45 – 13:00	High dose procedures: how to manage dose in prostatic artery embolisation	F.C. Carnevale <i>(São Paulo/BR)</i>
	13:00 – 13:15	High dose procedures: how to protect and manage dose - technical solutions	R. Adamus <i>(Nürnberg/DE)</i>
	13:30 – 13:45	Radiation protection beyond the cath lab (MAVIG)	M. Schmid <i>(Munich/DE)</i>
	13:45 – 14:00	How to optimise your angiographic room	G. Bartal <i>(Kfar-Saba/IL)</i>
	14:00 – 14:15	How to recognise overexposures (incidents and accidents) for reporting to authorities	R. Loose <i>(Nürnberg/DE)</i>
14:15 – 14:30	High dose procedures: how to manage dose in paediatric IR	A. Cahill <i>(Philadelphia, PA/US)</i>	

	<b>Time</b>	<b>Mini-Talk</b>	<b>Speaker</b>
<b>MON</b> SEPT 24	09:30 – 09:45	Radiation dose management in prostatic artery embolisation (Philips)	P. Schott <i>(Krefeld/DE)</i>
	09:45 – 10:00	High dose procedures: how to manage dose in renal embolisation	B. Gebauer <i>(Berlin/DE)</i>
	11:00 – 11:15	C-arm management and radiation safety in the angiosuite (Mentice)	L. Lönn <i>(Copenhagen/DK)</i>
	11:15 – 11:30	High dose procedures: how to manage dose in IAT	T. Struffert <i>(Erlangen/DE)</i>
	12:30 – 12:45	Key elements in reducing and limiting radiation dose in EVAR/TEVAR (Siemens Healthineers)	G. Richter <i>(Stuttgart/DE)</i>
	12:45 – 13:00	How to optimise dose in stroke treatment	A. Krajina <i>(Hradec Králové/CZ)</i>
	13:00 – 13:15	How to choose your equipment	P. Reimer <i>(Karlsruhe/DE)</i>
	13:15 – 13:30	Scatter radiation reduction in the interventional suite (Radpad)	E. Radtke <i>(Kansas City, KS/US)</i>
	13:30 – 13:45	High dose procedures: how to manage dose in EVAR/TEVAR	A. Chavan <i>(Oldenburg/DE)</i>
<b>TUE</b> SEPT 25	11:00 – 11:15	Live demonstration on ANGIO Mentor simulator - reducing dose levels during prostate embolisation (3D Systems)	F.C. Carnevale <i>(São Paulo/BR)</i>
	11:15 – 11:30	High dose procedures: how to manage dose in TIPS	A. Moelker <i>(Bergschenhoek/NL)</i>
	13:00 – 13:15	Establishment of clinical diagnostic reference levels for Europe (EuroSafe Imaging)	W. Jaschke <i>(Innsbruck/AT)</i>
	13:30 – 13:45	High dose procedures: how to manage dose in liver embolisation	R. Kickuth <i>(Würzburg/DE)</i>

**Canon**  
CANON MEDICAL



**Infinix-i 4DCT**

**Together,  
we make it  
possible.**

*Made For life*

<https://eu.medical.canon>

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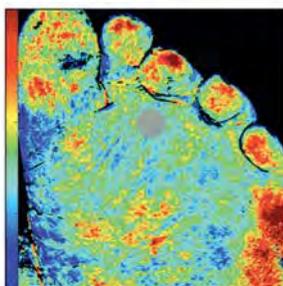
# The Leader in Hyperspectral Imaging for Tissue Oximetry

## HyperView™

WOUND CARE • RECONSTRUCTIVE SURGERY • VASCULAR INTERVENTION

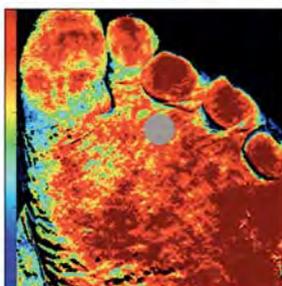


**Oxy Pre-op**



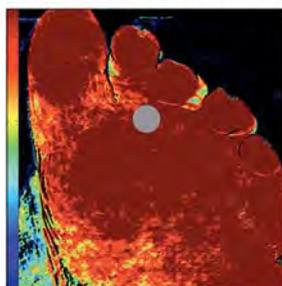
OxyHb Level = 44

**Oxy Post-op**



OxyHb Level = 78

**Oxy Post-op +133 min**



OxyHb Level = 111

Establishing a New Standard of Care

**Visit Us At Booth #79 - Pavilion 1**

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## Technical Exhibitors Guide

### Abbott Vascular

30

Park Lane  
Culliganlaan 2B  
1831 Diegem  
BELGIUM  
[www.vascular.abbott](http://www.vascular.abbott)

At Abbott, we're committed to helping you live your best possible life through the power of health. For more than 125 years, we've brought new products and technologies to the world – in nutrition, diagnostics, medical devices and branded generic pharmaceuticals – that create more possibilities for more people at all stages of life. Today, 94,000 of us are working to help people to live not just longer, but better, in the more than 150 countries we serve. Connect with us at [www.abbott.com](http://www.abbott.com), on Facebook at [www.facebook.com/Abbott](https://www.facebook.com/Abbott) and on Twitter @AbbottNews and @AbbottGlobal.

### Adept Medical Ltd

54

2-6 McDonald Street  
Morningside  
1025 Auckland  
NEW ZEALAND  
[www.adeptmedical.com](http://www.adeptmedical.com)

Adept Medical designs and manufactures world leading patient support devices and accessories clinically originated and developed to provide ergonomic working solutions for clinicians performing endovascular interventions on fluoroscopy imaging tables, including radiation protection and more. With Adept Medical's integrated research, industrial design, engineering, state of the art tooling, precision injection moulding and manufacturing capability all on one site, it is ideally placed to develop new products in partnership with medical professionals to fulfil unmet market needs. We are a leading specialist injection moulding and carbon fibre composite manufacturer to the medical market. With an ISO 13485 certified quality management system, clean room facilities, FDA and Health Canada registration, we offer products to the global healthcare industry through an independent net-work of medical and surgical distribution companies. Adept Medical is a subsidiary and specialist medical business unit of the award-winning design and manufacturing company Adept Limited with over 45 years of experience in the design and manufacture of high end injection moulded products.  
Current products: STARSystem – STARBoard, STARTable and the STARSupport; IR System – STARBoard, IR Shield and IR Extension; IR Platform – Platform and Extension; ArmSure – ArmSure Support, Shield and Straps; Drape Support.

**ALN Implants**

**61**

589 Chemin du Niel  
 83230 Bormes les Mimosas  
 FRANCE  
[www.aln2b.com](http://www.aln2b.com)

ALN is one of the leaders in its field with its ALN optional vena cava filter. This filter is well known in Europe for more than 25 years and is present for long on international markets including USA.

Products: ALN Optional vena cava filter with Hook, ALN Optional vena cava filter without Hook, Retrieval systems of the ALN filter including the 2in1 device  
 CE Mark & FDA approved (2008), Proven effectiveness, Retrieval after long placements (over 40 months), 1 Retrieval at 12 years.

**Alvimedica**

**51**

Trakya Serbest Bölgesi  
 34540 Çatalca /Istanbul  
 TURKEY  
[www.alvimedica.com](http://www.alvimedica.com)

We are a global innovator of unique interventional medical devices, committed to continuing the development and manufacturing of globally recognized and highly innovative product portfolios in both endovascular and interventional cardiology. We create the highest quality devices and technologies that answer patients' un-met needs. Our teams are spread all around the world, with our main manufacturing plants in Italy and Turkey. Our driving passion is to improve the quality of life through innovative technology, creating a better future by investing in both clinical research and product development. We firmly believe that by working with today's leading physicians we will create highly effective solutions that meet today's real unresolved patient needs. This collaboration is fundamental to us as a company, in order to present and discuss new treatment options.

As a company we work collaboratively to constantly pursue clinically innovative treatment and devices. We are wholeheartedly committed to improving minimally invasive procedures that prioritize the care for each patient and improve their quality of life. Our experienced team of specialists continue to build on the success of our current breakthrough products, as we strive to create a better, healthier future for our patients. We invite you to join us in fulfilling our ambition to create the very best medical devices for people all around the globe.

**Andanza International**

15

Zum Werrablick 4  
37276 Meinhard  
GERMANY  
[www.andanza.de](http://www.andanza.de)

Andanza International is a partner for various closure devices, made in Germany. Our patented product range includes first class femoral, radial and brachial compression systems for puncture sites, as well as several accessories. Hospitals and suppliers from all over the world trust in our products, support and expertise.

**Andramed**

47

Schiesswieslenstrasse 18  
72766 Reutlingen  
GERMANY  
[www.andramed.com](http://www.andramed.com)

It is probably a combination of many factors that has made us successful since 2004: the good collaboration of a medium-sized family company, the site in the heart of Germany's medical technology region around the University of Tübingen, our "typical Swabian" meticulousness and our extremely high quality standards, the commitment to just a few, but therefore all the more high-quality niche products, and the collaboration with doctors to find ever-better solutions. All this has contributed to our first-class reputation and making us so well-known – as well as to our products being used worldwide.

**AndraTec**

21

Simmerner Strasse 70  
56075 Koblenz  
GERMANY  
[www.andratec.com](http://www.andratec.com)

AndraTec is a highly innovative company located in the heart of Germany. We are known for the Lokum Interventional Guide wires, Exeter Retrieval Snares, AltoSa XL Balloons, Optimus and Optimus Covered XL Stents, Pillar Bifurcation Device and Pillow Occluder. Our focus is in the interventional Cardiovascular field with new innovative products.

**Angiodroid Srl****48**

Via Caselle 76  
40068 San Lazzaro di Savena (BO)  
ITALY  
[www.angiodroid.com](http://www.angiodroid.com)

Angiodroid S.r.l. is an Italian innovative company that projects and trades solutions for the medical market. Angiodroid The CO<sub>2</sub> Injector is our main product. It is a carbon dioxide (CO<sub>2</sub>) injector for interventional radiology procedures and represents the perfect solution for the treatment of patients with, diabetic disease, renal failure, intolerance to iodinated contrast media.

The use of CO<sub>2</sub> in peripheral angiography has been common practice for many decades. To date, however, it has not the proper success due to the lack of advanced technology which could support operators during the procedures. Angiodroid The CO<sub>2</sub> Injector, whose main fields of application are interventional radiology & vascular surgery, is the perfect solution to all these problems and is the only injector: 100% automatic, 100% safe, 100% digital, 100% user friendly.

**AngioDynamics****46**

Haaksbergweg 75 (Margrietoren)  
1101BR Amsterdam Z-O  
THE NETHERLANDS  
[www.AngioDynamics.com](http://www.AngioDynamics.com)

AngioDynamics Inc. is a leading provider of innovative, minimally invasive medical devices used by professional healthcare providers for vascular access, surgery, peripheral vascular disease and oncology. AngioDynamics' diverse product lines include market-leading ablation systems, fluid management systems, vascular access products, angiographic products and accessories, angioplasty products, drainage products, thrombolytic products and venous products. More information is available at [www.AngioDynamics.com](http://www.AngioDynamics.com).

**AprioMed****68**

Virdings Alle 28  
75450 Uppsala  
SWEDEN  
[www.apriomed.com](http://www.apriomed.com)

AprioMed develops, manufactures, markets and sells innovative medical devices and related services within the field of interventional radiology. We aim to deliver, in close collaboration with healthcare practitioners, innovative quality tools to achieve the most favourable solutions for radiologists worldwide.

**APT Medical**

81

Room 804, The Integrated Buiding  
Qinghua Information Center  
518000 Shenzhen  
CHINA  
[www.aprmed.com](http://www.aprmed.com)

APT Medical Inc. is a leading developer, manufacturer and vendor of advanced interventional medical devices for cardiovascular. Devoted to this field, APT becomes a well-known EP catheters and cardiology catheters provider in China market after 10 years development.

Research and Development (R&D) is our core development strategy, with around 10% of sales revenue invested in R&D. APT has strong developing and manufacturing ability in EP catheter, guiding sheath and so on. A big component of our success is that we have been involving with more than 10 government-sponsored research and development projects.

APT's products are widely accepted by more than 600 third-grade class-A hospitals covering more than 30 provinces in China. APT established 6 branch offices in China to provide fast and convenient service to clinical staffs. APT's products are widely sold to more than 20 countries like Japan, Germany, Poland, Czech Republic, Turkey etc.

**AR Baltic Medical**

20

P.Luksio g. 5B  
08221 Vilnius  
LITHUANIA  
[www.aachen-resonance.com](http://www.aachen-resonance.com)

AR Baltic Medical is engaged in the development and manufacturing of catheters and stents. The company is specialised in the field of invasive cardiology, radiology and neurology providing a range of treatment possibilities with drug eluting devices for several applications. The key products of AR Baltic Medical include Paclitaxel coated PTA and PTCA Balloons as well the unique Paclitaxel coated balloon for intra-cranial applications. The company maintains strong relationship with Universities, Medical Centers of clinical and scientific relevance and Technical Research Centers for its development activities. AR Baltic Medical has its main research and manufacturing facility in Vilnius, Lithuania. The company offers its products through distributors across Europe, Middle East, Asia, Latin America and Africa as well as directly to hospitals.

**Argon Medical Devices**

**11**

Av. Mon Repos 14  
 1005 Lausanne  
 SWITZERLAND  
[www.argonmedical.eu.com](http://www.argonmedical.eu.com)

Argon Medical Devices welcomes you to booth 11 at CIRSE 18. Argon is a global manufacturer of specialty medical products offering a broad range of single-use medical devices for interventional radiology, vascular surgery and interventional cardiology. Argon’s portfolio includes: CLEANER™ Thrombectomy Systems, Option™ ELITE IVC Filter, Atrieve™ Vascular Snare Kits, BioPince™ Full Core Biopsy Instrument, TLAB® Transjugular Biopsy Instrument and SKATER™ Drainage Systems, in addition to many other products for your interventional needs. Our products are sold globally through our sales teams and specialist distributors. The spirit of innovation thrives as we focus on improving the lives of caregivers and patients by delivering best-in-class medical device products, programs and services. And our commitment to quality is unwavering – achieved through the dedication of 800 highly-skilled employees globally. For years, medical professionals worldwide have trusted us to deliver consistent clinical performance. The Argon team will be delighted to meet you on stand 11 for presentations and hands-on sessions of our complete range of products. We are looking forward to your visit!

**Asahi Intecc Co. Ltd**

**80**

Strawinskylaan 527  
 WTC B-5  
 1077XX Amsterdam  
 THE NETHERLANDS  
[www.asahi-intecc.co.jp/en/](http://www.asahi-intecc.co.jp/en/)

Asahi Intecc develops and supplies high-quality medical products using an integrated in-house production system that covers everything from the selection and treatment of raw materials to the manufacturing of final products. In the peripheral field, Asahi Intecc offers a selection of guide wires that incorporate technological innovations ensuring optimal torque transmission from the proximal to the distal end and better control for intraluminal tracking. For femoropopliteal (SFA) interventions, the wire line-up consists of the 0.018” Gladius18, Halberd18, GaiaPV and Astato 30, while for infrapopliteal (BK) interventions the 0.014” wires Gladius14, Halberd14, Regalia XS 1.0, Astato XS 20 and Astato XS 40 are available.

In the field of IR, Asahi Intecc offers the Masters Parkway microcatheters, with a high flow rate and a large inner lumen for high volume injection and smooth delivery of embolic materials. For increased ease of use, a version with a pre-loaded guide wire that is prepared with just one flush injection is also available. Our 0.016” guidewire Meister 16 has high durability and better torque transmission, and a 1.7 Fr Veloute and 1.9 Fr Tellus super selective microcatheters has recently been launch in the European market.

**B.Braun****34**

Sieversufer 8  
12359 Berlin  
GERMANY  
[www.bbraun.de/de](http://www.bbraun.de/de)

B. Braun is one of the world's leading healthcare suppliers. Its division Vascular Systems offers high quality products for peripheral interventional procedures. New in pipeline are the novel drug coated balloon SeQuent® Please OTW and the innovative Multiple Stent Delivery System VascuFlex® Multi-LOC.

**Balt International****72**

10 rue Croix Vigneron  
95160 Montmorency  
FRANCE  
[www.balt.fr](http://www.balt.fr)

BALT aims to be the trusted partner physicians want to work with, by delivering only the best & breakthrough solutions in the endovascular treatment of vascular diseases worldwide.

