



Barcelona, Spain  
September 7-11  
**CIRSE 2019**

**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 7


08:00			09:00			10:00			11:00			12:00			13:00		
15	30	45	15	30	45	15	30	45	15	30	45	15	30	45	15	30	45
			<b>FS 101</b> R117 Technologies and techniques: evolution and outstanding questions <i>p47</i>			<b>HTS 201</b> A1 Hot debates on drug-eluting technologies <i>p51</i>			<b>FS 301</b> R117 Real world endovascular management of claudication <i>p55</i>								
			<b>CEC 104</b> A2 Ilio-femoral venous stenting masterclass <i>p48</i>			<b>ERT 204</b> A2 Portal hypertension management <i>p53</i>			<b>FS 304</b> A1 Superior vena cava syndromes <i>p56</i>								
			<b>FS 102</b> R115 Pancreatic cancer: role of IR <i>p47</i>			<b>FC 202</b> R117 Ablative therapies: the basics <i>p52</i>			<b>CEC 302</b> A2 Intrahepatic cholangiocarcinoma <i>p55</i>								
			<b>FC 103</b> R114 Mgmt. of benign musculo-skeletal tumours <i>p48</i>			<b>FS 203</b> R115 Future trends in spine treatments <i>p52</i>			<b>FS 303</b> R112 Lymphatic interventions <i>p56</i>								
			<b>ERT 105</b> R112 Artificial intelligence, machine learning and robotics in IR <i>p49</i>			<b>VL 205</b> R116 Embolisation <i>p53</i>			<b>CS 305</b> R116 Fibroids and adenomyosis <i>p57</i>								
			<b>SP 106</b> R116 Introducing IR <i>p50</i>			<b>IRT 206</b> R113 Future IR technologies <i>p54</i>			<b>CM 306</b> R113 CIRSE meets APSCVIR <i>p57</i>								
						<b>CLP-HDT 1</b> R111 Central lines and ports <i>p33</i>											
						<b>CD-HDT 1</b> R130 A closer look at closure devices <i>p33</i>											
						<b>PMT-HDT 1</b> R132 Peripheral mechanical thrombectomy <i>p35</i>											
			<b>SIM 1</b> Simulation Training – Prostatic artery embolisation: basics, current role and future perspectives ( <i>advanced</i> )														