**BD****31**

Forest House  
Tilgate Forest Business Park  
Brighton Road  
RH11 9BP Crawley  
UNITED KINGDOM  
[www.bd.com](http://www.bd.com)

BD is one of the largest global medical technology companies in the world and is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. The company develops innovative technology, services and solutions that help advance both clinical therapy for patients and clinical process for health care providers. BD has 65,000 employees and a presence in virtually every country around the world to address some of the most challenging global health issues. BD helps customers enhance outcomes, lower costs, increase efficiencies, improve safety and expand access to health care.

**Bentley InnoMed GmbH**

**58**

Lotzenaecker 25  
72379 Hechingen  
GERMANY  
[www.bentley.global](http://www.bentley.global)

Bentley's passion is the development, manufacturing and distribution of innovative implants for minimal-invasive treatments of vascular diseases. Since market launch in 2012 we rapidly expanded worldwide. Thanks to our international network of exclusive distribution partners we are represented in more than 70 countries – in some we are already market leader.

**Bioteque**

**79**

5F-6, No.23, Sec. 1  
Chang-An E. Rd.  
104 Taipei  
TAIWAN  
[www.bioteq.com.tw](http://www.bioteq.com.tw)

Bioteque Corporation currently operates two manufacturing plants in Taiwan and one manufacturing plant in Philippines. The Bataan facility was established in 2013 by Bioteque Corporation. The facility employs approximately 300 people. The area (size) of the facility is 34,288 total square meters. Product categories manufactured are mainly Bloodline and Respiratory Care products.

We provide solutions in many critical applications such as nephrology and dialysis, cardiovascular catheters, endourology, interventional radiology just about every field that exists.

Manufacturing processes associated with full range of TPU (Thermoplastic polyurethane) catheters and full range of endovascular, endourology, interventional radiology products are manufactured by the Taiwan facilities.

All our facilities are accredited with ISO 13485 and compliant with FDA, GMP and Quality System Regulations. In pursuit of extensive and everlasting growth, we are supplying quality products include: Pigtail Drainage Catheter / Double Pigtail Ureteral Stent / PCN kits for Nephrostomy, Hemodialysis Bloodline / AV Fistula Needles, IV Infusion Bags, Double Lumen Dialysis Catheter, CVC catheter, CAPD solution system. Our facility is ISO13485, CE-0434 accredited and passed FDA establishment audit. For more information, please visit our website [www.bioteq.com.tw](http://www.bioteq.com.tw)

Bioteque is continuously dedicated to develop innovative products and provide total solutions for all its customers.

**Biotronik**

10

Ackerstrasse 6  
8180 Bülach  
SWITZERLAND  
[www.biotronik.com](http://www.biotronik.com)

Biotronik is a global leader in cardio- and endovascular medical technology. Several million patients have been treated with Biotronik coronary and peripheral vascular intervention products. Biotronik Vascular Intervention has engineered many innovations, including Magmaris, the first clinically-proven resorbable magnesium scaffold, Orsiro, the ultrathin drug-eluting stent and Pulsar, the world's first 4 F compatible stent for treating long lesions.

**Boston Scientific International SA**

6

Europe Headquarters  
Parc d'Affaires Val Saint Quentin  
Bâtiment H 2 Rue René Caudron  
78960 Voisins-le-Bretonneux  
FRANCE  
[www.bostonscientific.eu](http://www.bostonscientific.eu)

Boston Scientific transforms lives through innovative medical solutions that improve the health of patients around the world.

As a global medical technology leader, we advance science for life by providing a broad range of high performance solutions that address unmet patient needs and reduce the cost of healthcare.

**Bracco Suisse SA****56**

Via cantonale centro galleria 2  
6928 Manno  
SWITZERLAND  
[www.braccoimaging.com](http://www.braccoimaging.com)

Bracco Imaging S.p.A., part of the Bracco Group, is one of the world's leading companies in the diagnostic imaging business. Headquartered in Milan, Italy, Bracco Imaging develops, manufactures and markets diagnostic imaging agents and solutions that meet medical needs.

Bracco Imaging offers a product and solution portfolio for all key diagnostic imaging modalities: X-ray Imaging (including Computed Tomography-CT, Interventional Radiology, and Cardiac Catheterization), Magnetic Resonance Imaging (MRI), Contrast Enhanced Ultrasound (CEUS), Nuclear Medicine through radioactive tracers. The diagnostic imaging offer is completed by several medical devices and advanced administration systems for contrast imaging products in the fields of radiology. The Company operates in more than 100 markets worldwide, either directly or indirectly, through subsidiaries, joint ventures, licenses and distribution partnership agreements. With an on-going research covering all key modalities, Bracco Imaging has a strong presence in key geographies: North America, Europe and Japan operating through the Joint Venture Bracco-Eisai Co. Ltd. The Company also operates in Brazil, South Korea, and China through the Joint Venture Bracco Sine Pharmaceutical Corp. Ltd. Operational investments have been made in order to achieve top quality and compliances with a sustainable eco-friendly production. Manufacturing activities are located in Italy, Switzerland, Japan, China, and Germany. Bracco Imaging is an innovative Research and Development (R&D) player with an efficient process oriented approach and a track record of innovation in the diagnostic imaging industry. R&D activities are managed in the three Research Centres located in Italy, Switzerland, and USA. To learn more about Bracco Imaging, visit [www.braccoimaging.com](http://www.braccoimaging.com).

**BTG****3**

Lakeview, Riverside Way  
Watchmoor Park, Camberley  
GU15 3YL Surrey  
UNITED KINGDOM  
[www.btgplc.com](http://www.btgplc.com)

No company endeavours to do more than BTG to help doctors in their quest to see more, reach further and treat smarter. Our growing portfolio of Interventional Medicine products is designed to advance the treatment of cancer, vascular conditions and severe emphysema.

**Canon Medical**

50

Zilverstraat 1  
2718RP Zoetermeer  
THE NETHERLANDS  
<https://eu.medical.canon/>

Canon Medical offers a full range of diagnostic medical imaging solutions including CT, X-Ray, Ultrasound and MRI, across the globe. As of December 2016, Canon Medical became a member of the Canon Group. In line with our continued Made For life philosophy, patients are at the heart of everything we do. Our mission is to provide medical professionals with solutions that support their efforts in contributing to the health and wellbeing of patients worldwide. Our goal is to deliver optimum health opportunities for patients through uncompromised performance, comfort and safety features.

At Canon Medical we work hand in hand with our partners – our medical, academic and research community. We build relationships based on transparency, trust and respect. Together as one, we strive to create industry-leading solutions that deliver an enriched quality of life.

Plan, treat and verify in one room, on one system Canon's groundbreaking new Infinix-i 4DCT supports you in bridging the gap between the interventional lab and CT with one seamlessly integrated solution for the ultimate in patient care. Infinix-i 4DCT eliminates the need to transfer patients back and forth between different rooms, while minimizing dose and maintaining patient safety. The system can help save valuable time and gain efficiencies with the ability to plan, treat, and verify in the same room, on a single system.

**Canyon Medical**

45

No. 10 Gaoke 3rd Road  
National Hi-Tech Zone  
210032 Nanjing  
CHINA  
[www.canyonmedical.com.cn](http://www.canyonmedical.com.cn)

Canyon Medical is specialized in Microwave Ablation for over 30 years with the largest accumulated cases done successfully with our system in China. By innovating with clinical practices hands in hands, we are pioneering to solve clinical challenges in this field. In view of our continuous and prominent contribution, our company was granted with many great honors, like the National Award for Scientific and Technological Invention in 2014. Canyon Microwave Ablation is indicated for use in percutaneous, laparoscopic, and intraoperative coagulation (ablation) of soft tissue, including partial or complete ablation of non-resectable liver and lung tumors. It mainly includes Microwave Ablation System and Microwave Ablation Antennas, which are designed to realize a reliable, predictable

and uniform ablation zone. As a leading brand in China with endless efforts in product design and R&D, we are proud to continue delivering solutions Accurate, Stable, Safe and more.

Microwave Ablation System – main features: Portable version (2450 MHz) for easy setup and usage; Interactive and sensitive touch screen with adjustable power and time setting, and real-time temperature monitoring; One button control for convenient usage; Continuous and pulsed modes are available for different options; Incorporated multi-safety monitoring design.

Microwave Ablation Antennas – Main features: High performance material to ensure better connection and strength; Unique shaft coating material to avoid tissue adhesion; Sharp tip needle and thin diameter, less invasive; Internally water cooled antenna with intelligent temperature control; Signal enhancement design for better visibility under CT or ultrasound guidance: High efficiency reusable cable, unique enhanced connection with the antenna.

### **Cardionovum**

**32**

Am Bonner Bogen 2  
53227 Bonn  
GERMANY  
[www.cardionovum.com](http://www.cardionovum.com)

Cardionovum GmbH consists of R & D staff, in developing of next generation DCB & DES for the treatment of coronary and endovascular artery diseases. The company offers peripheral vascular intervention solutions, including LEGFLOW RX/OTW, a next-generation paclitaxel releasing peripheral balloon dilatation catheter, it is available in three platforms for guiding wires 0.014"; 0.018" and 0.035" with a wide range of measures for the treatment of the whole arterial axis of the legs; and solutions for the treatment of shunt restenoses, such as APERTO OTW, paclitaxel releasing hemodialysis shunt balloon dilatation catheter, specifically designed for AVF stenosis with up to 20bar RBP and 40cm shaft length; 9 & 10mm, 80cm shaft length, for central venous stenoses.

Cardonovum GmbH also provides coronary vascular intervention products, such as Restore DEB, a next generation paclitaxel releasing coronary balloon dilatation catheter and XLIMUS, an ultimate coronary DES stent system to treat complex coronary artery disease by reaching and crossing the challenging lesions. The company was founded in 2012 and is based in Bonn, Germany. Cardionovum is represented in more than 40 countries worldwide and still growing.

**CAScination**

65

Steigerhubelstrasse 3  
3008 Bern  
SWITZERLAND  
[www.cascination.com](http://www.cascination.com)

CAScination AG is an award-winning medical technology company dedicated to development, manufacturing and commercialization of innovations in computer-assisted and image-guided surgery. Our trailblazing navigation systems and surgical robots are designed to improve outcomes for patients undergoing surgical or interventional procedures and offer new perspectives to patients worldwide. Our CAS-One planning and navigation system is used to treat patients suffering from soft tissue cancer (e.g., liver cancer) by many hospitals across Europe, and we are developing further applications in a number of disease areas.

Accuracy and safety in the IR suite: CAS-One IR is an end-to-end, stereotactic navigation system designed to assist in the planning, navigation and ablation of tumors in the liver, lung, kidney, pancreas and bones during percutaneous interventions. CAS-One IR provides an ablation cockpit compiling and displaying all the views and information you need to precisely and safely navigate during the course of the procedure. Choose different viewing modalities to always stay in control. Connect CAS-One IR to your IR suite and enjoy impressively smooth workflows. Navigation of various needles facilitates multi-needle procedures such as IRE and treatment of larger lesions with overlapping ablation zones. With its emphasis on accurate planning and needle placement with a single puncture, CAS-One IR allows a better predictability of procedure time.

**Control – Pilot – XO Score – GPX**

22

2500 South State Street  
Suite 257  
UT 84115 Salt Lake City  
UNITED STATES  
[www.controlmedtech.com](http://www.controlmedtech.com)

ASPIRE Mechanical Thrombectomy Systems deliver speed, power, volume and force. FDA cleared ASPIRE Mechanical Thrombectomy Systems are sold alone and/or in a kit with catheters. PILOT technology delivers next-generation performance to bone access, bone biopsy and soft tissue resection with a simple cost effective vacuum-assisted rotational device. POWRSYRINGE is a handheld angiographic injector that offers fast injections, improved image quality while reducing contrast volume. XO SCORE is a simple and cost-effective exoskeleton catheter used with off-the-shelf PTA balloons designed to score, cut, infuse and vessel-prep during PTA. GPX is a non-toxic biocompatible polymer embolic device deployed through standard catheters designed to improve safety, targeting, precision and control.

**Cook Medical**

29

O'Halloran Road  
National Technology Park  
Limerick  
IRELAND  
[www.cookmedical.eu](http://www.cookmedical.eu)

Since 1963, Cook Medical has worked closely with physicians to develop technologies that eliminate the need for open surgery. Today we are combining medical devices, biologic materials, and cellular therapies to help the world's healthcare systems deliver better outcomes more efficiently. We have always remained family owned so that we have the freedom to focus on what we care about: patients, our employees, and our communities. For more information, visit [www.cookmedical.eu](http://www.cookmedical.eu), and for the latest news, follow us on Twitter, Facebook, and LinkedIn.

**Cordis, a Cardinal Health Company**

14

Cardinal Health  
Linderstrasse 10  
6340 Baar  
SWITZERLAND  
<https://emea.cordis.com/emea.html>

Cardinal Health, Inc. is a global, integrated healthcare services and products company, providing customized solutions for hospitals, healthcare systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices worldwide. The company provides clinically proven medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency from hospital to home. Cardinal Health connects patients, providers, payers, pharmacists and manufacturers for integrated care coordination and better patient management. Backed by nearly 100 years of experience, with more than 50,000 employees in nearly 60 countries, Cardinal Health ranks among the top 25 on the Fortune 500.

**Delcath Systems**

5

Unit 19, Mervue Business Park  
Mervue  
Galway  
IRELAND  
[www.chemosat.com](http://www.chemosat.com)

Delcath Systems, is a specialty pharmaceutical and medical device company focused on oncology. Our proprietary product – the Delcath Hepatic Delivery System for use with Melphalan Hydrochloride -is designed to administer high dose chemotherapy to the liver, while controlling systemic exposure.

**Deutsche Akademie für Mikrotherapie e.V. (DAfMT)**

57

Leipziger Strasse 44  
39120 Magdeburg  
GERMANY  
[www.dafmt.com](http://www.dafmt.com)

Microtherapy or minimally-invasive medicine opens a perspective of completely new therapeutic dimensions in numerous medical subspecialties. Technical advances enable treatment of an increasing number of diseases with a minimum of trauma and discomfort to the patient. However, such strategies demand a highly developed sense of interdisciplinary strategies and a culture of teamwork and communication across medical specialties. The same challenges apply for the development of new materials, tools and interventional techniques, which can only be successfully implemented in close cooperation of physicians, scientists and industrial developers to meet the demands of patients and users.

The Deutsche Akademie für Mikrotherapie (DAfMT) understands itself as a platform for this interdisciplinary dialogue. Main feature at present is academic teaching in practical courses and workshops. Our philosophy is based on a disease-centered approach, with physicians of various specialties gathering to teach conceptual interdisciplinary thinking in addition to practical skills in microtherapy. Scholars will be guided to develop treatment algorithms including microtherapeutic techniques, and they will additionally undergo training using phantoms and animal models to learn essential practical skills. The DAfMT also renders specific services for preclinical science and development in microtherapeutic techniques and the according tools.

**Eco Microwave**

23

10th Floor, Block 2, Binjiang Plaza  
No. 305, Jiangdong North Road  
210036 Nanjing  
CHINA  
[www.ecomicrowave.com](http://www.ecomicrowave.com)

Since 2000, ECO Microwave is a medical device manufacturer specialized in microwave ablation, high frequency, and laser products. ECO's vision is to become the leading provider of thermal ablation treatment for cancer patients. Visit [www.ecomicrowave.com](http://www.ecomicrowave.com) for more information.

**Encapson****62**

Institutenweg 25a  
7521PH Enschede  
THE NETHERLANDS  
[www.encapson.com](http://www.encapson.com)

Encapson is a medical technology company with the mission to improve patient care through innovative echogenic visibility solutions for medical devices. Sono-Coat™ is a best in class coating-based visibility system that significantly improves the ultrasound visibility of medical devices in the body leading to better patient outcomes. The unmatched ultrasound visibility of Sono-Coat™ enables doctors carrying out difficult minimally invasive procedures.

Sono-Coat™ is a game-changing technology in situations “when precision counts”. It enables precise targeting of objects in deeper tissue structures (e.g. liver and kidney biopsies) and supports the physician in performing accurate, safe and error-free ultrasound-guided minimally invasive procedures.

**Endocare****71**

9825 Spectrum Drive, Building 2  
TX 78717 Austin  
UNITED STATES  
[www.endocare.com](http://www.endocare.com)

Endocare, Inc. is a medical device company focused on the development of minimally invasive technologies for tissue and tumor ablation. With over 10-years of clinical experience in percutaneous cryoablation for kidney, lung, palliative pain management, and other tissues, we remain committed to innovative technology that improves and extends patients' lives. Endocare also offers the Synchronous Wave Alignment technology of MicroThermX for Microwave Ablation of soft tissue.

**Endologix Int. Holdings BV 86**

Burgemeester Burgerslaan 40  
5245NH Rosmalen, Noord-Brabant  
THE NETHERLANDS  
[www.endologix.com](http://www.endologix.com)

Endologix offers personalized AAA care for each patient with options to treat even the most challenging anatomies on IFU. Our portfolio is designed to improve outcomes and solve key challenges like access, bifurcation preservation and aneurysm sealing. We are committed to physician collaboration for solutions that revolutionize aortic care for life.

**Endovascular Today Europe**

90

1008 Upper Gulph Road, Suite 200  
PA 19087 Wayne  
UNITED STATES  
[www.evtoday.com](http://www.evtoday.com)

Endovascular Today Europe is the premier publication for all specialists engaged in endovascular therapies. Published 7 times a year with a weekly online e-news, each issue of Endovascular Today Europe features timely articles on new techniques, clinical trial results, case studies, and advances in technology for endovascular practitioners. Endovascular Today Europe is distributed to 9,200 endovascular specialists in Europe.

**GEM S.r.l.**

38

Via dei Campi, 2  
55049 Viareggio (LU)  
ITALY  
[www.gemitaly.it](http://www.gemitaly.it)

GEM S.r.l., Italian company, since 1994, under the brand name GLUBRAN, produces and distributes all over the world synthetic surgical adhesives and their applicator devices: Dispensing Tips; Catheters for Laparoscopy; Drop Control Devices; Nebulisers and Vascular Closure system specific for femoral accesses. All CE marked. Glubran 2 is a synthetic biodegradable cyanoacrylate basis glue, modified by the addition of a monomer. Class III medical device authorized for endovascular and surgery use. Glubran Tiss 2 is the adhesive for skin applications. Glubran 2 is an embolising agent, visible after being mixed with the contrast agent, for interventional radiology and neuroradiology. The final solution for: AVM, Trauma, Bleedings, Tumors, Varicocele, Portal Vein, Type II endoleaks. Ready to be used, has high adhesive, sealant, haemostatic and bacteriostatic properties. Glubran conforms with the tissues on which it is applied. Innovation is part of GEM's DNA as shown by the important solutions developed and achieved year after year in response to our clients' needs, working at introducing solution independently. GEM's paradigm is: "Solution comes from evolution". GEM's evolution comes from continuous commitment to research and effort to improve always its products, to demonstrate their efficiency and quality.

**Getinge****59**

Kehler Strasse 31  
76437 Rastatt  
GERMANY  
[www.getinge.com](http://www.getinge.com)

Getinge is a global provider of innovative solutions for operating rooms, intensive-care units, sterilization departments and for life science companies and institutions. Our extensive portfolio of trusted products, solutions and consulting services have been brought together under one single brand – Getinge. With brands like Maquet, Lancer, Atrium, Pulsion, Datascope, Steritec and Stericool – just to name a few – we are now a global market leader in many healthcare and life science segments. Based on our first-hand experience and close partnerships with clinical experts, healthcare professionals and medtech specialists, we are improving every-day life for people, today and tomorrow. [www.getinge.com](http://www.getinge.com)

**Guerbet****33**

bp57400  
95943 Roissy CDG Cedex  
FRANCE  
[www.guerbet.com](http://www.guerbet.com)

Guerbet is a pioneer in the contrast-agent field, with more than 90 years' experience, and is a leader in medical imaging worldwide. It offers a comprehensive range of pharmaceutical products, medical devices and services for diagnostic and interventional imaging, to improve the diagnosis and treatment of patients. With 7% of revenue dedicated to R&D and more than 200 employees distributed amongst its three centers in France and the United States, Guerbet is a substantial investor in research and innovation. Guerbet (GBT) is listed on Euronext Paris (segment B – mid caps) and generated € 807 million in revenue in 2017. For more information about Guerbet, please visit [www.guerbet.com](http://www.guerbet.com).

**H.S. Hospital Service SPA****53**

Via Zosimo, 13

00178 Rome

ITALY

[www.hshospitalservice.com](http://www.hshospitalservice.com)

HS Hospital Service Spa is a leading player in the international interventional oncology market, from RF and MW tumor ablation systems to soft tissue and bone marrow biopsy needles, catheters, drug infusion devices and all sorts of products for surgery, interventional radiology and critical care. In the field of health technologies, success may only be achieved through excellence. We are committed to deliver excellence all the way from product design and manufacturing to post-sale customer care. We transfer know how and expertise from industrial research to the clinical field and back. Everyday we work side by side with physicians and interact with all the stakeholders in interventional oncology for better understanding and fulfilling their needs and requirements, so to deliver to the market top level devices, with optimum performance, minimum invasiveness and unmatched usability. Let us show you our new products and projects and let us share with you information, ideas, plans and strategies for the future! Please come and visit us at booth number 53.

**HyperMed Imaging, Inc.****74**

8700 Trail Lake Drive West

Suite 200

TN 38125 Memphis

UNITED STATES

[www.hypermed.com](http://www.hypermed.com)

HyperMed Imaging, Inc. was the first to commercialize hyperspectral imaging for tissue oximetry and remains the leader with more than a decade of clinical efficacy. HyperMed's new product called HyperView is a smaller, faster, and easier-to-use device for applications including wound care, amputation, vascular surgery, and reconstructive surgery.

**Hyprevention**

76

PTIB – Hopital Arnozan  
Avenue du Haut Leveque  
33604 Pessac  
FRANCE  
[www.hyprevention.com](http://www.hyprevention.com)

Hyprevention develops, manufactures and commercializes innovative implantable medical devices to address bone performance issues (such as weakness or fractures due to osteoporosis or metastases). The company has developed first Y-STRUT® Proximal Femur System indicated to reinforce the proximal femur and limit risk of fracture in oncology for patients with metastatic lesions). V-STRUT®, the second product developed by the company, is intended to be used for the treatment of vertebral compression fracture due to osteoporosis or tumorous bone lesions in the thoracic and/or lumbar spine.

**Imactis**

83

20 rue du tour de l'eau  
38400 St Martin D'Herès, Iserè  
FRANCE  
[www.imactis.com](http://www.imactis.com)

Imactis is specialized in computer assisted interventional radiology. Imactis develops and markets innovative solutions to assist interventional radiologists during minimally invasive needle procedures. The objective is to increase accuracy and safety, facilitate complex procedures, reduce the length of procedures, decrease the number of controls and improve patient treatment.

**Interventional News / BIBA**

91

526 Fulham Road  
SW6 5NR London  
UNITED KINGDOM  
[www.interventionalnews.com](http://www.interventionalnews.com)

Interventional News is an editorially independent, expertly curated news provider that brings you the news, as it happens. With a brand new website, fortnightly newsletters, social media presence, and an app with worldwide readership, we also have a quarterly print edition for subscribers in Europe and North America. Published by BIBA Medical, Interventional News is steered by renowned editors-in-chief, Professor Andy Adam and Dr. Brain Stainken, and reaches over 12,000 interventionalists. Interventional News contains the latest news, summaries of cutting-edge research and spotlights controversies in interventional radiology. We publish expert analysis, conference coverage and key updates on the latest products and medical device industry. Have you visited us yet? Free subscription at [www.interventionalnews.com](http://www.interventionalnews.com).

**iVascular**

77

Camí de Can Ubach, 11  
08620 Sant Vicenç dels Horts  
SPAIN  
[www.ivascular.global](http://www.ivascular.global)

iVascular is a fast-growing company founded in 2010 in Barcelona (SPA), with the aim of developing advanced medical devices and therapies for the treatment of the cardiovascular system disorders. Thanks to the knowhow and the investment in technology, iVascular achieved the vertical integration of all the processes of their products.

**IZI Medical**

64

5 Easter Ct # J  
MD 21117 Owings Mills  
UNITED STATES  
[www.izimed.com](http://www.izimed.com)

IZI Medical Products, LLC develops minimally invasive diagnostic and therapeutic spine solutions to restore patients' quality of life. Our spine product offerings include vertebroplasty, vertebral compression fracture solutions and vertebral augmentation systems. We embrace the legacy of the Osteo-site portfolio acquired from Cook Medical, as well as the recently added Kiva® and Blazer® systems acquired from Benvenue Medical. We look forward to working together to improve patient care.

Our Vertebral Compression Fracture offering includes: Osteo-Site Murphy needle developed in collaboration with Dr. Kieran Murphy has set the standard for percutaneous entry needles globally,

Innovative range of PMMA bone cements indicated to vertebroplasty and kyphoplasty, the Kiva® VCF Treatment System provides a new implant-based approach to vertebral augmentation in the treatment of painful VCF's, the Blazer-C® utilizes a unique cannulated curved wire, offering mechanical channel creation, predictable cement deposition across the entire vertebral body and an MIS unilateral approach.

As a leading innovator, manufacturer, and distributor of quality medical devices, we ensure that all our products reduce procedural time and enhance precision.

Stop by our booth to learn more and join us in the Vertebroplasty hands-on training on Monday 24<sup>th</sup>!

**Joline****36**

Neue Rottenburger Strasse 50  
72379 Hechingen  
GERMANY  
[www.joline.net](http://www.joline.net)

Joline has built on a long tradition in the development and production of medical devices meeting the highest quality standards. Advanced production technology and medical expertise ensure consistency and reliability. All Joline products have been developed and produced exclusively in Germany. Excellent global customer relations and positive patient outcomes are essential for our success.

**M.D.L.****67**

Via Tavani 1/a  
23014 Delebio (SO)  
ITALY  
[www.mdlsrl.com](http://www.mdlsrl.com)

Based in Northern Italy, MDL, has been on the forefront of innovation since 1993. Already an established leader in the production of biopsy needles, it continues to innovate developing new and custom made technologies for the following procedures: Histological Biopsy, Cytological Biopsy, Bone Marrow Biopsy, Soft Tissue Biopsy, Senology, Percutaneous Drainages, Radiology, Anesthesia. MDL's in house production capabilities, allow medical professionals to work hand in hand with technicians to develop, modify and innovate, providing state of the art, custom solutions both quickly, and efficiently, for any specialized medical use. MDL is in the unique position to guarantee the devices performance, maintenance and further developments through its effective quality management system. The entire design, production and distribution process meets the standard UNI CEI EN ISO 13485:2012 and UNI EN ISO 9001-2008. The devices also bear the CE Mark released as per Annex II of European Council Directive 93/42 CEE. The product's production certification guarantees each device has undergone a comprehensive and accurate inspection at each phase of production. This attention to detail and the stringent approval process, ensures the highest quality product. MDL is placed nationally and internationally through a dedicated and exclusive sales network of regional and international distributors.

**Medcomp**

7

1499 Delp Drive  
PA 19438 Harleysville  
UNITED STATES  
[www.medcompnet.com](http://www.medcompnet.com)

Medcomp is a major supplier of Venous Access Systems. This year the innovators of Medcomp proudly introduce the Symetrex Long Term Hemodialysis Catheter, engineered and designed to preserve access. Symetrex combines RF tipping technology with a unique anti-wall suction design to produce low recirculation, high flow catheter that meets the demands of the clinician. Medcomp will also be showing its series of Split Tipped designs. Rounding off the dialysis line will be DuraLock-C, Trisodium Citrate antibacterial-anticoagulant catheter locking solution. For drug/chemotherapy administration, CT-Power Injectable PICC lines and Ports will be demonstrated. Rated at 300psi, these venous access devices allow contrast delivery to 5cc/second, facilitating superior contrast enhanced CT studies. Also the new DIRECT MICROPUNCTURE PORTS will be shown Neonatal micropuncture access will be showcased as well. Significant features include: a .010" mini-mandrel wire, a mini-sheath/dilator, and a 1.9 French neonatal line.

**Medex Research Ltd**

88b

2 Chapel St  
PO19 1BU Chichester  
West Sussex  
UNITED KINGDOM  
[www.medexresearch.com](http://www.medexresearch.com)

We help medical device companies wishing to explore growth opportunities and develop marketing strategies for new and existing products in developed and emerging markets.

**Medicor Europa AG**

69

Wingepark 5b 101  
3110 Rotselaar  
BELGIUM  
[www.medicor-international.com](http://www.medicor-international.com)

The contrast agent injectors of the Japanese manufacturer Nemoto offer innovative functions for each imaging modality. Whether CT, MR or angiography – the Nemoto contrast agent injectors are extremely reliable, easy to use and secure. In MR field the Nemoto Sonic Shot 7 is the only injector worldwide which gives you the opportunity to use pre-filled syringes of any manufacturer. Simply click the syringe into the appropriate adapter and the device does the rest for you. Modern functions such as determination of

the injection protocol on the basis of body weight, auto-fill, storage options for custom protocols and the unique anatomical interface with touch screen round out the features of the devices.

Nemoto and Medtronic are proud to introduce this year the finest power injector for interventional which is the PRESS DUO ELITE, a unique dual head high pressure injector dedicated for the interventional. Nemoto and Medtronic offer only the best for your imaging!

### **Medtron AG**

**55**

Hauptstrasse 255  
66128 Saarbrücken  
GERMANY  
[www.medtron.com](http://www.medtron.com)

Medtron AG – Essential for contrast.

Medtron AG is a globally active company working in the field of medical engineering. As one of the leading manufacturers of ultramodern contrast medium injectors, Medtron AG has made its name on the international market: Across the globe, many thousand doctors, hospitals and diagnostic centres place their trust in Medtron's contrast medium injectors made in Germany. Our innovative and high-quality injector systems – made right here, in the Saarland – complement virtually all modern methods of examination which can be performed with the help of medical engineering imaging systems, such as magnetic resonance imaging, computed tomography and angiography.

To combine improved diagnostics, patient-friendliness and cost effectiveness is one of the goals of our competent Medtron development team. For example, our experienced radiologists and creative engineers keep improving image display using special injection profiles in radiology, and an improvement can only be achieved with the help of the flexible drive concept of the contrast medium injectors. They are involved in a continuous dialogue with the users of the injectors, and they integrate the customers' wishes in the product development.

To facilitate the optimization of the examination techniques, we also run development projects involving all renowned manufacturers of radiological imaging systems and devices. Any contrast medium injector produced by Medtron can be equipped with a user interface in most languages. Naturally, Medtron also offers a wide range of device-specific and high-quality consumables for its injectors.

**Medtronic International****13**

Rte de Molliau 31  
1131 Tolochenaz  
SWITZERLAND  
[www.medtronic.com](http://www.medtronic.com)

As a global leader in medical technology, services and solutions, Medtronic improves the health and lives of millions of people each year. We believe our deep clinical, therapeutic and economic expertise can help address the complex challenges – such as rising costs, aging populations and the burden of chronic disease – faced by families and healthcare systems today. But no one can do it alone. That's why we're committed to partnering in new ways and developing powerful solutions that deliver better patient outcomes. Founded in 1949 as a medical repair company, we're now among the world's largest medical technology, services and solutions companies, employing more than 85,000 people worldwide, serving physicians, hospitals and patients in more than 155 countries. Join us in our commitment to take healthcare Further, Together. Learn more at [Medtronic.com](http://Medtronic.com).

**Merit Medical****49**

Amerikalaan 42  
6199AE Maastricht-Airport  
THE NETHERLANDS  
[www.merit.com](http://www.merit.com)

Founded in 1987, Merit Medical is a leading manufacturer and marketer of disposable medical devices used in interventional, diagnostic and therapeutic procedures, particularly in cardiology, radiology, oncology, critical care and endoscopy. With a global work force and cutting-edge manufacturing facilities equipped with the most advanced technology, Merit Medical consistently delivers quality products that are backed by excellent customer service and professional expertise. Starting with the world's most studied spherical Embolic – Embosphere® Microspheres – we have built a comprehensive embolotherapy suite of products, including tools to deliver your embolics right to the target. Our focus on interventional spine continues to increase, with tools for various spine treatments including spinal ablation and vertebroplasty. We support physicians with PAE, UFE, TACE and Interventional Spine training programs and practice support tools. Our peripheral intervention division offers solutions for Interventional Radiologists, including access and drainage products, angiography and intervention catheters, wires and snares, and a suite of biopsy devices. We also support Renal Therapies with the HeRO® Graft family of products and systems for Peritoneal Dialysis, as well as physician training programs. We look forward to meeting you at our booth and Learning Centre and presenting our comprehensive suite of products, customised solutions and education programmes.