**ENDOVASCULAR PROGRAMME**

- ARTERIAL INTERVENTION
- VENOUS INTERVENTION
- AORTIC INTERVENTION IDEAS

**INTERVENTIONAL ONCOLOGY**

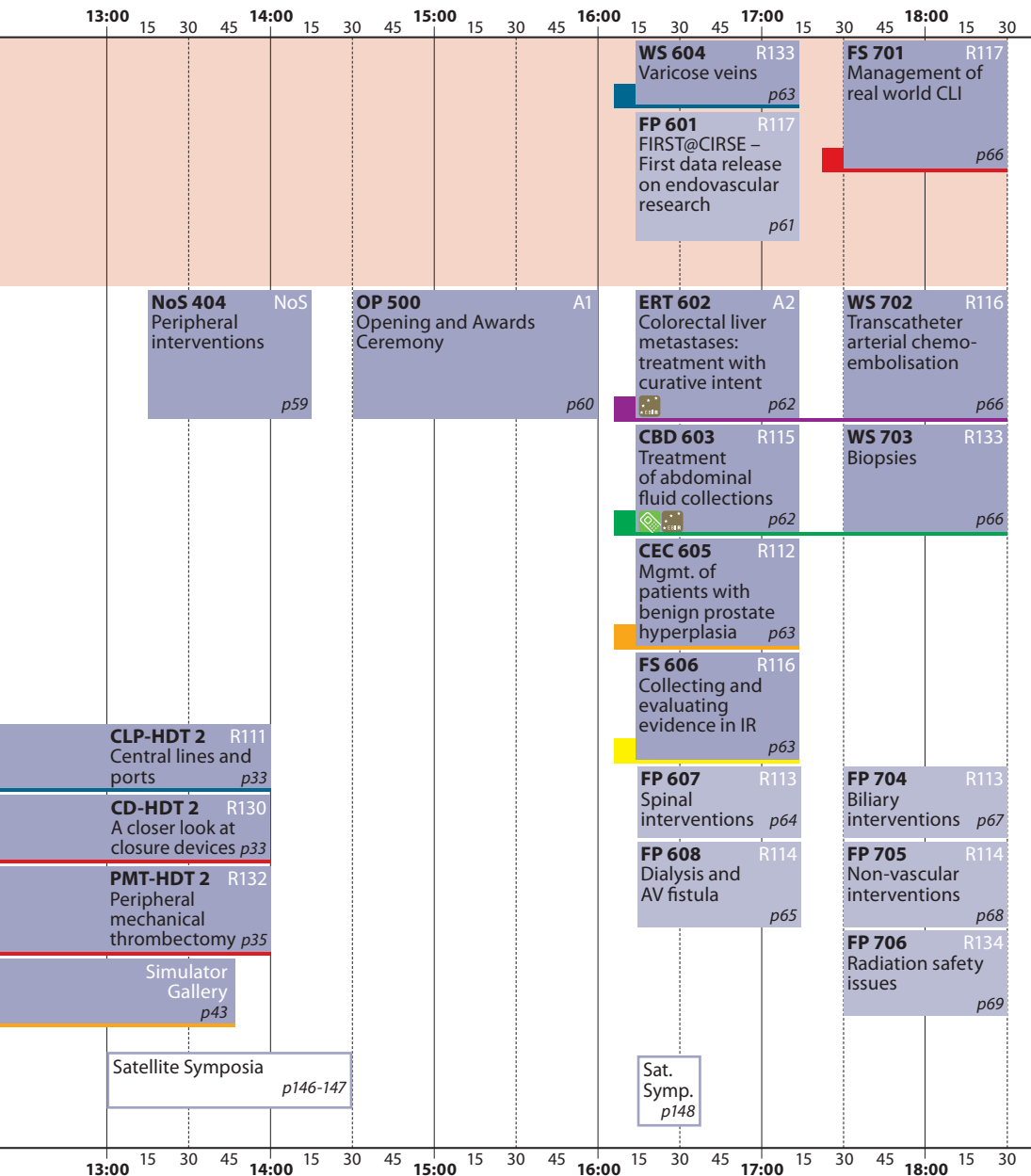
- EMBOLISATION
- NEUROINTERVENTION
- NON-VASCULAR INTERVENTION
- IR MANAGEMENT

 Session includes lectures that are recommended for EBIR preparation

 e-voting

**A:** Auditorium      **NoS:** News on Stage Area

**R:** Room

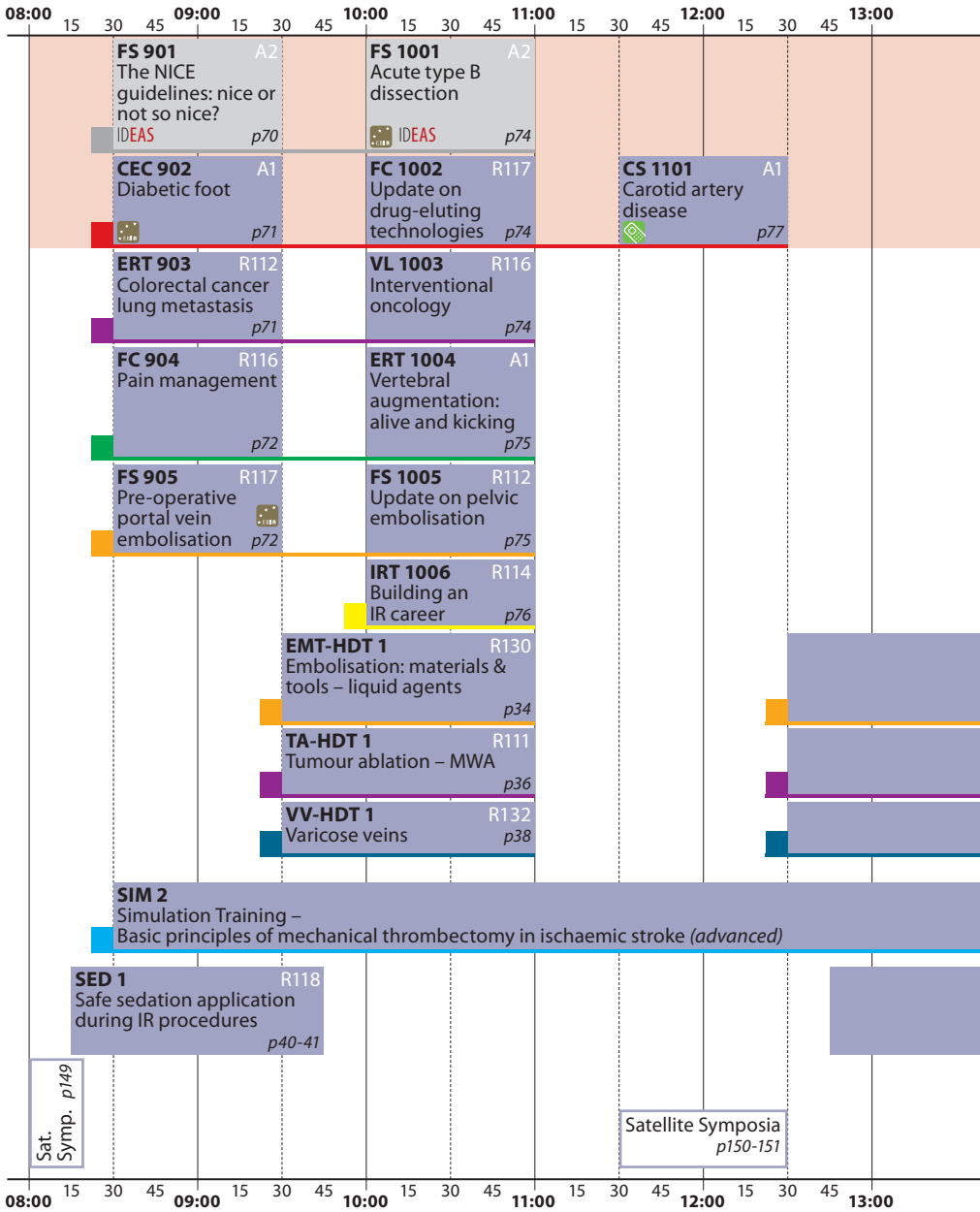


**CBD:** Case-based Discussion  
**CEC:** Clinical Evaluation Course  
**CS:** Controversy Session  
**ERT:** Expert Round Table  
**FC:** Fundamental Course

**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  
**SP:** Student Programme  
**VL:** Video Learning Session  
**WS:** Workshop

# Programme at a Glance – Sunday, September 8



**ENDOVASCULAR PROGRAMME**

- ARTERIAL INTERVENTION
- VENOUS INTERVENTION
- AORTIC INTERVENTION IDEAS

**INTERVENTIONAL ONCOLOGY**

- EMBOLISATION
- NEUROINTERVENTION
- NON-VASCULAR INTERVENTION
- IR MANAGEMENT

Session includes lectures that are recommended for EBIR preparation  
 e-voting  
**A:** Auditorium    **NoS:** News on Stage Area  
**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	
								<b>WS 1303</b> A2 Fundamentals in EVAR IDEAS p80				<b>CBD 1401</b> A2 My worst day in the angiosuite 1 IDEAS p81				<b>FS 1501</b> A2 Subacute and chronic type B dissection IDEAS p86							
												<b>ERT 1402</b> R112 Aorto-iliac stenotic occlusive disease p81				<b>WS 1502</b> R133 Radial access p86							
<b>NoS 1204</b> NoS Embolisation p79				<b>HL 1301</b> A1 Andreas Gruentzig Lecture				<b>HTS 1302</b> Does ATTRACT change our DVT management practice? p79-80				<b>WS 1403</b> R115 Biliary interventions p82				<b>CBD 1503</b> R116 IR salvage for abdominal surgical disasters p86							
												<b>CBD 1404</b> R116 Arteriovenous malformations and lymphatics p82											
												<b>AI 1405</b> A1 Amazing interventions p82											
												<b>FP 1406</b> R113 Ablation of liver tumours p83				<b>FP 1504</b> R113 Venous interventions p87							
<b>EMT-HDT 2</b> R130 Embolisation: materials & tools – liquid agents p34												<b>FP 1407</b> R114 Experimental studies in IR p84				<b>FP 1505</b> R134 Interventional oncology beyond liver p88							
<b>TA-HDT 2</b> R111 Tumour ablation – MWA p36												<b>FP 1408</b> R133 Aortic interventions IDEAS p85				<b>FP 1506</b> R114 Peripheral vascular disease intervention 1 p89							
<b>VV-HDT 2</b> R132 Varicose veins p38																							
Simulator Gallery p44																							
<b>SED 2</b> R118 Safe sedation application during IR procedures p40-41												<b>SED 3</b> R118 Safe sedation application during IR procedures p40-41											
Satellite Symposia p153-156				Satellite Symposia p156-157								Satellite Symposia p157-158				Sat. Symp. p158							