**Mermaid Medical Group****2**

Frydensbergvej 25  
3660 Stenløse  
DENMARK  
[www.mermaidmedical.com](http://www.mermaidmedical.com)

Mermaid Medical is a private and independently owned company founded in 2007 and headquartered in Denmark. We develop, manufacture and distribute high quality innovative products for diagnostic and interventional radiology and for vascular surgery. We collaborate closely with clinicians to provide solutions that improve patient outcomes. The first products of our D Clot thrombectomy systems range, the D Clot OTW and the D Clot HD will be presented during the CIRSE. These are all-in-one systems requiring no additional capital equipment and providing wall-to-wall thrombus removal. Our global offices serve physicians and patients across Europe, USA and Asia. We look forward to your visit at booth number 2.

**MIM Software****19**

25800 Science Park Dr Ste 180  
OH 44122 Cleveland  
UNITED STATES  
[www.mimsoftware.co](http://www.mimsoftware.co)

MIM Software Inc. offers a single-vendor reading environment for 2D NM, PET, SPECT, CT, and MRI regardless of camera manufacturer. Now you can have advanced image review for nuclear medicine and anatomical modalities all within one system. The industry-leading software for PET/CT review and therapy response assessment is available on both PC and Mac®. MIM offers integrated packages for cardiac and neuroimaging with automated quantitative analysis including for Amyloid PET. Professionals can collaborate securely and reliably by sharing images with MIMcloud and Mobile MIM, a remote diagnostic image review tool for the iPhone®, iPod touch®, or iPad®.

**Minerva Medica****87**

C.So Bramante 83  
10126 Torino  
ITALY  
[www.minervamedica.it](http://www.minervamedica.it)

Since 1909, Edizioni Minerva Medica publishes specialist journals and books which are distributed worldwide, among which The Journal of Cardiovascular Surgery. The journal is indexed by BIOSIS Previews, Current Contents/Clinical Medicine, EMBASE, PubMed/MEDLINE, Science Citation Index Expanded (SciSearch), Scopus and has an Impact Factor of 2,179.

**Möller Medical GmbH**

44

Wasserkuppenstrasse 29-31  
36043 Fulda  
GERMANY  
[www.moeller-medical.com](http://www.moeller-medical.com)

German medical device manufacturer Moeller Medical produces components and highly sensible medical devices. The product portfolio consists of own brands (interventional radiology, urology, neurosurgery, aesthetics, blood banks) and OEM. Our product line BiopC is based upon decades of experience in developing and manufacturing cannulae and needles. Creating high quality products with the utmost respect for patient's well-being has been an unspoken mission statement ever since the foundation of the company. This guideline directly influenced the development of the BiopC product range and will remain a determining factor to continuous developments of the product portfolio.

**NeuWave Medical, Ethicon**

52

3529 Anderson St  
WI 53704 Madison  
UNITED STATES  
[www.ethicon.com/na/products/microwave-ablation/microwave-ablation/neuwave-microwave-ablation-system](http://www.ethicon.com/na/products/microwave-ablation/microwave-ablation/neuwave-microwave-ablation-system)

The NEUWAVE(tm) Microwave Ablation System, now a part of the Ethicon(tm) portfolio of products, is the first intelligent ablation system and the only system that has it all. The versatile probe portfolio with multi-probe synchronized energy delivery allows physicians to tailor ablations with 1, 2 or 3 probes. In addition, the 17 gauge NEUWAVE(tm) PR probe is the only probe available with distal energy control to help protect non-target tissue. The unique computer controlled system now includes Ablation Confirmation(tm) software, offering the only integrated in-procedure confirmation to help confirm probe placement and evaluate the technical success of your procedure. Build your ablation program with the first intelligent ablation system and the only system that has it all.

**Nocimed, Inc.**

40a

370 Convention Way  
CA 94063 Redwood City  
UNITED STATES  
[www.nocimed.com](http://www.nocimed.com)

Nocimed™, Inc. harnesses MR-Spectroscopy to provide new quantitative insights used in diagnosing lumbar disc pain.

**Noras MRI****84**

Leibnizstrasse 4  
97204 Hoechberg  
GERMANY  
[www.noras.de](http://www.noras.de)

Noras has been present internationally within the MRI industry for 30 years and has built a solid reputation due to its customer-oriented service. Besides our standard products, our slogan „we build your vision,“ reflects exactly what we offer our customers: We are a competent partner with the planning and realization of your individual ideas and concepts.

Beneath development and producing MR Coils for different applications; such as Breast Biopsy, Neurosurgery, Prostate Intervention, Orthopedic and Pediatric; an Innovative Breast-cancer research project called HYPMED was started.

Our development and production is taking place mainly in Germany. The final assembly and inspection is done manually by skilled employees, which provide an extra quality advantage. Noras FDA registration#: 3004929307

**Olympus Surgical Technologies Europe****16**

Kuehnstrasse 61  
22045 Hamburg  
GERMANY  
[www.olympus-oste.eu](http://www.olympus-oste.eu)

Olympus develops solutions for healthcare professionals that help to improve outcomes and enhance quality of life for their patients. By enabling less invasive treatments and innovative diagnostic procedures, Olympus is transforming the future of healthcare.

At our booth we are going to present the unique bipolar and multipolar radiofrequency technology for tumor ablation and varicose vein treatment. The method was developed by Celon, a German Company, that is now a part of Olympus as the worldwide competence center for new medical radiofrequency technologies. As an alternative to surgical removal, radiofrequency ablation of benign thyroid nodules, presented by Olympus, has become more and more popular worldwide.

We will be happy to provide you with more information about our CELON Power System and our Olympus Precision System at our booth and during hands-on workshops.  
[www.olympus.eu/tumorablation](http://www.olympus.eu/tumorablation), [www.olympus.eu/veintreatment](http://www.olympus.eu/veintreatment)

**optimed Medizinische Instrumente GmbH****42**

Ferdinand-Porsche-Strasse 11  
76275 Ettlingen  
GERMANY  
[www.opti-med.de](http://www.opti-med.de)

As a leading German medical device manufacturer optimed is dedicated to the development and production of innovative products for improved patient outcomes. Continuous investment in research and development of high-quality portfolio solutions makes optimed a trusted partner for minimally invasive therapy experts. With focusing on vascular interventions our portfolio shows proven safety and efficacy in leading technologies e.g. self-expanding venous and arterial nitinol stents, PTA balloons and the CO<sub>2</sub>-Angioset.

**Pajunk GmbH Medizintechnologie****63**

Karl-Hall Strasse 1  
78187 Geisingen  
GERMANY  
[www.pajunk.com](http://www.pajunk.com)

**Pajunk® GmbH Medizintechnologie**

Pajunk® was established in 1965 in Geisingen, southern Germany. Since then Pajunk® is continuing investment in its employees, manufacturing facilities and research and development has helped maintain its growth of an already established product range. Our manufacturing plant in Germany produces high quality medical products throughout our product portfolio, which includes Regional Anaesthesia, Interventional Pain, Laparoscopic Surgery, Biopsy and Dental. Pajunk® offers a wide range of disposable cannulas for extraction of soft tissue such as prostate, kidney, liver and a variety of soft tumours. The cannula system is characterised by their finish, precision & geometry. Bone marrow biopsy products are also available. Pajunk® complies with the following standard – EN ISO 13485.

**Penumbra**

26

Am Borsigturm 44  
13507 Berlin  
GERMANY  
[www.penumbrainc.com](http://www.penumbrainc.com)

Penumbra, Inc., headquartered in Alameda, California, is a global healthcare company focused on innovative therapies. Penumbra designs, develops, manufactures and markets medical devices and has a broad portfolio of products that addresses challenging medical conditions and significant clinical needs. Penumbra sells its products to hospitals and clinics primarily through its direct sales organization in the United States, most of Europe, Canada and Australia, and through distributors in select international markets. The Penumbra P logo is a trademark of Penumbra, Inc.

**PharmaCept**

4

Bessemerstrasse 82  
10437 Berlin  
GERMANY  
[www.pharmacept.com](http://www.pharmacept.com)

**PharmaCept – Experts in Interventional Radiology**

PharmaCept stands for successful development of niche products for various cancer indications with a special focus on research in Interventional Oncology. The main pillar of our company's development is the chemoembolization therapy. Based on the Barcelona guidelines for the treatment of primary liver cell carcinoma, chemoembolization has become an integral part of the therapy of hepatocellular carcinoma patients. With our product EmboCept® S, the only short-term degradable starch microspheres, tumor growth can be considerably reduced. New clinical studies will continue to explore scientifically already known advantages of degradable embolic agent and unlimited combination with cytostatic agents, e.g. with our new Cisplatin powder PlatiCept®. Cisplatin powder is the second most commonly used chemotherapeutic agent for primary liver cancer. It can be used as an alternative drug to doxorubicin, within a combination or after a tumor progression under anthracyclines. Our experimental data show a significantly increased accumulation of platin products in tumor tissue when it is used in combination with starch microspheres (EmboCept® S).

**Philips Medical**

9

Building QP, Veenpluis 6

5680DA Best

THE NETHERLANDS

[www.philips.com.au/healthcare/resources/landing/image-guided-therapy](http://www.philips.com.au/healthcare/resources/landing/image-guided-therapy)

Philips is the leader in image guided therapy, providing integrated solutions that advance minimally invasive procedures. We help healthcare providers to decide, guide, treat and confirm the right care in real time during the procedure to enable better outcomes for each patient and at population level. <https://www.philips.co.uk/healthcare/solutions/interventional-xray/interventional-radiology>

**Piolax Medical Devices, Inc.**

85

2F 3-18-20 Shin-Yokohama, Kohoku-ku

2220033 Yokohama / Kanagawa

JAPAN

[www.piolax-md.co.jp/en](http://www.piolax-md.co.jp/en)

We "Piolax Medical Devices, Inc." are specialized in manufacturing high quality medical intervention devices like micro-catheters, guidewires, micro-coils for not only vascular field, but also for GI field. Since our company was found in 1999, we have been developing and producing user friendly devices based on Made in Japan Quality with an honor of being one of the medical members devoted to patients. We are relatively new to enter international markets so we would be glad to hear your comments for our products and we are looking for potential business partners as well.

**QualiMed Innovative Medizinprodukte GmbH**

17

Boschstrasse 16

21423 Winsen

GERMANY

[www.qualimed.de](http://www.qualimed.de)

QualiMed is a recognized worldwide leader in the design, development, and selling of medical devices, with 20 years of experience in all interventional surgical areas. The company has extensive expertise with devices used in interventional vascular and non-vascular spaces including various catheter, therapeutic drug, and novel bioresorbable material technologies.

**Ra Medical Systems, Inc.****89**

2070 Las Palmas Dr  
CA 92011 Carlsbad  
UNITED STATES  
[www.ramed.com](http://www.ramed.com)

Ra Medical Systems, Inc. develops, manufactures, and markets excimer laser-based medical equipment. The DABRA Catheter and Laser System photochemically ablates arterial blockages. Ra Medical Systems transforms the lives of cardiovascular patients around the world by saving their limbs and lives.

**RD Global Research & Development****70**

Mutlu Kent Mahallesi 1927.Sokak  
Hekimköy Sitesi No:10 Çankaya  
06810 Ankara  
TURKEY  
[www.rdglobal.com.tr](http://www.rdglobal.com.tr)

As R&D Global, we're dedicated to continuous innovation in order to shape everything we do. Our purpose is to improve health of the patients all around the world with our strong, hard working, dedicated and clinically driven biomedical solutions team. Our products and technologies are mostly focused on endovascular treatment solutions with addition of wide range of medical conditions. R&D's mission dictates human healthcare and welfare above everything. Our mission is to contribute to heritage of humanity by achieving the best in multiple disciplines of medicine and biomedical engineering in order to serve optimal healthcare solutions.

We produce the products in the Cardiovascular and Radiology fields mainly as below;  
Varicose Vein Treatments: Varicose Vein Glue Treatment, Small Varicose Vein Glue, Treatment, Varicose Vein RF Ablation System 5 cm Active Tip, Valve Repair Device  
Internal Compression Therapy; Thrombus Management: Fistulla Thrombectomy Device, Pulmoner Emboli Thrombolysis Device, Pharmacomechanical Thrombolysis Catheter, Thrombectomy Aspiration Device, Simple Temporary Vena Cava Filter, Waterjet Thrombus Management System; Arterial Intervention: Drug Eluting Balloon (Paclitaxel), Atherectomy Catheters, Support Catheters (Peripheral, Coronary, Neurology); Embolization Systems: Embolic Adhesive (NBCA), Embolic Agents (Non adhesive-High density), Hemorroid Glue Treatment; Vascular Access: Vascular Closure Device, Micro Catheter (Coronary/Neuro), Introducer Set, Guidewires, Guiding Catheters;

**RF Medical Co., Ltd.****60**

#505, 254 Beotkkot-ro, Geumcheon-gu  
08511 Seoul  
KOREA, Republic of  
[www.rfa.co.kr](http://www.rfa.co.kr)

As a manufacturer, RF Medical is dedicated to popularizing radiofrequency ablation treatments since 2003. Our extensive product range spans from tumor ablation such as liver and thyroid nodule ablation to even varicose vein treatments. Our sophisticated technology has allowed us to spread our business to more than 40 countries and our proven quality has granted us a strong reputation on the market. As always, RF Medical strives with all its capabilities to create a healthier world by continuous investment in research and development.

**Rontis AG****40**

Bahnhofstrasse  
6300 Zug  
SWITZERLAND  
[www.rontis.com](http://www.rontis.com)

Rontis AG, a Swiss-based international company consists of five (5) divisions: Medical Devices, Pharmaceutical, Dermaceutical, Infant Nutrition products, and Healthcare (dialysis) Services.

Rontis AG develops innovative technologies for the treatment of CAD & PAD. Our three E.U.-based factories serve also as an R&D platform for medical devices like PTCA and PTA balloons and stents systems, as well as pharmaceuticals for customers worldwide; also provides OEM / private label services for international customers.

We own three (3) manufacturing facilities, one (1) private dialysis center and have offices in Switzerland, U.S.A., U.K., Greece, Romania and F.Y.R.O.M. Our products are CE marked; our notified body is DEKRA, Germany.

We have received U.S.A. FDA for our PTA balloon Cronus HP and more products will follow. Rontis is selling its products in 40+ countries worldwide and is also a full-service OEM Contract Manufacturer of medical devices, under your own specifications and private label.

We can take your product from concept through to design and development, prototyping and testing all the way to production, packaging and sterilization of semi and fully finished products.

Our mission is to improve the quality of patient care through state-of-the-art minimally invasive products that reduce risk and cost for clinicians ([www.rontis.com](http://www.rontis.com)).

**Shockwave Medical**

78

48501 Warm Springs Boulevard  
CA 94539 Fremont  
UNITED STATES  
[www.ShockwaveIVL.com](http://www.ShockwaveIVL.com)

Shockwave Medical, based in Silicon Valley, Calif., has developed and introduced a novel treatment for calcified cardiovascular disease – Intravascular Lithotripsy (IVL). The presence of calcium makes cardiovascular interventions more difficult and leads to complications during the procedure and escalating healthcare costs. IVL was designed to minimize trauma to the artery, simplify the procedure, and allow physicians to optimize outcomes. To view an animation of the Intravascular Lithotripsy visit <http://shockwavemedical.com> and follow us at @shockwaveIVL on Twitter to keep apprised of the latest IVL developments, cases and educational opportunities.

**Siemens Healthcare GmbH**

1

Karlheinz-Kaske Strasse 5  
91052 Erlangen  
GERMANY  
[www.siemens.com/healthineers](http://www.siemens.com/healthineers)

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery and improving patient experience, all enabled by digitalizing healthcare.

An estimated 5 million patients globally benefit everyday from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine, as well as digital health and enterprise services. We are a leading medical technology company with over 170 years of experience and 18,000 patents globally. With more than 48,000 dedicated colleagues in 75 countries, we will continue to innovate and shape the future of healthcare. Further information is available at [www.siemens.com/healthineers](http://www.siemens.com/healthineers).

**Sirtex Medical**

24

Joseph-Schumpeter-Allee 33  
53227 Bonn  
GERMANY  
[www.sirtex.com](http://www.sirtex.com)

Sirtex is a global life-sciences company actively engaged in the field of liver-directed therapies for cancer patients. The innovative technology of Sirtex, SIR-Spheres® Y-90 resin microspheres (microscopic Yttrium-90 resin beads), is a medical device used in interventional oncology to deliver Selective Internal Radiation Therapy (SIRT), also known as radioembolisation, to the liver. This treatment for inoperable liver cancer delivers high doses of radiation directly to the site of tumour(s) whilst conserving normal liver parenchyma. Our business revolves around helping medical professionals understand and use our product to improve clinical outcomes and the quality of life for people with liver cancer. Approximately 90,000 doses SIR-Spheres microspheres have been supplied to treat patients in over 1,100 certified hospitals in more than 40 countries.

SIR-Spheres® microspheres were approved in 2002 for use in the treatment of a variety of unresectable liver tumours within the European Union under a CE Mark. The 2016 European Society for Medical Oncology (ESMO) guidelines for physicians recommend the use of SIR-Spheres Y-90 resin microspheres to treat liver tumours that have spread from the bowel and do not respond anymore to chemotherapy. For further information please visit [www.sirtex.com](http://www.sirtex.com).

**Skyline Medical Europe SPRL**

88

9 Chemin de la Fraite  
1380 Lasne  
BELGIUM  
[www.skylinemedical.com](http://www.skylinemedical.com)

Streamway the only fully automated wall-mounted direct to drain, closed system in the fluid waste management market.

**Smiths Medical****93**

1500 Eureka Park  
Lower Pemberton  
TN25 4BF Ashford, Kent  
UNITED KINGDOM  
[www.smiths-medical.com](http://www.smiths-medical.com)

Smiths Medical is a leading supplier of medical devices that are vital to patient care around the world. Smiths Medical's devices aid in the delivery of medication (Infusion Systems), protect healthcare workers and patients from cross-infection and injury (Vascular Access), manage patient airway and temperature (Vital Care), as well as deliver specialized care in areas of diagnostics and emergency patient transport (Specialty Products).

**STARmed****66**

#B-14th floor Daebang Triploan, 158  
Haneulmaeul-ro, Ilsandong-gu  
10355 Goyang, Gyeonggi-do  
KOREA, Republic of  
[www.starmed4u.com/starmed/index.php](http://www.starmed4u.com/starmed/index.php)

STARmed Co., Ltd. is a young and fast-growing company from South Korea, specializing in Radiofrequency technology. Passionately working on the best possible RF treatment, STARmed has collaborated with a number of Key Opinion Leaders in developing the most innovative Electrodes and leading-edge RF Technology specific to certain tumour types and clinical applications, in thyroid, liver, lung, kidney, myoma, bone, etc. STARmed is now recognized as global leader in Thyroid RFA. VIVA Multi RF System is uniquely different and powerful compared with past RF systems. It effectively generates two electrodes at the same time. It is safer and cost less than microwave result. Viva Multi RF System is idea for large and multiple lesions ablation. It has choice of six different modes. Octopus RF Electrode has unique and innovative design with 3 needles that can either be used as cluster of 0.5cm distance from each. It is ideal for patients with large or multiple tumours and gets best result faster and bigger ablation. VIVA RF Electrode has unique and innovative design with adjustable active tip of 0.5 to 4cm. Star RF Electrode-Fixed has wide range of length and gauge which makes it very appropriate for thyroid tumor ablation.

**Sterylab SRL****39**

Via Magenta 77/6  
20017 Rho  
ITALY  
[www.sterylalab.it](http://www.sterylalab.it)

Sterylab is the leading European supplier of: Special procedure needles, biopsy needles & devices,

Sets for vertebral reconstruction, anaesthesia needles, Infusion sets, breast localisation systems, gynaecological products, Interventional sets & trays, decontamination mats for the o.r.

Sterylab's customers can rely on more than 40 years of experience in providing innovative products and superlative customer service. All our products are manufactured in compliance with ISO 9001 & ISO 13485 international standards and covered by CE Mark and US FDA.

**Straub Medical****18**

Straubstrasse 12  
7323 Wangs  
SWITZERLAND  
[www.straubmedical.com](http://www.straubmedical.com)

Straub Medical AG is an internationally leading enterprise in the field of treating vascular disease. We aim to be the first brand to come to a physician's mind when a patient presents with vascular occlusion. We manufacture the Straub Endovascular System with its Rotarex®S and Aspirex®S catheter families. A range of endovascular tools, including the Capturex® peri-interventional filter catheter, adds to our portfolio. Our Swiss-made products are of highest quality and precision. Our innovative minimally-invasive technologies contribute worldwide to improving the outcomes of endovascular intervention.

**Stryker Interventional Spine**

92

1901 Romence Road Pkwy  
 MI 49002 Portage  
 UNITED STATES  
[www.strykerivs.com](http://www.strykerivs.com)

Stryker is working hard to make healthcare better by investing in reimbursement tools, educational materials and training events that are an investment in you, our customer. As we share this patient-centered focus, you can trust Stryker's product portfolio for vertebral augmentation, vertebroplasty, radiofrequency ablation, disc diagnostics and decompression treatments for disc herniations. From the office to the operating room and every stop in between, we're here to serve you with a portfolio built on innovation and a legacy of customer support.

**Surgnova Healthcare Technologies**

41

3F. Yashi Building, No.22, Hongjunyng Road  
 Chaoyang District, Beijing  
 P.R.C 100012 Beijing  
 CHINA  
[www.sinosurgical.cn](http://www.sinosurgical.cn)

**Surgnova Healthcare Technologies**

To strive to create really affordable high-end quality surgical devices to make people live longer, healthier and better lives around the world, we set up Surgnova, specialized in the research and development on minimally invasive surgical devices. We started with devices for minimally invasive surgical procedures for tumor treatment, including interventional oncology procedures and tumor resection procedures at early 2015. To fulfill the rapidly-expanding needs of these advanced fields, we have been enhancing our three product lines of interventional oncology devices, minimally invasive surgical devices and surgical robots. Additionally, we will tap into cardiovascular interventional and orthopedic surgical field in the near future.

We are dedicated to creating top-level surgical products upon continuous innovation and technology breakthrough. We only deliver the highest quality products meeting the needs of our customer around the globe. We are committed to providing the access to minimally invasive, safe and efficient surgical operations for people worldwide via developing excellent and cost-effective surgical devices.

**Tecres Spa**

73

Via A. Doria 6  
37066 Sommacampagna (Vr)  
ITALY  
[www.tecres.it](http://www.tecres.it)

Tecres has got over thirty years of experience in orthopaedics and is also active in minimal invasive surgery. Mendec Spine HV System is the unique all in one closed mixing device specifically developed for the preparation of high density acrylic resin to be used for vertebroplasty. Mendec Spine is our acrylic resin specifically developed for the filling of vertebral cavities, that goes with a complete kit for the vertebroplasty procedures with Mendec Spine Kit.

Mendec Aqva is an hydraulic delivery device that allows the surgeon to extrude high viscosity cement remaining distant from the x-ray beam.

**Teleflex Medical**

37

IDA Business Park  
Athlone  
IRELAND  
[www.teleflex.com](http://www.teleflex.com)

Teleflex is a leading global provider of specialty medical devices used for diagnostic and therapeutic procedures in critical care, urology and surgery. We specialise in devices for general and regional anaesthesia, cardiac care, respiratory care, urology, vascular access and surgery.

**Terumo Aortic**

27

Newmains Avenue, Inchinnan  
PA4 9RR Renfrewshire, Scotland  
UNITED KINGDOM  
[www.terumo-aortic.com](http://www.terumo-aortic.com)

Terumo Aortic has integrated Bolton Medical and Vascutek with a vision to transform the treatment of aortic disease worldwide. Our unique portfolio of endovascular, surgical and hybrid technologies and services enables clinicians to meet the individual needs of each patient. Together, we are Interwoven with Life.

**Terumo Europe****28**

Interleuvenlaan 40  
3001 Leuven  
BELGIUM  
[www.terumo-europe.com](http://www.terumo-europe.com)

Founded in Tokyo in 1921, Terumo is a multinational company with more than 90 years' experience in developing best in class medical devices. Terumo Interventional Systems, constantly work to refine and perfect our products so that interventionists can do more. We are committed to innovation that embraces intricacies and complexities. Our exceptional tools and education programs empower physicians with the confidence they need to perform ever-more challenging procedures and spark progress.

Terumo offers intervention in all dimensions: from access to closure.

PVS : In Peripheral Interventions, Terumo is able to provide a full portfolio ranging from Access (Introducer Kits and Radifocus® Guidewires) through Interventions (Roadsaver® Carotid Artery Stent and a selection of PTA Balloons) to Closure (AngioSeal™ and FemoSeal™). Our innovative next generation Drug Coated Balloon Kanshas™ will be launched soon.

IO: In Interventional Oncology, Terumo is focused on disease based solutions in Liver Cancer and non-tumor settings e.g, PAE and Acute Bleeding. This is due to a comprehensive portfolio ranging from access devices Progreat® microcatheter, GT Wire®, Occlusafe® for B-TACE, embolics including Azur®, HydroPearl as well as loco-regional therapies including LifePearl® drug-eluting microspheres and QuiremSpheres® the next generation SIRT technology.

**Tokai Medical Products, Inc****12**

1485 Taraga  
486-0808 Kasugai  
JAPAN  
[www.tokaimedpro.co.jp/en](http://www.tokaimedpro.co.jp/en)

Tokai Medical Products, Japanese medical device manufacturer was founded by Mr. Nobumasa Tsutsui who succeeded in developing the first Japanese-made IAB-Intra Aortic Balloon catheter more than 30 years ago. Since then, we've been focusing on manufacturing/development of interventional devices and enjoying a good reputation in several medical fields such as cardiology, radiology, neurosurgery, gastroenterology, pediatrics and emergency IVR. Tokai offers a large selection of premium microcatheters for super selective embolization. Japan's best seller microcatheter, Carnelian ranges 2.7Fr high flow to 1.7Fr ultra selective. All are compatible with micro particles, coils and DMSO. Tokai recently introduced a new micro guidewire which will be perfect supplement to Carnelian microcatheters. For more information, please visit [www.tokaimedpro.co.jp/en](http://www.tokaimedpro.co.jp/en).

**Uresil, LLC****35**

5418 W. Touhy Ave.  
IL 60077 Skokie  
UNITED STATES  
[www.uresil.com](http://www.uresil.com)

Uresil LLC manufactures and distributes cutting edge medical devices that serve the needs of the Interventional Radiologist. These include the innovative Origin series of drainage catheters and a full line of drainage catheters including General Purpose, Nephrostomy, Biliary, Bariatric, Large Bore , Nephro-Ureteral and Miniaturized Catheters. Uresil LLC is also the proprietary manufacture of the Tru-Close suction' drainage system and the Thora-Vent. The Thora-Vent is designed to manage and resolve a simple pneumothorax without the need for a chest tube. All manufacturing is performed in a state-of-the-art facility in Skokie, Illinois. Uresil utilizes a network of over one hundred local sales representatives globally to promote and support its products and is constantly and actively innovating new solutions for healthcare world-wide.

**Varian Medical Systems****75**

3290 Northside Parkway  
Suite 500  
GA 30327 Atlanta  
UNITED STATES  
[www.varian.com](http://www.varian.com)

Varian's vision is a world without fear of cancer. To meet this challenge, we provide the world with innovative, cost-effective solutions for fighting cancer. We aim to be a leader in cancer care and continuously strive to expand our product offering to support new and innovative techniques in both radiation therapy and interventional radiology.

**Vigeo****8**

Via Dell'Alpino 2  
46031 Bagnolo San Vito (MN)  
ITALY  
[www.vigeosrl.it](http://www.vigeosrl.it)

Vigeo, a young and dynamic company created to develop and market high-quality biomedical products. Organized to supply a wide biomedical range of healthcare and medical solutions for clinics, hospitals, pharmacies, private institutions and veterinary field. Vigeo guarantees effective, reliable, accurate and high-quality products. Our terms and conditions reflect the needs and trends of the most advanced healthcare professionals in the sector. Our high quality standard is maintained through research and continuous development of accurate and specific solutions, developed together in close collaboration with our customers.

**W.L. Gore & Associates, Inc.****25**

AZ 86004 Flagstaff  
UNITED STATES  
[www.goremedical.com/eu](http://www.goremedical.com/eu)

Gore Medical Products Division engineers devices that treat a range of cardiovascular and other health conditions. With more than 40 million medical devices implanted over the course of more than 40 years, Gore builds on its legacy of improving patient outcomes through research, education and quality initiatives. Product performance, ease of use and quality of service provide sustainable cost savings for physicians, hospitals and insurers. Gore is joined in service with clinicians and through this collaboration we are improving lives. [www.goremedical.com/eu](http://www.goremedical.com/eu)

W. L. Gore & Associates is a global materials science company dedicated to transforming industries and improving lives. The company is also known for its strong, team-oriented culture and continued recognition from the Great Place to Work® Institute. Headquartered in Newark, Del., Gore employs approximately 9,500 Associates and generates annual revenues that exceed \$3 billion. [www.gore.com](http://www.gore.com)

**Wisepress****82**

15 Lyon Road  
SW19 2RL London  
UNITED KINGDOM  
[www.wisepress.com](http://www.wisepress.com)

Wisepress.com, Europe's leading conference bookseller, has a complete range of books and journals relevant to the themes of the meeting. Books can be purchased at the stand or, if you would rather not carry them, posted to you – Wisepress will deliver worldwide. In addition to attending 200 conferences per year, Wisepress has a comprehensive medical and scientific bookshop online with great offers.

**Ziehm Imaging GmbH**

43

Donaustrasse 31  
90451 Nuremberg  
GERMANY  
[www.ziehm.com](http://www.ziehm.com)

Founded in 1972, Ziehm Imaging has stood for the development, manufacturing and worldwide marketing of mobile X-ray-based imaging solutions for more than 45 years. Employing more than 500 people worldwide, the company is the recognized innovation leader in the mobile C-arm industry and a market leader in Germany and other European countries. The Nuremberg-based manufacturer has received several awards for its ground-breaking technologies and achievements, including the Frost & Sullivan Award (various years), the iF Design Award 2011 and 2016, the Top100 award for innovative mid-size companies 2012, the Stevie Awards 2013, 2014, 2015 and 2017, the German Stevie Award 2016 and the IAIR Global Awards 2014 as "Best Company for Innovation & Leadership". For more information, please visit: [www.ziehm.com](http://www.ziehm.com).

## Technical Exhibition RPP (Alphabetical List)

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## Technical Exhibition RPP (Numerical List)

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**3D Systems Symbionix****8**

5381 South Alkire Circle  
CO 80127 Littleton  
UNITED STATES  
[www.symbionix.com](http://www.symbionix.com)

Experience a hands on demo of the Symbionix ANGIO Mentor endovascular training simulator in three platforms. The ANGIO Mentor Suite is ideal for team training, the ANGIO Mentor Flex is an easy-to-use portable solution for remote meetings and courses and the NEW ANGIO Tab Pro ultra-portable, carry-on solution is packed in a small and light-weight suitcase that can be setup in less than a minute. The ever-expanding library of modules includes 30+ endovascular procedures with over 230 patient scenarios, including Endovascular Basic Skills, Peripheral Interventions, Peripheral Embolization, Aortic Interventions, Transradial and Transfemoral Coronary Interventions, Structural Heart Diseases, Electrophysiology and Neurovascular Interventions. Request a demo at [healthcare@3dsystems.com](mailto:healthcare@3dsystems.com) or learn more at [www.symbionix.com](http://www.symbionix.com).

**Bracco Injeneering****4**

An de Sevelin 46  
1004 Lausanne  
SWITZERLAND  
<https://imaging.bracco.com/us-en/about-us/bracco-injeneering>

Bracco Imaging S.p.A., part of the Bracco Group, is one of the world's leading companies in the diagnostic imaging business. Headquartered in Milan, Italy, Bracco Imaging develops, manufactures and markets diagnostic imaging agents and solutions that meet medical needs. Bracco Imaging offers a product and solution portfolio for all key diagnostic imaging modalities: X-ray Imaging (including Computed Tomography-CT, Interventional Radiology, and Cardiac Catheterization), Magnetic Resonance Imaging (MRI), Contrast Enhanced Ultrasound (CEUS), Nuclear Medicine through radioactive tracers. The diagnostic imaging offer is completed by several medical devices and advanced administration systems for contrast imaging products in the fields of radiology.