**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  
**SP:** Student Programme  
**VL:** Video Learning Session  
**WS:** Workshop

# Programme at a Glance – Monday, September 9



08:00			09:00			10:00			11:00			12:00			13:00					
15	30	45	15	30	45	15	30	45	15	30	45	15	30	45	15	30	45			
			<b>ERT 1701</b> A2 How I treat bad necks in EVAR IDEAS p90			<b>FS 1801</b> A2 Endoleaks in EVAR IDEAS p94														
			<b>FS 1702</b> R112 Endovascular masterclass: intermittent claudication p91			<b>FS 1802</b> R115 Medical therapy to improve outcomes of PAD interventions p94														
			<b>FC 1704</b> R117 Portomesenteric vein thrombosis p92			<b>FS 1804</b> R116 Dialysis masterclass p95														
			<b>FS 1703</b> R116 Everything you wanted to know about immunotherapy in IR p91			<b>ERT 1803</b> A1 Current mgmt. of metastatic lesions from breast cancer p95			<b>ERT 1901</b> R112 Anaesthesia in IR activity p97											
			<b>CEC 1705</b> A1 Trauma p92			<b>FC 1805</b> R117 Peripheral arteriovenous malformations p96														
						<b>IRT 1806</b> R114 Clinical practice for trainees, residents and young IRs p96														
						<b>EMT-HDT 3</b> R130 Embolisation: materials & tools – coils & plugs p34														
						<b>TA-HDT 3</b> R111 Tumour ablation – RFA p37														
						<b>ST-HDT 1</b> R132 Stroke thrombectomy p36														
			<b>SIM 3</b> Simulation Training – Emergency embolisation in trauma: state-of-the-art ( <i>intermediate</i> )																	
			<b>SED 4</b> R118 Safe sedation application during IR procedures ( <i>advanced</i> ) p40-41																	
Sat. Symp. p159												Satellite Symposia p161-164								

**ENDOVASCULAR PROGRAMME**

- ARTERIAL INTERVENTION
- VENOUS INTERVENTION
- AORTIC INTERVENTION IDEAS

**INTERVENTIONAL ONCOLOGY**

- EMBOLISATION
- NEUROINTERVENTION
- NON-VASCULAR INTERVENTION
- IR MANAGEMENT

-  Session includes lectures that are recommended for EBIR preparation
-  e-voting
- A:** Auditorium
- R:** Room
- NoS:** News on Stage Area

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	
								<b>CBD 2103</b> A2 My worst day in the angiosuite 2 IDEAS p101				<b>ERT 2201</b> A2 How to achieve durability in F-/B-EVAR IDEAS p102				<b>WS 2301</b> A2 Fundamentals in TEVAR IDEAS p108							
												<b>ERT 2205</b> R112 SFA: the unsolved question: angioplasty vs. stent p104											
								<b>FIQ 2101</b> A1 Film Interpretation Quiz				<b>WS 2202</b> R133 Thermal protection for ablative therapies p102				<b>WS 2302</b> R113 Genitourinary IR interventions: basic and advanced p108							
<b>NoS 2004</b> NoS Interventional oncology p99								<b>HTS 2102</b> Is renal tumour ablation ready for prime time? p100				<b>CBD 2203</b> R115 IR in gynaecological emergencies p103				<b>WS 2303</b> R114 Pulmonary and bronchial artery embolisation p108							
												<b>FS 2204</b> R117 New in endovascular thrombectomy p103				<b>FP 2304</b> R115 TIPS and portal vein intervention p109							
<b>EMT-HDT 4</b> R130 Embolisation: materials & tools – coils & plugs p34												<b>FP 2206</b> R113 Prostate artery embolisation p105				<b>FP 2305</b> R133 Musculoskeletal interventions p110							
<b>TA-HDT 4</b> R111 Tumour ablation – RFA p37												<b>FP 2207</b> R116 Transarterial approaches for liver tumours p106				<b>FP 2306</b> R134 Embolotherapy p111							
<b>ST-HDT 2</b> R132 Stroke thrombectomy p36												<b>FP 2208</b> R114 Peripheral vasc. disease intervention 2 p107				<b>GA 2308</b> R116 General Assembly – members only p112							
Simulator Gallery p45																							
<b>SED 5</b> R118 Safe sedation application during IR procedures p40-41												<b>SED 6</b> R118 Safe sedation application during IR procedures p40-41											
Satellite Symposia p164-165								Satellite Symposia p166-167				Sat. Symp. p 167								<b>SP-NoS 2307</b> NoS Students on Stage p112			

**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  
**SP:** Student Programme  
**VL:** Video Learning Session  
**WS:** Workshop

# Programme at a Glance – Tuesday, September 10

08:00			09:00			10:00			11:00			12:00			13:00								
15	30	45	15	30	45	15	30	45	15	30	45	15	30	45	15	30	45						
			<b>FS 2501</b> A2 Radiation exposure: are we doing enough? IDEAS p113			<b>ERT 2601</b> A2 Don't forget the iliacs! IDEAS p117			<b>ERT 2701</b> A2 What's next for EVAR? IDEAS p120														
			<b>CEC 2502</b> A1 Acute mesenteric arterial ischaemia p114			<b>ERT 2602</b> A1 Open questions in below-the-knee procedures p117			<b>FS 2702</b> R117 Radial access: how and when p121														
			<b>FC 2503</b> R117 Intra-arterial stroke management p114			<b>VL 2603</b> R116 Neurointervention p118			<b>CEC 2703</b> R112 Stroke management p121														
			<b>FS 2505</b> R112 Standardising planning to achieve optimal ablation p115			<b>CEC 2605</b> R112 Strategies for T1 renal cell carcinoma p119			<b>FS 2705</b> R116 Musculoskeletal: metastatic disease p122														
			<b>FS 2504</b> R116 Urinary tract embolisation p115			<b>FS 2604</b> R117 Gastrointestinal bleeding p118			<b>FC 2704</b> R115 Essential skills for a clinical IR p122														
						<b>IRT 2606</b> R114 IRs: from the angio-suite to industry boardrooms and the road to innovation p119			<b>CM 2706</b> R113 CIRSE meets CAIR p122														
						<b>EMT-HDT 5</b> R130 Embolisation: materials & tools – particulate agents p35																	
						<b>TA-HDT 5</b> R111 Tumour ablation – Image guided navigation & targeting p37																	
						<b>VA-HDT 1</b> R132 Vertebral augmentation p38																	
			<b>SIM 4</b> Simulation Training – Peripheral artery disease: angioplasty and stenting (core)																				
			<b>SED 7</b> R118 Safe sedation application during IR procedures (advanced) p40-41																				