The Company operates in more than 100 markets worldwide, either directly or indirectly, through subsidiaries, joint ventures, licenses and distribution partnership agreements. With an on-going research covering all key modalities, Bracco Imaging has a strong presence in key geographies: North America, Europe and Japan operating through the Joint Venture Bracco-Eisai Co. Ltd. The Company also operates in Brazil, South Korea, and China through the Joint Venture Bracco Sine Pharmaceutical Corp. Ltd. Operational investments have been made in order to achieve top quality and compliances with a sustainable eco-friendly production. Manufacturing activities are located in Italy, Switzerland, Japan, China, and Germany. Bracco Imaging is an innovative Research and Development (R&D) player with an efficient process oriented approach and a track record of innovation in the diagnostic imaging industry. R&D activities are managed in the three Research Centres located in Italy, Switzerland, and USA. To learn more about Bracco Imaging, visit [www.braccoimaging.com](http://www.braccoimaging.com).

**Ecolab**

1

Hekkehorst 24  
7207BN Zutphen  
THE NETHERLANDS  
[www.ecolab.com](http://www.ecolab.com)

A long-standing leader in infection control, Ecolab specializes in the design, manufacture and marketing of an extensive range of innovative, premium quality infection and fluid control products today trusted around the world. Traditionally a category leader in equipment covers, patient drapes and fluid control draping, Ecolab offers diverse product lines for literally every medical specialty from interventional radiology, cardiology and angiography to orthopedics, neurology, OB/GYN, urology and other clinical environments. Over the past several decades, Ecolab has become the trusted name for product solutions now synonymous with risk reduction and protection in clinical environments around the world.

Drape Armour: With ongoing innovations for future needs, often being developed in association with manufacturers of medical equipment, Ecolab's dedicated expertise is truly the proper solution that can cover virtually every piece of equipment in your facility. One of these innovations is Drape Armour Radiation Protection Shields, designed to protect at the procedure site where scatter radiation is most prevalent. These shields can help to protect surgeons and offer substantial attenuation as demonstrated by direct beam studies. This means you can achieve substantial savings with Drape Armour depending upon your individual needs.

**EuroSafe Imaging**

9

Am Gestade 1  
1010 Vienna  
AUSTRIA  
[www.eurosafeimaging.org](http://www.eurosafeimaging.org)  
[www.myESR.org](http://www.myESR.org)

EuroSafe Imaging is the European Society of Radiology's flagship campaign to promote quality and safety in medical imaging. The mission of EuroSafe Imaging is to support and strengthen medical radiation protection across Europe following a holistic, inclusive approach. EuroSafe Imaging has recently issued the 'EuroSafe Imaging Call for Action 2018', a 13-point action plan to achieve EuroSafe Imaging's objectives of promoting appropriateness in radiological imaging, maintaining radiation doses within diagnostic reference levels, promoting the use of up-to-date equipment, empowering patients, and joining forces with various stakeholders. Visit the EuroSafe Imaging booth (No. RPP 9) to learn about our activities and support us by becoming a EuroSafe Imaging Star.

**Kinepict Health****6**

Kelta Köz 5  
2092 Pest  
Budakeszi  
HUNGARY  
[www.kinepict.com](http://www.kinepict.com)

Kinepict was founded in 2015. Our product Kinepict Health Imaging Tool is a software can improve X-ray angiography images quality.

Kinetic imaging can visualize blood vessel structures by detecting the movement of the contrast medium bolus. The advanced statistical data analysis yields better image quality than DSA.

**Mavig****3**

Stahlgruberring 5  
81829 Munich  
GERMANY  
[www.mavig.com](http://www.mavig.com)

Mavig, founded in 1921, designs, manufactures and markets personal protection devices and X-Ray accessories, as well as ceiling- and table-mounted equipment. The patented Mavig ceiling tracks and suspension systems, like its modern LCD-monitor suspension systems comply with the latest requirements of the industry. All Mavig products are certified according to the EU Medicinal Product Directives and the EU Directive for Personal Safety Gear, bearing the corresponding CE Symbol. Most of the Mavig Ceiling Suspension Systems are UL-listed or -registered. Quality management was installed already 1995 in the company according to EN ISO 9001 and EN 46001.

Mavig products are life-cycle tested and released only after the derivation of external certifications.

Mavig is market leader in its business fields. Our product quality and service is acknowledged worldwide. MAVIG also offers VivaScope®, the first Confocal Laser Scanning Microscope for in-vivo, real-time examination of human skin. This optical biopsy provides a view into the layers of the skin. A substantial number of biopsies can be avoided in favour of the patient.

**MDT X-Ray B.V.****11**

Bukkumweg 26  
5081CT Hilvarenbeek  
THE NETHERLANDS  
[www.mdtxray.com](http://www.mdtxray.com)

Personal radiation protection designed by radiologists and produced in Europe. MDT has multiple design & production sites close to the users. All products are tailor made to your wishes and body. MDT is the leading manufacturer in Europe with quality and durability in mind. In harsh environments or in the clinic. All products are handmade and undergo a very strict quality control to live up to the highest standards including the 61331:2014. Even more so, state of the art fulfillment. Delivering to the most demanding clients and processing the largest research & development projects on personal radiation protection in the world.

**Mentice****2**

Odinsgatan 10  
41103 Gothenburg  
SWEDEN  
[www.mentice.com](http://www.mentice.com)

A world leader in virtual reality-based interventional medical simulation solutions. Mentice solutions help healthcare professionals with skills acquisition, continuous development and preprocedural planning – leading to improved productivity and outcomes. Mentice solutions are scientifically validated, and have been specifically developed for healthcare providers and the medical industry.

**Siemens Healthcare GmbH****5**

Karlheinz-Kaske Strasse 5  
91052 Erlangen  
GERMANY  
[www.siemens.com/healthineers](http://www.siemens.com/healthineers)

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery and improving patient experience, all enabled by digitalizing healthcare.

An estimated 5 million patients globally benefit everyday from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine, as well as digital health and enterprise services. We are a leading medical technology company with over 170 years of experience and 18,000 patents globally. With more than 48,000 dedicated colleagues in 75 countries, we will continue to innovate and shape the future of healthcare. Further information is available at [www.siemens.com/healthineers](http://www.siemens.com/healthineers)

**Unfors RaySafe****10**

Uggledalsvägen 29  
42740 Billdal  
SWEDEN  
[www.raysafe.com](http://www.raysafe.com)

RaySafe and Landauer focus on measuring and reducing radiation exposure for healthcare professionals. RaySafe provides technologies for measuring real-time radiation and Landauer enables healthcare professionals to measure radiation exposure. The Raysafe i3 system is the latest generation of the real-time dosimetry family. The system includes the new RaySafe real-time personal radiation dosimeters coupled with a display and software to provide a complete, immediate visual of radiation exposures. Visualize X-ray exposure with the new i3 real-time personal radiation dosimeter using easy-to-read bar graphs. Instant feedback empowers your medical staff to learn and adapt their behavior on the go, minimizing unnecessary radiation exposure. Measurements are simultaneously stored for post-procedure analysis, facilitating continued learning and to enable comparisons over time, between labs and users.

<http://raysafe.com/Home/Products/Staff/RaySafe%20i3>

LANDAUER VISION® lens of eye dosimeter ensures your workers are being monitored precisely with the highest comfort and it meets the IRR17 requirements. VISION is ergonomic, compact and flexible. It adapts to protection support such as lead glasses, visors and caps.. The use is simple: durable identification by laser engraving and easy disinfection by immersion or brushing. It can measure Hp(3) photon dose to the lens from 0.1 mSv and complies with EN 62387-1:2015. Moreover, its high measuring dynamic and extreme accuracy allow dose measurement up to 10 Sv with a standard deviation greater than 9%. VISION dosimetry service is approved and accredited in several countries under ISO 17025 standard.

<https://www.landauer-fr.com/en/produit/vision-discrete-and-versatile-multi-support-lens-dosimeter/>

### **Worldwide Innovations & Technologies, Inc.**

**7**

14740 W. 101st Terrace  
KS 66215 Lenexa  
UNITED STATES  
[www.radpad.com](http://www.radpad.com)

Manufacturer of RADPAD® Shields, Worldwide Innovations & Technologies, Inc. is committed to developing and producing quality products that are designed to provide medical personnel and patients with protection from the deadly and debilitating effects of radiation. Our products have been independently tested, studied, and proven to be effective in reducing radiation exposure. In 2010, WIT obtained ISO 13485 certification to confirm and enhance its commitment to quality products and customer service. WIT has also developed a line of products designed to protect patients from unnecessary exposure to radiation. RADPAD® Radiation Protection Shields & Drapes, the world leader in scatter radiation protection; dramatically reduce scatter radiation exposure to medical personnel during fluoroscopy procedures.

Lightweight, flexible, disposable and lead-free, RADPAD® shields and drapes have been documented in more than 18 independent third party clinical studies to provide up to a 95% reduction rate in scatter radiation.

American made and procedure specific, RADPAD® Shields are designed to provide the maximum possible scatter radiation reduction without impairing the physician's interventional techniques.

## Societies (Alphabetical List)

Official Name	Booth#
BSIR	S5
CIRSE 2019	S17
CIRSE Library	S14
CVIR	S15
CVIR ENDO	S16
DeGIR/ÖGIR/IROS/SSVIR	S4
DFIR	S8
ECIO 2019	S1
ESIR	S3
ESR	88a
ET 2019	S2
GSIR	S10
ICIR	S9
IESIR	S7
IRSA	S6
ISVIR	S12
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**Societies** (Numerical List)

<b>Official Name</b>	<b>Booth#</b>
ECIO 2019	S1
ET 2019	S2
ESIR	S3
DeGIR/ÖGIR/IROS/SSVIR	S4
BSIR	S5
IRSA	S6
IESIR	S7
DFIR	S8
ICIR	S9
GSIR	S10
TGRD	S11
ISVIR	S12
IUOIR	S13
CIRSE Library	S14
CVIR	S15
CVIR ENDO	S16
CIRSE 2019	S17
SIO	17a
ESR	88a
SIR	94

**BSIR – British Society of Interventional Radiology****S5**

63 Lincoln's Inn Fields  
WC2A 3JW  
London UK  
bsir.org

The BSIR is a charitable foundation founded to promote and develop the practice of Interventional Radiology.

What are the main objectives of the society?

- To support and develop access to high quality information on Interventional Radiology for patients and all healthcare professionals.
- To support audit and research in Interventional Radiology
- To support education and training in Interventional Radiology

**CIRSE 2019****S17**

As the biggest interventional radiology meeting of the year, the CIRSE Annual Congress is an essential event for every IR. Within this vibrant setting of discussion and debate, delegates are able to discover new research and technological advances across a wide range of fields, from oncological interventions to clinical management and more! Join us at CIRSE 2019 from September 7-10 in Barcelona, Spain, for another year of science, education and innovation. Visit our booth or learn more on our website at [www.cirse.org](http://www.cirse.org).

**CIRSE Library****S14**

CIRSE proudly presents its new online resource for congress recordings: the CIRSE Library. Find lectures and posters since 2014, watch webcasts in HD quality, browse our large collection of educational topic packages, get recommendations for similar content, and find selected lectures to prepare for the EBIR examination. Access is included for members year-round, and non-members have a range of access options. Find out more at the booth and explore the most extensive online educational resource in interventional radiology at [library.cirse.org](http://library.cirse.org)!

**CVIR – CardioVascular and Interventional Radiology****S15**

CVIR is the official journal of the Cardiovascular and Interventional Radiological Society of Europe (CIRSE). Over the past 40 years, CVIR has established itself as a key source of cutting-edge information, positioning itself as the leading journal in the field of interventional radiology, not just in Europe but also in other parts of the world. This is a special year for CVIR as the journal marks its 40<sup>th</sup> birthday.

Pick up the latest journal issue in the dedicated CVIR exhibition area, and celebrate the journal's 40<sup>th</sup> Anniversary with us by taking a photo in the CVIR photo booth, to win great prizes.

[www.cvironline.org](http://www.cvironline.org)

**CVIR Endovascular****S16**

Launched during CIRSE 2017 in Copenhagen, CVIR Endovascular is CIRSE's new online, open access journal, focusing on endovascular therapies. It features the open peer-review model and is intended for all specialists working in the field of endovascular treatment. If you require funding for your open access fee, please contact Editor-in-Chief Prof. Reekers with your proposal at [info@cvirendovascular.org](mailto:info@cvirendovascular.org) and ask for a waiver!

[www.cvirendovascular.org](http://www.cvirendovascular.org)

**DeGIR – German Society of Interventional Radiology****S4**

DeGIR is the German society for interventional radiology and minimally invasive therapy ([www.degir.de](http://www.degir.de)). Founded in 2008, the society now has over 1,400 members and works closely with the German Roentgen Society (DRG). DeGIR has a permanent office located in Berlin. The society runs an elaborate national registry of interventional procedures, collecting data from 190.000 interventions, documented by over 300 Institutes in 2017 alone. The data is used for quality assurance in interventional radiology as well as for scientific analyses. DeGIR established a qualification initiative in interventional procedures similar to EBIR, which is divided into 6 different modules including vascular recanalization techniques, embolisation, non-vascular interventions and neurointerventions.

Qualification requires both a written and oral exam, as well as sufficient practical experience and to date, more than 1,000 certificates of personal qualification in interventional radiology have been issued. A network of training facilities is also offered to its members. For further information, please contact the society directly at [degir@drg.de](mailto:degir@drg.de).

**DFIR – Danish Society of Interventional Radiology  
(Dansk Forening For Interventional Radiologi)****S8**

Tjernevaenget 7  
3520  
Farum, Denmark  
[www.dfir.dk](http://www.dfir.dk)

DFIR is the IR society of Denmark with between 70-80 members. The primary activity of the society is to hold the annual meeting of the DFIR, the venue of which is shifted after every few years. DFIR celebrated its 20th jubilee this year (2018) in June. DFIR formulates Danish IR curriculum on the basis of CIRSE curriculum, coordinates with other IR societies of Scandinavia and CIRSE and holds IR courses and meetings to exchange ideas among the experts in related fields. DFIR also disseminates information about IR among patients. It also supports research activities in various centers in Denmark, encourages young doctors to pursue IR as a career, invites young researchers to participate in DFIR annual meetings and provides educational grants to doctors motivated for IR. Besides, the society collects various IR related data for the statistical purpose from all the institutes performing interventional procedures in Denmark. National and international experts in IR are invited every year to the annual meeting. Lectures and presentations from the meetings are currently freely available as pdf at the website. We encourage doctors, radiographers, nurses and industry partners to participate in the annual meeting of DFIR and actively engage with DFIR for collaboration, exchange and augment research in the field of IR.

**ECIO 2019 – European Conference on Interventional Oncology****S1**

Featuring a comprehensive scientific programme, world-renowned faculty and a first-rate technical exhibition, ECIO explores the latest developments and best practices in minimally invasive, image-guided cancer treatment. As interventional oncologists continue to play an increasingly important role alongside oncologists and surgeons in cancer treatment, this annual event emphasises the importance of multidisciplinary tumour boards and discussions, while encouraging registrants to bring along a non-radiologist colleague at no extra cost. ECIO 2019 will be held from April 8-11 in Amsterdam, Netherlands.  
[www.ecio.org](http://www.ecio.org).

**ESIR 2018 & 2019 – European School of Interventional Radiology****S3**

Each year the ESIR Clinical Procedure Training provides premier education to IR professionals, helping participants to stay updated on the latest developments in medicine. Since 2006, ESIR has offered 89 first-rate, practice-oriented courses in over 20 countries on a wide range of IR topics. Skilled specialists guide participants in perfecting their performance through featured state-of-the-art devices and technology, as well as live or video cases, where appropriate.

The following ESIR courses will be held in 2018 & 2019:

- Mastering Liquid Embolics  
Zaragoza (ES), October 25-26, 2018
- DEB & cTACE in Primary and Secondary Liver Cancer  
Villejuif (FR), December 13-14, 2018
- DVT/PE Thrombolysis and Thrombectomy  
Dublin (IE), February 15-16, 2019
- DEB & cTACE in Primary and Secondary Liver Cancer  
Munich (DE), June 6-7, 2019

Further ESIR 2019 courses will be published soon. To find out more, visit [www.cirse.org/esir](http://www.cirse.org/esir).

**ESR – European Society of Radiology****88a**

Am Gestade 1  
Vienna 1010 Austria  
[myESR.org](http://myESR.org)

The European Society of Radiology is an apolitical and non-profit organisation dedicated to promoting and coordinating the scientific, philanthropic, intellectual and professional activities of Radiology in all European countries.