**ENDOVASCULAR PROGRAMME**

- ARTERIAL INTERVENTION
- VENOUS INTERVENTION
- AORTIC INTERVENTION IDEAS

**INTERVENTIONAL ONCOLOGY**

- EMBOLISATION
- NEUROINTERVENTION
- NON-VASCULAR INTERVENTION
- IR MANAGEMENT

Session includes lectures that are recommended for EBIR preparation  
 e-voting

**A:** Auditorium      **NoS:** News on Stage Area  
**R:** Room



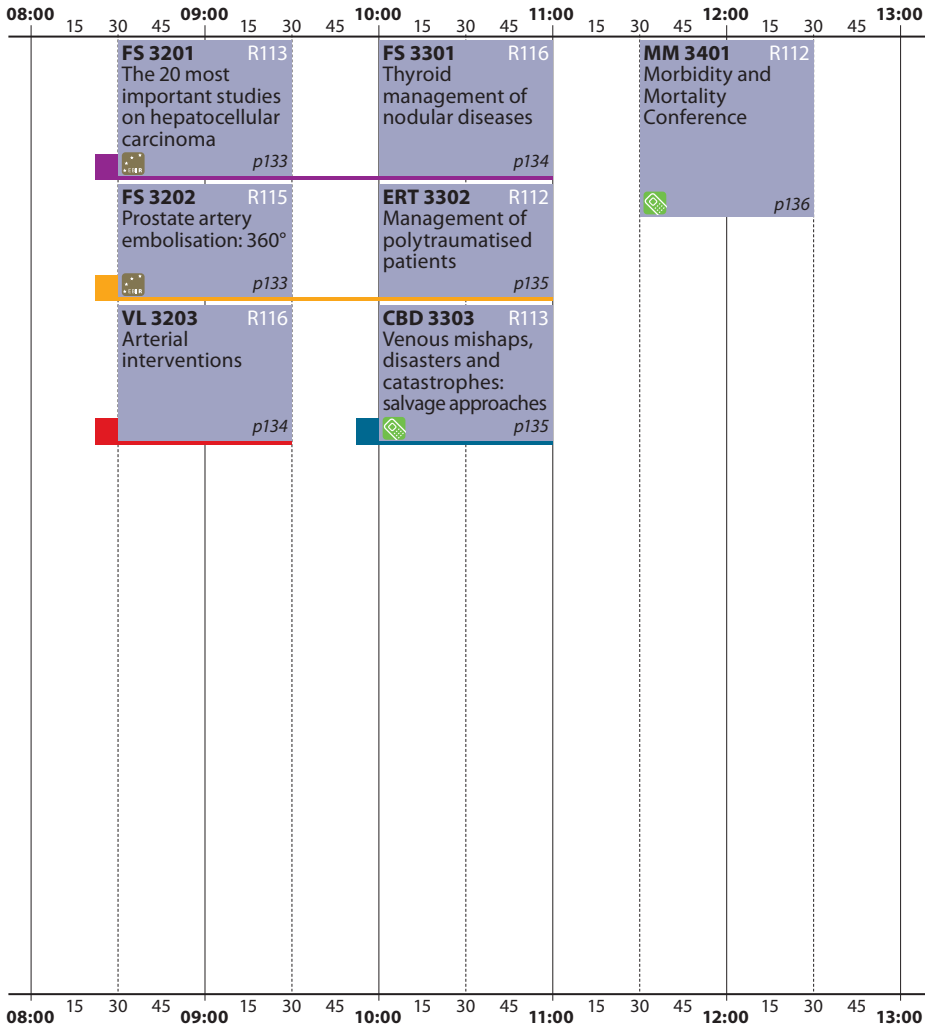
13:00				14:00				15:00				16:00				17:00				18:00			
15	30	45		15	30	45		15	30	45		15	30	45		15	30	45		15	30	45	
												<b>FS 3001</b> A2 Open surgery vs. endoluminal treatment for TAAA IDEAS p125				<b>WS 3101</b> A2 FEVAR and BEVAR IDEAS p129							
												<b>WS 3005</b> R113 Venous access p127											
												<b>CBD 3007</b> R116 Below the knee p127											
<b>NoS 2802</b> NoS From science to practice p124				<b>HL 2901</b> A1 Josef Roesch Lecture				<b>WS 3002</b> R133 Enteral feeding: gastrostomy, gastrojejunostomy and direct jejunostomy p126				<b>FS 3102</b> R116 Biliary p129											
												<b>HTS 2902</b> Durability: the Achilles heel of EVAR IDEAS p124-125											
												<b>ERT 3003</b> R112 Controversies in endovascular thrombectomy p126				<b>WS 3103</b> R133 Acute stroke management p129							
<b>EMT-HDT 6</b> R130 Embolisation: materials & tools – particulate agents p35												<b>FS 3004</b> R115 Musculoskeletal: ablation, consolidation, embolisation p126											
<b>TA-HDT 6</b> R111 Tumour ablation – Cryo & laser, IRE & electrochemotherapy p37												<b>WS 3006</b> R134 Mgmt. of visceral aneurysms and pseudoaneurysms p127											
<b>VA-HDT 2</b> R132 Vertebral augmentation p38												<b>FP 3008</b> R114 Super Tuesday p128				<b>FP 3104</b> R134 Neuro-interventions p130							
Simulator Gallery p46																<b>FP 3105</b> R113 Gynaecology and urogenital interventions p131							
<b>SED 8</b> R118 Safe sedation application during IR procedures p40-41																<b>FP 3106</b> R114 Biopsy and drainage p132							
Sat. Symp. p168																							

**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  
**SP:** Student Programme  
**VL:** Video Learning Session  
**WS:** Workshop

# Programme at a Glance – Wednesday, September 11



**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  
**SP:** Student Programme  
**VL:** Video Learning Session  
**WS:** Workshop

## ENDOVASCULAR PROGRAMME

■ **ARTERIAL INTERVENTION**  
■ **VENOUS INTERVENTION**  
■ **AORTIC INTERVENTION IDEAS**

## INTERVENTIONAL ONCOLOGY

■ **EMBOLISATION**  
■ **NEUROINTERVENTION**  
■ **NON-VASCULAR INTERVENTION**  
■ **IR MANAGEMENT**

Session includes lectures that are recommended for EBIR preparation

e-voting

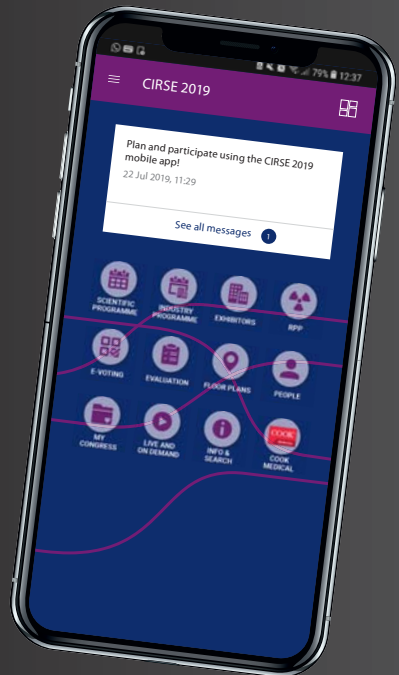
**A:** Auditorium  
**R:** Room

**NoS:** News on Stage Area

# Download CIRSE 2019 in the CIRSE society app!

## Your toolkit for the 2019 Annual Meeting in Barcelona:

- 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!



WHERE THE WORLD OF IR MEETS

# CIRSE 2019

LIVE AND ON DEMAND

**CIRSE 2019**

**LIVE NOW**

CIRSE Annual Meeting 2019  
7-11 Sept, Barcelona, SP

Explore now

**Preclinical assessment of a new robotic device...**  
R. Castano | CIRSE 2019 | 3106.7  
Session: Radiation safety  
NON-VASCULAR INTERVENTION

**Use of drug-coated balloons in dysfunctional...**  
P. Ribou | CIRSE 2019 | 3107.7  
Session: Venous Interventions  
VENOUS INTERVENTION

**Embolization of genicular arteries for chronic...**  
D. deRochambeau | CIRSE 2019 | 3108.7  
Session: Embolotherapy  
EMBOLIZATION

**Multimodal visibility of DC bead LUMI In...**  
D. Schwandt | CIRSE 2019 | 3109.7  
Session: Oncologic Interventions 4  
EMBOLIZATION

**Uterine artery embolisation**  
J. Pelage | CIRSE 2019 | 3104.3  
Session: Embolisation  
EMBOLIZATION

**THE PAE LEARNING CURVE**  
G. Vigneronvan | CIRSE 2019 | 3106.6  
Session: Radiation safety  
EMBOLIZATION

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

Pick your favourite and watch the other lectures on demand at the CIRSE Library!

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

Cardiovascular and Interventional Radiological Society of Europe

- Scientific & Educational Programme \*
- Corporate Activities

<b>14 General Information from A to Z</b> <b>21</b> Session Types, <b>24</b> Film Interpretation Quiz, <b>25</b> Opening Ceremony, <b>26</b> News on Stage, <b>31</b> First@CIRSE, <b>32</b> Hands-on Device Training, <b>40</b> Safe Sedation Training, <b>42</b> Simulation Training	<b>SAT</b>
<b>47</b> Saturday – <b>Scientific Programme</b>	<b>SUN</b>
<b>70</b> Sunday – <b>Scientific Programme</b>	<b>MON</b>
<b>90</b> Monday – <b>Scientific Programme</b>	<b>TUE</b>
<b>113</b> Tuesday – <b>Scientific Programme</b>	<b>WED</b>
<b>133</b> Wednesday – <b>Scientific Programme</b>	<b>POSTERS</b>
<b>138</b> <b>Posters</b>	<b>TUE</b>
<b>143 Corporate Activities</b> <b>146</b> Satellite Symposia, <b>169</b> Learning Centres, <b>182</b> Industry Training Village, <b>185</b> Hands-on Device Training Sponsors, <b>187</b> Safe Sedation & Simulation Training Sponsors	<b>WED</b>
<b>192 Technical Exhibition</b> <b>192</b> Alphabetical & Numerical List, <b>198</b> Technical Exhibitors Guide, <b>252</b> Radiation Protection Pavilion, <b>262</b> Societies, <b>274</b> Floor Plans	<b>SAT</b>

\* 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 2019 event. If the CIRSE society app is already on your smartphone, please update the app and install the CIRSE 2019 event in order to have the best toolkit to plan your personal congress programme, evaluate sessions, browse the exhibition, take part in e-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 9, 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 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 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 2019 will be available shortly after.

### CME Credit Allowance

**CIRSE 2019**, Barcelona, Spain, September 7-11, has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 34 European CME credits (ECMEC®s).

**IDEAS 2019**, Barcelona, Spain, September 8-10, has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 16 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/education/earn-credit-participation-international-activities](http://www.ama-assn.org/education/earn-credit-participation-international-activities).

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

Refreshments can be purchased at the cash bar.

### 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 2019 sessions, please use the online evaluation system, accessible through the CIRSE mobile app (please see page 11) and at [programme.cirse.org](http://programme.cirse.org).



### Hotels | Social Events | City Information

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

#### Opening Hours

Friday, September 6	16:00-18:00
Saturday, September 7	07:00-18:00
Sunday, September 8	07:30-18:00
Monday, September 9	08:00-18:00
Tuesday, September 10	08:00-18:00
Wednesday, September 11	08:00-13:00

#### Internet/Wifi

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

**Network: CIRSE 2019**

**Password: Barcelona19**

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

All sessions are being livestreamed and will be available on demand in the CIRSE Library shortly after. Never miss another session! CIRSE members have year-round free access to all live congresses and webcast recordings. Find out more about our various access options for non-members at [cirse.org/library/access](http://cirse.org/library/access).