**ET 2019 – European Conference on Embolotherapy****S2**

Between 2009 and 2017, CIRSE organised the biennial Global Embolization Symposium and Technologies Meeting in cooperation with the GEST founders. This partnership contract is now coming to an end and both parties have agreed to establish annual meetings of their own. CIRSE now welcomes a new member to its family of annual conferences: ET – the European Conference on Embolotherapy, which take place in Valencia on June 26-29, 2019. The conference will cover the many areas of embolotherapy, including trauma management, vascular and lymphatic malformations, GI haemorrhage, UAE and PAE. Stay tuned for updates and visit [www.etconference.org](http://www.etconference.org) to find out more.

**GSIR – Greek Society of Interventional Radiology****S10**

20 Papadiamantopoulou str  
11528 Athens  
Greece  
[www.epemvatiki.gr](http://www.epemvatiki.gr)

The Greek Society of Interventional Radiology was founded in 1993 by Greek Radiologists who applied the techniques of Interventional Radiology to the daily clinical practice. It collaborates closely with the European Society of Interventional Radiology (CIRSE) and all its members are members of the European Society. In 2012, a Government Gazette defining Interventional Radiology was published as a special curriculum specialization, training centers and recognized interventional radiologists.

**ICIR – Italian College of Interventional Radiology****S9**

Via della Signora, 2  
20122  
Milano Italy  
[www.sirm.org/sezione/radiologia-interventistica](http://www.sirm.org/sezione/radiologia-interventistica)

ICIR is the group of work of the Italian Society of Medical and Interventional Radiology (SIRM) and it reunites professionals dedicated to interventional radiology from the entire Nation. The College comprises radiologists with different expertise, such as those with experience in oncologic, vascular and extravascular procedures. Thus, it has a pivotal role in connecting interventional radiologists with different background, in order to improve knowledge and communications between professionals. In an era of rationalization of economic budgets dedicated to health management, interventional radiology offers mini-invasive solutions to a number of different clinical and surgical problems, increasing the need for medical doctors able to deal with this scenario. Therefore, ICIR plays a leading role in coordinating training of a new generation of interventional radiologists, as well as in developing homogeneous guidelines to approach daily activities and in creating connections with other societies, in order to give to this medical field a recognizable and well-defined role in the clinical management of patients.

**IESIR – Italian-European Society of Interventional Radiology****S7**

Via Eusebio Bava, 8  
10124  
Torino, Italy  
[www.iesir.org](http://www.iesir.org)

IESIR – Italian-European Society of Interventional Radiology is an independent and autonomous company, whose main objective is to develop and promote the “clinical” figure of the Interventional Radiologist in Italy and in Europe.

**IROS 2019****S4**

Neutorgasse 9  
1010 Vienna  
AUSTRIA  
[www.irosonline.org](http://www.irosonline.org)

IROS 2019 is the annual meeting of the Austrian, German and Swiss Societies of Interventional Radiology. Next year, the meeting will take place in Berlin, Germany, from January 10-12. In addition to lectures and workshops, delegates will have the possibility to participate in recorded procedure demonstrations (Live in Box), Satellite Symposia and intensive courses tailored to the daily needs of interventional radiologists. For further information, please visit our booth or our website at [www.irosonline.org](http://www.irosonline.org).

**IRSA – Interventional Radiology Society of Australasia****S6**

Level 9, 51 Druitt Street  
Sydney NSW 2000 Australia  
[www.irsa.com.au](http://www.irsa.com.au)

IRSA (Interventional Radiology Society of Australasia) is an association of Interventional Radiologists from Australia and New Zealand, under the auspice of the Royal Australian and New Zealand College of Radiologists. Interventional Radiology is a clinical subspecialty of Radiology. Interventional Radiologists apply minimally invasive therapies using imaging guidance such as X-ray, ultrasound and CT scan. Many conditions that once required surgery can be treated non-surgically by Interventional radiologists.

**ISVIR – Indian Society of Vascular and Interventional Radiology****S12**

Room No - 20A, Department of Interventional Radiology  
 Sir Ganga Ram Hospital, New Delhi – 110060  
 India  
[www.isvirindia.org](http://www.isvirindia.org)

The Indian Society of Vascular & Interventional Radiology (ISVIR) has been floated to provide a platform for exchange of information regarding catheter-based radiological procedures. ISVIR was formed in Trivandrum on November 9, 1997. The objectives of the society include a planned growth of Interventional Radiology in India, providing a forum for exchange of views and information, formulating guidelines for performing and documenting interventional radiological procedures, streamlining the availability of devices in different regions, creating opportunities for certified training programs in Interventional radiology, evolving guidelines for medico-legal aspects of the practice, creating public awareness with respect to interventional radiology, and helping the fledgling subspecialty with turf battles. The official Journal of the society is "Journal of Clinical Interventional Radiology" which is a peer-reviewed, open access, online and print journal that supports the science and practice of interventional radiology worldwide.

**IUOIR – International Union of Interventional Radiologists****S13**

c/o Dr. Hassanin  
 70B Rue Kleber  
 59139 Wattignies  
 FRANCE  
[www.iuoir.com](http://www.iuoir.com)

The International Union of Interventional Radiologists (IUOIR) is a non-profit association of interventional radiologists all over the world, of which the idea flashed in minds of a group of North American and European interventional radiologists attending the congress of RSNA 2008. The scientific discussions at different occasions during this conference highlighted the tremendous need for a worldwide organization with the mission of transferring of expertise and sharing of best practice of this precious sub-specialty. Through IUOIR, expert interventional radiologists will move all over the world, performing different maneuvers (vertebroplasty, gastrostomy, embolisation... etc) in any countries and will participate in training local radiologists as well. It's time for interventional radiologists to join the train of "Médecins sans Frontières", to help people in their own countries and even beyond their own countries' borders.

The IUOIR offers:

- Training of Radiologists in situ and follow up the training to build independent IR unit
- One to two months observership in Europe and USA
- Treatment of patients in your country as well as receiving of patients in IUOIR' Centers in Europe
- May offer one year fellowship.

Our visits to Vietnam and Africa: [www.iuoir.com](http://www.iuoir.com)

**ÖGIR – Austrian Society of Interventional Radiology****54**

Neutorgasse 9  
1010 Vienna  
AUSTRIA  
[www.oegir.at](http://www.oegir.at)

ÖGIR is the Austrian Society of Interventional Radiology and Minimally Invasive Therapy ([www.oegir.at](http://www.oegir.at)). Founded in 2007, the society now has over 200 members. ÖGIR has a permanent office located in Vienna and organises the IROS annual meeting together with the German Society of Interventional Radiology (DeGIR) and the Swiss Society of Interventional Radiology (SSVIR). In 2012, ÖGIR, in cooperation with DeGIR, introduced a qualification initiative in interventional procedures similar to EBIR, which is divided into 6 different modules including vascular recanalisation techniques, embolisation, non-vascular interventions and neurointerventions.

For more information, please visit [www.oegir.at](http://www.oegir.at) or email [oegir@oegir.at](mailto:oegir@oegir.at).

**SIO – Society of Interventional Oncology****17a**

2025 M Street NW  
Suite 800  
DC 20036 Washington  
UNITED STATES  
[www.sio-central.org](http://www.sio-central.org)

As an established society, SIO serves as the only membership-based organization dedicated wholly to the emerging field of IO, working to further promote the mission originally put forth by WCIO to establish, nurture and support Interventional Oncology (IO) as the 4th pillar of cancer therapy alongside medical, surgical, and radiation oncology worldwide. Through IO Central and the SIO Annual Meeting, professionals can engage 24/7, 365 days a year. SIO's Annual Meeting, formally WCIO, is the leading interventional oncology conference, bringing together medical experts from around the world for a multidisciplinary approach. Featuring state-of-the-art lectures on innovative IO topics, tumor boards highlighting real-world techniques, cutting-edge best practices, and bench-to bedside program content, SIO raises the bar on IO and complex biology. Session topics span private practice, hospital, and institutional settings. Medical students, residents and fellows, advanced practice providers, IO experts, and less experienced operators alike can participate in a truly dynamic learning and networking experience. SIO offers the opportunity to challenge conference faculty in interactive debate-style sessions. Additionally, through IO University, SIO features the most comprehensive on-demand education for IO professionals. With access to an in-depth IO curriculum, best practices, and industry advances, IO University will build your skills while offering the opportunity to earn CME credits online. Please visit [www.sio-central.org](http://www.sio-central.org) for the latest interventional oncology news and conference updates.

**SIR – Society of Interventional Radiology****94**

3975 Fair Ridge Drive  
Suite 400 North  
VA 22033 Fairfax  
UNITED STATES  
[www.sirweb.org](http://www.sirweb.org)

The Society of Interventional Radiology (SIR) is a nonprofit, professional medical society representing more than 7,000 practicing interventional radiology physicians, trainees, medical students, scientists and clinical associates, including physician assistants, nurse practitioners, radiologic technologists and paramedical professionals. SIR's members work in a variety of settings and at different professional levels—from medical students and residents to university faculty and private practice physicians. The society's core purpose and mission is to work with its members to deliver patient-centered care through image-guided therapy.

SIR Foundation is dedicated to advancing the clinical needs of interventional radiology by specializing in developing investigators trained in conducting basic and clinical trials research, which provides the foundation for the innovative treatments delivered through image-guided techniques. SIR Foundation has initiated a new program structure that proactively fosters research priorities in the areas of clinical research, research policy and research.

**SSVIR – Switzerland****S4**

SSVIR is the Swiss Society of Vascular and Interventional Radiology ([www.ssvir.ch](http://www.ssvir.ch)). Founded in 1992 by six radiologists, the society has now more than 100 members. The SSVIR office is located in Lausanne. The SSVIR is associated to the Swiss Society of Radiology (SSR) and member of the Union of Swiss Societies of Vascular Medicine (UVS). Apart from being represented with permanent members in different steering committees of our European organisation (CIRSE, UEMS), the SSVIR has also permanent members in several scientific committees. The SSVIR co-organises the IROS, annual meeting together with the German Society of Interventional Radiology (DeGIR) and the Austrian Society of Interventional Radiology (ÖGIR), the Annual Meeting of the UVS and the annual joint meeting of the SSVIR and the SSR. The SSVIR is active in continuous medical education and adopted the EBIR since 2014 as qualification system in Interventional Radiology while promotes the national "Vascular Center Accreditation" as quality assurance process.

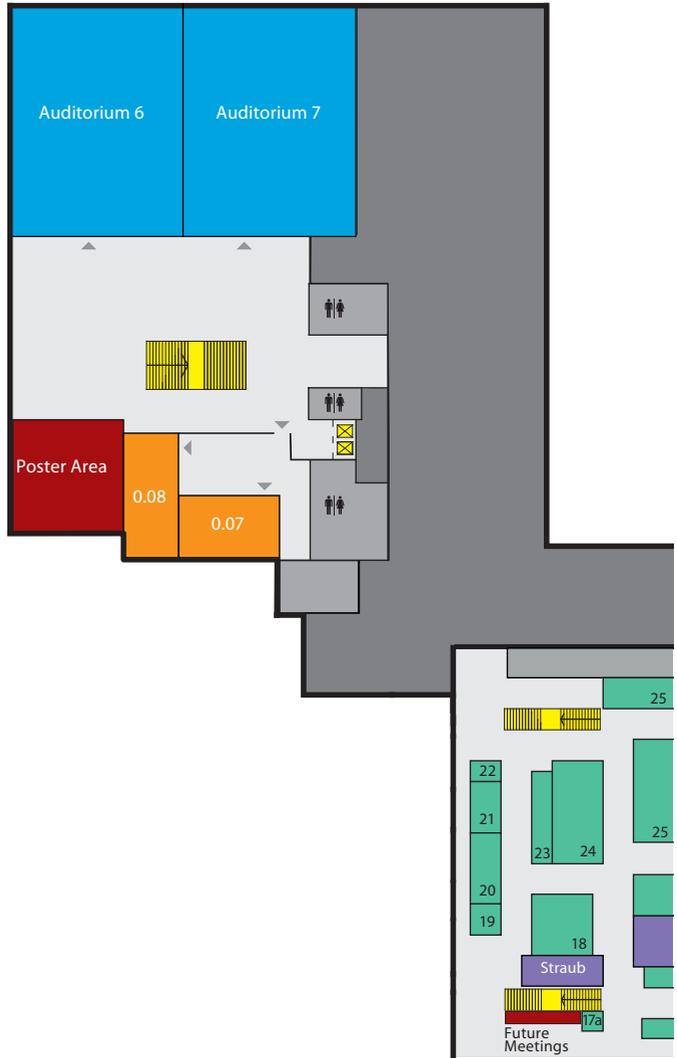
**TGRD- Turkish Society of Interventional Radiology****S11**

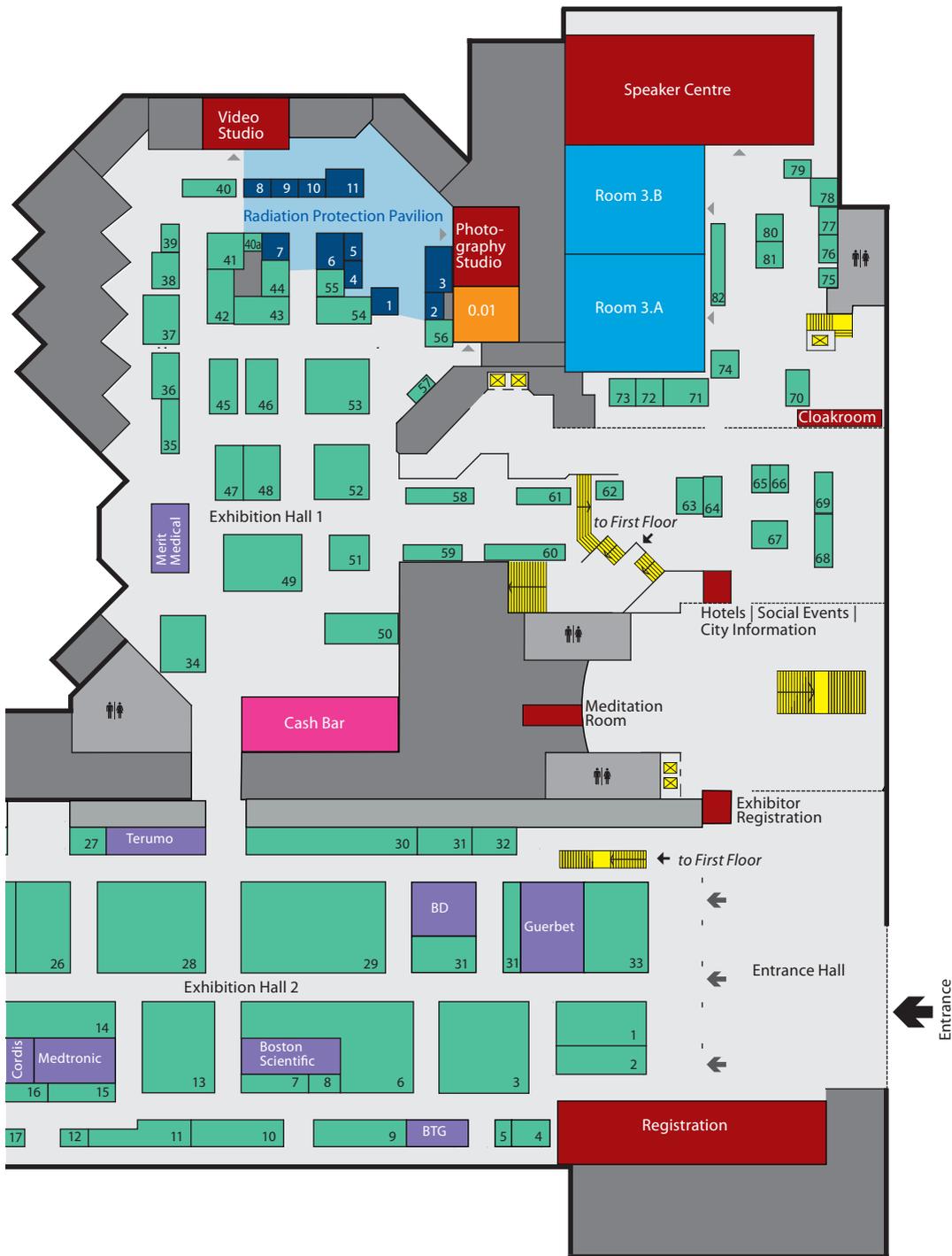
Hoşdere Caddesi Çankaya Evleri F Blok Daire:2 Çankaya  
Ankara Turkey  
tgrd@tgrd.org.tr  
www.tgrd.org.tr

Turkish Society of Interventional Radiology (TSIR) was established in 2000. Its office was located first in Istanbul and is now located in the capital city, Ankara. Interventional radiology has not yet become a governmentally recognized subspecialty of radiology in Turkey. For interventional radiology, the routine residency program has a three- to ten-month rotation, and after completion most radiologists are capable of performing basic interventions. Therefore, education on interventional radiology has become the most important mission of the society. The society arranges courses and annual national meetings in the field of Interventional Radiology. The mission of Turkish Society of Interventional Radiology is to contribute educations and trainings of radiologists who are occupied with all kind of interventional process and to pursue research and development on this field. Our 14th Annual Scientific Meeting will be held as Joint Meeting with EVIS 2019 in Hilton Bosphorus Hotel Convention Center-Istanbul-Turkey, on April 19-23 2019. A lot of attendees including interventional radiology doctors, technicians, nurses and industry members are expected to participate to this meeting.