#### Members' Lounge

All members are invited to relax and enjoy a snack in the Members' Lounge, which is located in the exhibition hall.

#### 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 sessions 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.

The Poster Area is located in the exhibition hall of the congress centre (please see the floorplan on page 275). 36 computers will be available to view the CIRSE 2019 posters.



**Opening Hours**

Saturday, September 7	07:30-18:30
Sunday, September 8	07:30-18:30
Monday, September 9	07:30-18:30
Tuesday, September 10	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/s00270-019-02282-x).

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 safety and dose management and is located in the exhibition hall. The RPP offers best-practice guides, a comprehensive programme of Radiation Safety Talks and information on the latest products for protection and dose management. 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 252-260 or visit [www.cirse.org/rpp](http://www.cirse.org/rpp).

**Registration Desk – Opening Hours**

Friday, September 6	16:00-18:00
Saturday, September 7	07:00-18:00
Sunday, September 8	07:30-18:00
Monday, September 9	08:00-18:00
Tuesday, September 10	08:00-18:00
Wednesday, September 11	08:00-13:00

**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 in the mezzanine of the congress centre. All material must be in English and provided on a USB flash drive 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 Professional Plus 2016. Please note that speakers are not allowed to use their own laptops for their presentations.

### Opening Hours

Friday, September 6	16:00-18:30
Saturday, September 7	07:30-18:30
Sunday, September 8	07:30-18:30
Monday, September 9	07:30-18:30
Tuesday, September 10	07:30-18:00
Wednesday, September 11	07:30-12:00

### Students' Lounge

The Students' Lounge will act as a home base for all participants of the CIRSE 2019 Student Programme, enabling students to meet with their peers, have lunch together and find out more about IR and CIRSE in a relaxed, comfortable environment. The Students' Lounge will also be the location of the Mentoring Breakfast and the Students' Quiz.

### Technical Exhibition

The CIRSE Technical Exhibition is located on the entrance level. Please find a floor plan of the exhibition on pages 274-275 and a detailed list of all exhibitors on pages 192-251.

### Opening Hours

Saturday, September 7	09:00-18:00
Sunday, September 8	09:00-18:00
Monday, September 9	09:00-18:00
Tuesday, September 10	09:00-18:00

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

As in previous years, CIRSE will feature tailor-made content for IR trainees and residents. This includes four IR trainee sessions, several short talks at noon, the ETF networking event and the ETF Quiz, which all young IRs are invited to join in order to measure their IR knowledge through friendly rivalry.

### **Transportation in Barcelona**

#### **Public transportation**

The Centre de Convencions Internacional de Barcelona "CCIB" can be reached with Metro line L4 – exit "El Maresme | Forum".

All CIRSE 2019 delegates with full congress registration (scientific badge) will receive a complimentary "Hola BCN!" 5-day travel pass. This pass allows delegates to travel on 5 consecutive days within Zone 1, making the congress centre easily accessible during the congress dates.

Travel passes will be available at the e-badge stations and registration desk. Please be aware that travel passes are limited to one per person.

#### **Taxis**

Taxis will be available in front of the congress centre.  
The cost to go to the city centre is €15-20.

#### **Important Travel Notice: Wednesday, September 11**

Please note that September 11 is Catalonia's national holiday. It may be more difficult than usual to get around the city, as public ceremonies will be going on throughout the day.

For more information, please visit the "Hotels | Social Events | City Information" desk located in the entrance area.

# September 2019

Read the latest CVIR issue with a special section dedicated to oncology:

- what IRs need to know about IO and
- oncology-specific procedures on targeted organs

[www.cvironline.org/read](http://www.cvironline.org/read)

Focus  
on IO

The official journal of the Cardiovascular and Interventional Radiological Society of Europe

vol 42 | no 9 | sep 2019

# CVIR

CardioVascular and Interventional Radiology

## Session Types

### Amazing Interventions

During this session, acclaimed experts in interventional radiology will talk about their most unusual and challenging procedures. The goal 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 2019, CIRSE's guests will be APSCVIR and CAIR.

### Clinical Evaluation Sessions

This 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 facilities 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. Select papers will be grouped by clinical focus and presented at a series of sessions. 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 trials and studies on endovascular treatment.



### Super Tuesday

This exclusive Free Paper Session 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.

### 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, 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 beginning a career in interventional radiology. These sessions will also address future IR technologies and challenges the next generation of IRs may face. Organised by CIRSE's 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**

News on Stage sessions will feature presentations on the latest results from multi-centric trials, groundbreaking techniques and many more IR hot topics. These sessions will give delegates the opportunity to hear from the experts personally and engage with them and other key opinion leaders in active, lively discussions. The News on Stage area is specifically designed for large-screen oral presentations and discussions in an easy and informal atmosphere.

### **Satellite Symposia**

Satellite Symposia are organised by industry partners 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 20-minute 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**

These sessions will feature stand-alone video presentations of interventions with the purpose of teaching procedural techniques and providing a brief overview of indications 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 9**  
**14:30-15:15**  
**Auditorium 1**

*Coordinators: L. Crocetti (Pisa/IT), G.J. O'Sullivan (Galway/IE)*

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 A:**

*N. McEniff (Dublin/IE) – Team leader*  
*A.M. Barnacle (London/UK)*  
*M. Casares Santiago (Palma de Mallorca/ES)*  
*S. Kee (Los Angeles, CA/US)*

## **Team B:**

*R. Iezzi (Rome/IT) – Team leader*  
*G. Eldem (Ankara/TR)*  
*J. Garnon (Strasbourg/FR)*  
*M.R. Meijerink (Amsterdam/NL)*





# CIRSE Opening and Awards Ceremony

**Saturday, September 7**

**14:30-16:00**

**Auditorium 1**

## **Welcome Addresses**

### **CVIR Editor's Medal Award:**

**M.R. Meijerink (Amsterdam/NL), R.S. Puijk (Amsterdam/NL)**

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

*(R.W. Günther Foundation Award)*

**B. Guiu (Montpellier/FR) & M.T. Boulin (Dijon/FR)**

### **Distinguished Fellow: V. Bérczi (Budapest/HU)**

*Laudation: T.J. Cleveland (Sheffield/UK)*

### **Distinguished Fellow: R.D. García-Mónaco (Buenos Aires/AR)**

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

### **Distinguished Fellow: J.E. Jackson (London/UK)**

*Laudation: A.M. Barnacle (London/UK)*

### **Gold Medal: T. de Baère (Villejuif/FR)**

*Laudation: J. Palussière (Bordeaux/FR)*

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

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

## News on Stage

News on Stage sessions will feature presentations on the latest results from multi-centric trials, groundbreaking techniques and many more IR hot topics. These sessions will give delegates the opportunity to hear from the experts personally and engage with them and other key opinion leaders in active, lively discussions. The News on Stage area is specifically designed for large-screen oral presentations and discussions in an easy and informal atmosphere.

Saturday, September 7, 13:15-14:15, News on Stage Area

### NoS 404 Peripheral interventions

*Moderators: E. Stabile (Naples/IT), G. Tepe (Rosenheim/DE)*

- 404.1 ZILVERPASS study – ZILVER PTX versus bypass surgery for long femoro\_ popliteal lesions: final 12-month and preliminary 24-month results  
*M. Bosiers; Hamme/BE*
- 404.2 Benefits of DEB post stenting in diabetic patients and males: subgroup analysis of the randomized Freeway stent study  
*J. Tacke<sup>†</sup>, K.A. Hausegger<sup>2</sup>, S. Müller-Hülsbeck<sup>3</sup>, H. Schröder<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>Flensburg/DE, <sup>4</sup>Berlin/DE, <sup>5</sup>Bonn/DE*
- 404.3 Cost-effectiveness of a polymer-coated, paclitaxel-eluting stent (Eluvia) compared to a polymer-free, paclitaxel-coated stent (Zilver PTX) for endovascular femoropopliteal intervention: a payer perspective  
*S. Müller-Hülsbeck<sup>1</sup>, P.W.M. Elroy<sup>2</sup>, R. Akehurst<sup>3</sup>, S.L. Amorosi<sup>3</sup>, C. Giretti<sup>5</sup>, R.I. Griffiths<sup>6</sup>, W.A. Gray<sup>7</sup>; <sup>1</sup>Flensburg/DE, <sup>2</sup>Utrecht/NL, <sup>3</sup>Sheffield/UK, <sup>4</sup>Marlborough, MA/US, <sup>5</sup>Milan/IT, <sup>6</sup>Maple Grove, MN/US, <sup>7</sup>Philadelphia, PA/US*
- 404.4 T.I.N.T.I.N. trial: combining luminor DCB and iVolution self-expanding stent in real life: 6-month outcomes  
*K.R. DeLoose; Dendermonde/BE*
- 404.5 Cost-effectiveness of drug-eluting stents versus PTA with bail-out bare metal stents for infrapopliteal lesions in critical limb ischemia (PADI Trial)  
*T. Wakkie<sup>1</sup>, M. Spreen<sup>1</sup>, L. Konijn<sup>1</sup>, J. Wever<sup>1</sup>, R. van Eps<sup>1</sup>, H. Veger<sup>1</sup>, L.C. van Dijk<sup>1</sup>, W.P.T.M. Mali<sup>2</sup>, M. Maessen<sup>3</sup>, N. van Herpen<sup>3</sup>, H. van Overhagen<sup>1</sup>; <sup>1</sup>The Hague/NL, <sup>2</sup>Utrecht/NL, <sup>3</sup>Arnhem/NL*
- 404.6 The Lutonix® global drug coated balloon registry real world patients with below the knee disease  
*M. Lichtenberg<sup>1</sup>, M. Brodmann<sup>2</sup>, D. Scheinert<sup>3</sup>; <sup>1</sup>Arnsberg/DE, <sup>2</sup>Graz/AT, <sup>3</sup>Leipzig/DE*

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

Sunday, September 8, 13:15-14:15, News on Stage Area

**NoS 1204 Embolisation**

*Moderators: M. Bezzi (Rome/IT), J.E. Jackson (London/UK)*

- 1204.1 Ethylene vinyl alcohol copolymer (Onyx) for treatment of large venous vascular malformations: long term results and histology  
*A.S. Gomes, P.A. Monteleone, S.V. Bukata, J.W. Sayre; Los Angeles, CA/US*
- 1204.2 Bronchial artery embolization for massive hemoptysis: experience from a tertiary referral center in Cape Town, South Africa  
*H. Chung<sup>1</sup>, M. Wojno<sup>2</sup>, K.-L. Pool<sup>3</sup>; <sup>1</sup>Palo Alto, CA/US, <sup>2</sup>Cape Town/ZA, <sup>3</sup>Los Angeles, CA/US*
- 1204.3 Retrospective multivariate study of the clinical outcomes in patients affected by different grades of varicocele treated using different endovascular approaches  
*G. Bianchi, M.V.M. Micelli, P. Palumbo, A. Izzo, A.V. Giordano, S. Carducci, M. Varrassi, A. Barile, C. Masciocchi; L'Aquila/IT*
- 1204.4 Treatment of high-flow priapism: superselective arterial embolization  
*G. de Magistris<sup>1</sup>, F. Pane<sup>1</sup>, F. Corvino<sup>1</sup>, F. Giurazza<sup>1</sup>, F. Amodio<sup>1</sup>, M. Coppola<sup>1</sup>, E. Cavaglià<sup>1</sup>, M. Silvestre<sup>1</sup>, G. Cangiano<sup>1</sup>, A. Borzelli<sup>1</sup>, A. Paladini<sup>2</sup>, R. Niola<sup>1</sup>; <sup>1</sup>Naples/IT, <sup>2</sup>Novara/IT*
- 1204.5 Diagnosis and management of thoracic and shoulder arteriovenous malformations  
*W.F. Yakes; Englewood, CO/US*
- 1204.6 Percutaneous glue embolisation as a primary treatment for visceral pseudoaneurysms  
*U. Gorsj, V. Bhatia, N. Kalra, M. Kang, M.S. Sandhu; Chandigarh/IN*