## Entrance Level

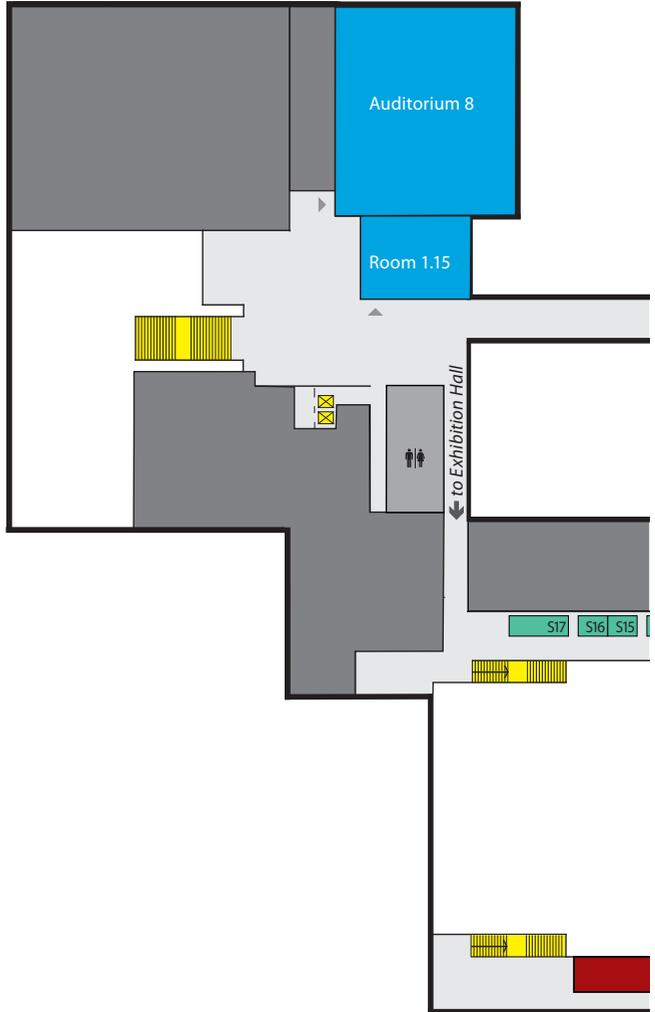
- Lecture Room / Hands-on Device Training Room
- Learning Centre
- Meeting Room
- Radiation Protection Pavilion
- Technical Exhibition





## First Floor

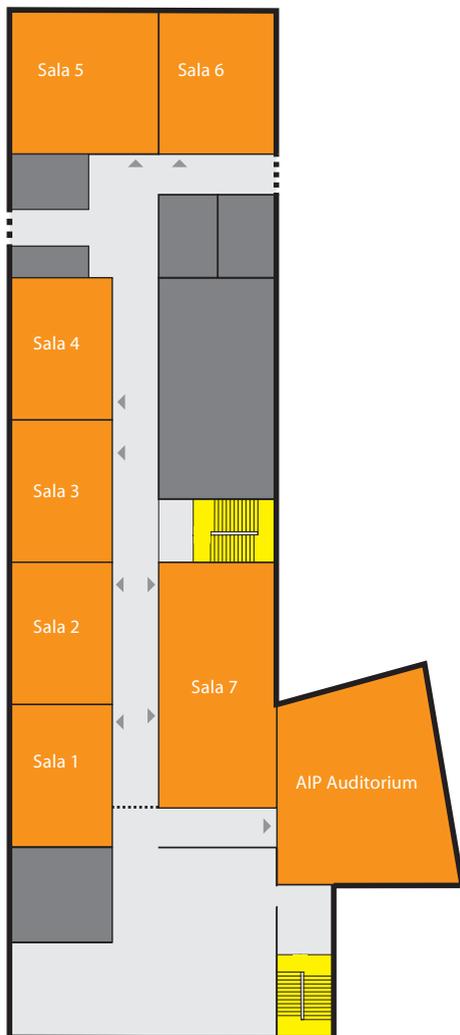
- Lecture Room / Hands-on Device Training Room
- Learning Centre
- Meeting Room
- Technical Exhibition

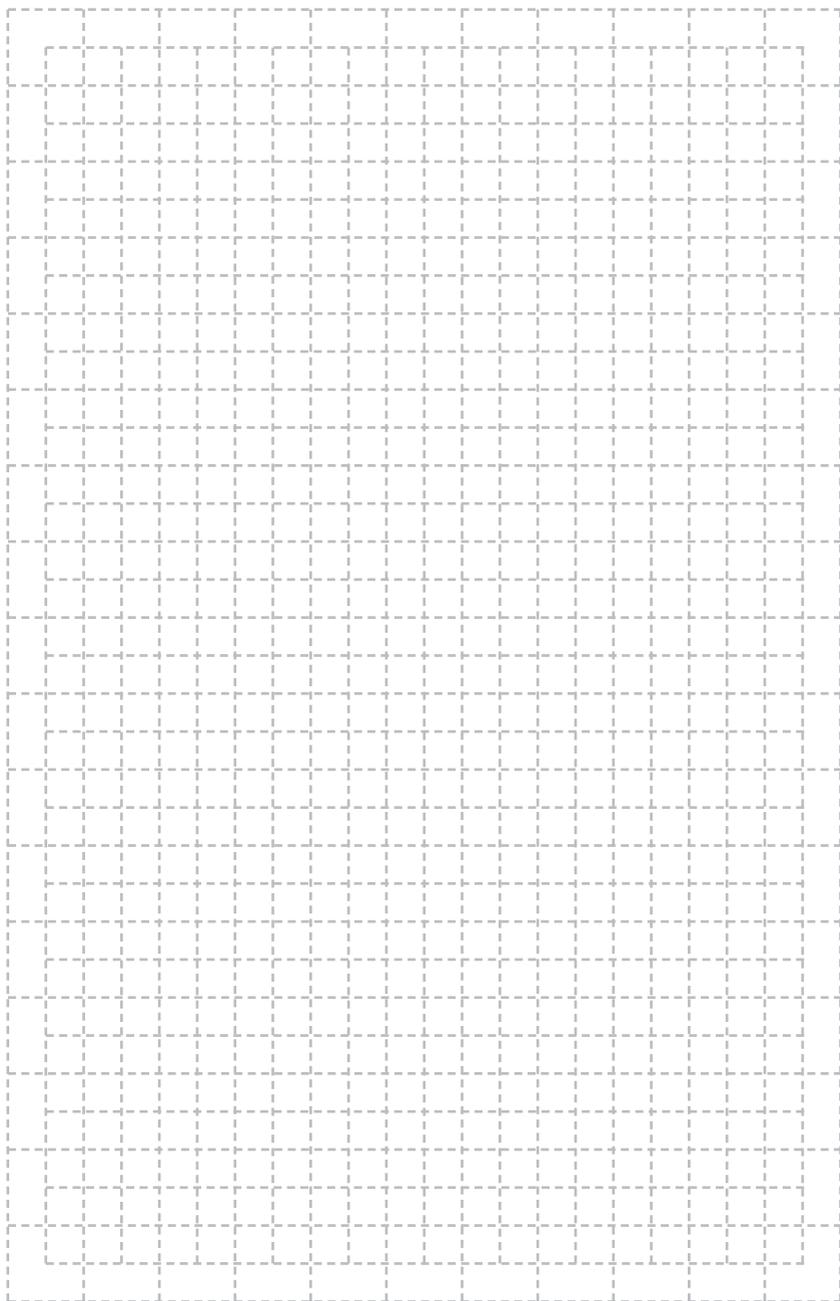


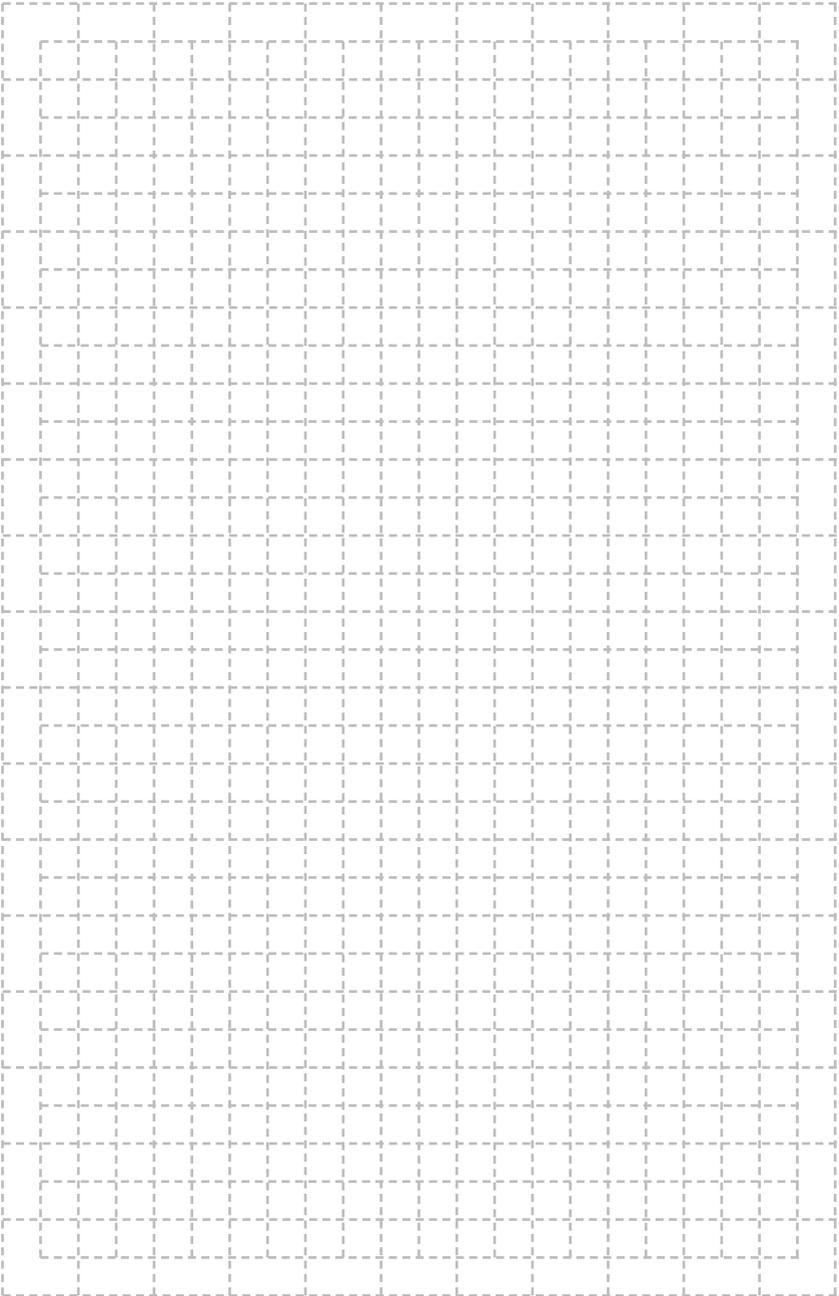


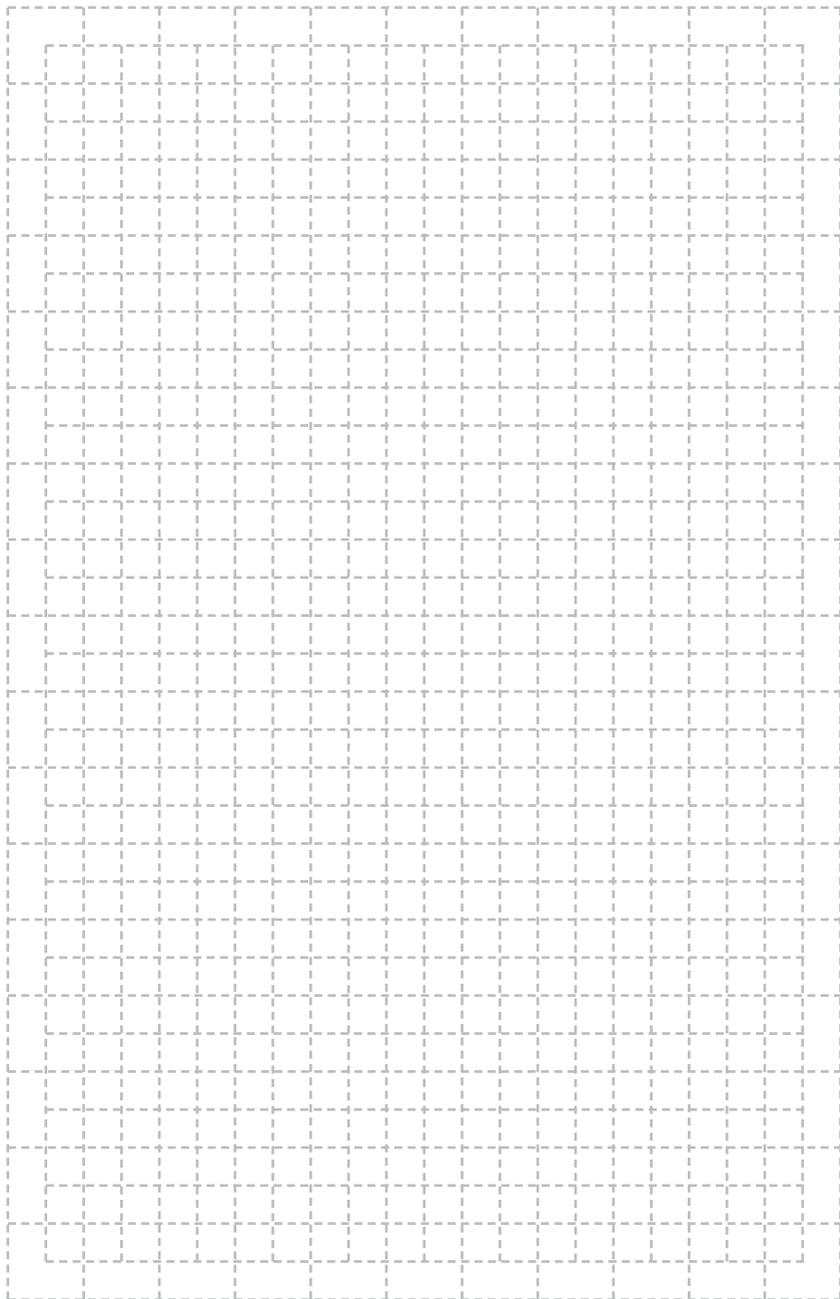
## AIP Building

■ Meeting Room









# Imprint

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## **The CIRSE 2018 Pocket Guide**

In case of any enquiries or comments,  
please contact us at **[info@cirse.org](mailto:info@cirse.org)**

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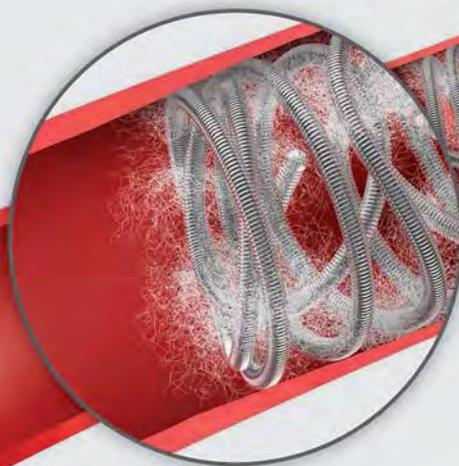


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