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

Monday, September 9, 13:15-14:15, News on Stage Area

**NoS 2004 Interventional oncology**

*Moderators: R. Lencioni (Pisa/IT), C.T. Sofocleous (New York, NY/US)*

- 2004.1 Performance of a new needle for the displacement of critical structure in thermal ablation  
*P. Auloge, R.L. Cazzato, J. Caudrelier, P.P. Rao, G. Koch, J. Garnon, A. Gangi; Strasbourg/FR*
- 2004.2 Effects of ablation on systemic therapy for metastatic pulmonary sarcoma: potential synergy?  
*K. Menon, A. Doshi, K. Ganjoo, D. Wang, G. Hwang; Stanford, CA/US*
- 2004.3 Randomized embolization trial for neuroendocrine tumors (RETNET): first safety report  
*M.C. Soulen<sup>1</sup>, N. Fidelman<sup>2</sup>, R.D. Garcia-Mónaco<sup>3</sup>, S.B. White<sup>4</sup>, R. Avritscher<sup>5</sup>, G. El-Haddad<sup>6</sup>, E.P. Wileyto<sup>1</sup>; <sup>1</sup>Philadelphia, PA/US, <sup>2</sup>San Francisco, CA/US, <sup>3</sup>Buenos Aires/AR, <sup>4</sup>Milwaukee, WI/US, <sup>5</sup>Houston, TX/US, <sup>6</sup>Tampa, FL/US*
- 2004.4 Chemoembolization for treatment of hepatocellular carcinoma: national registry-based analysis  
*T. Andrašina, M. Uher, T. Rohan, P. Matkulčik, J. Zavadil, B. Cechova, L. Jandurova, V. Válek; Brno/CZ*
- 2004.5 Transarterial chemoembolization with degradable starch microspheres (DSM-TACE) vs. selective internal radiation therapy (SIRT) in multifocal hepatocellular carcinoma (HCC)  
*T.A. Auer, M. Jonczyk, F. Collettini, B. Hamm, B. Gebauer; Berlin/DE*
- 2004.6 Multimodality quantitative volumetric and metabolic assessment of early tumor response and survival in patients with uveal melanoma liver metastases undergoing Y90-radioembolization  
*F. Tabotta, S. Gnesin, A. Ponti, A. Denys, A. Hocquelet, A. Digkha, J. Prior, J.-F. Knebel, N. Schaefer, R. Duran; Lausanne/CH*

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

Tuesday, September 10, 13:15-14:15, News on Stage Area

**NoS 2802 From science to practice**

*Moderators: Y. Arai (Tokyo/JP), M.D. Darcy (St. Louis, MO/US)*

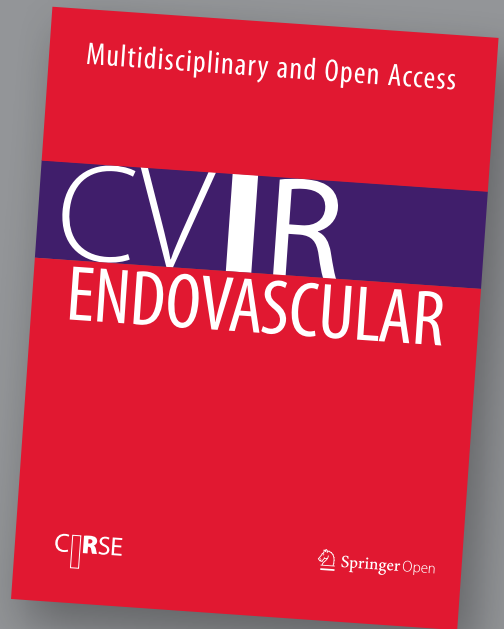
- 2802.1 Perfusion imaging with 320-slice spiral computed tomography and color-coded digital subtraction angiography for assessing acute skeletal muscle ischemia-reperfusion injury in a rabbit model  
*C. Li; Guangzhou/CN*
- 2802.2 Radiation exposure during transarterial chemoembolization: angio-CT versus cone-beam CT  
*L. Piron<sup>1</sup>, J. Le Roy<sup>1</sup>, C. Cassinotto<sup>1</sup>, J. Delicque<sup>1</sup>, A. Belgour<sup>1</sup>, C. Allimant<sup>1</sup>, J.-P. Beregi<sup>2</sup>, J. Greffier<sup>2</sup>, N. Molinari<sup>1</sup>, B. Guiu<sup>1</sup>; <sup>1</sup>Montpellier/FR, <sup>2</sup>Nîmes/FR*
- 2802.3 A randomized and controlled study comparing patient controlled and radiologist controlled intra-procedural conscious sedation, using midazolam and fentanyl, for patients undergoing insertion of a central venous line  
*W. Clements<sup>1</sup>, D. Sneddon<sup>1</sup>, H. Kavnoudias<sup>1</sup>, T. Joseph<sup>1</sup>, G.S. Goh<sup>1</sup>, J. Koukounaras<sup>1</sup>, T.M. Snow<sup>2</sup>; <sup>1</sup>Melbourne, VIC/AU, <sup>2</sup>Brisbane, QLD/AU*
- 2802.4 Left distal Percutaneous Radial hEmostasis using a Truncated dEflation Algorithm; IdPROTEA: safety and nursing impact assessment  
*D. Klass, L. Cardarelli-Leite, A. Hadjivassiliou, J. Chung, D.M. Liu, S. Ho; Vancouver, BC/CA*
- 2802.5 Women in interventional radiology: Australia's gender gap  
*M. Foo<sup>1</sup>, J. Maingard<sup>2</sup>, M. Wang<sup>1</sup>, K. Phan<sup>3</sup>, R. Lim<sup>4</sup>, H.K. Kok<sup>5</sup>, R. Chandra<sup>2</sup>, M.J. Lee<sup>6</sup>, H. Asadi<sup>2</sup>, M. Brooks<sup>1</sup>; <sup>1</sup>Heidelberg, VIC/AU, <sup>2</sup>Clayton, VIC/AU, <sup>3</sup>Liverpool, NSW/AU, <sup>4</sup>Frankston, VIC/AU, <sup>5</sup>Melbourne, VIC/AU, <sup>6</sup>Dublin/IE*
- 2802.6 Platform for preclinical MRI-guided focused ultrasound hyperthermia  
*U. Roy<sup>1</sup>, M. Fournelle<sup>2</sup>, S. Greiser<sup>1</sup>, R.V. Gorkum<sup>3</sup>, D. Speicher<sup>2</sup>, T. Grunwald<sup>1</sup>, S. Kozerke<sup>3</sup>, S. Tretbar<sup>2</sup>, L. Landgraf<sup>1</sup>, A. Melzer<sup>1</sup>; <sup>1</sup>Leipzig/DE, <sup>2</sup>St. Ingbert/DE, <sup>3</sup>Zurich/CH*

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

**FASTEST GROWING IR ENDOVASCULAR JOURNAL**

# OPEN ACCESS ARTICLES

- ... are freely available online
- ... receive more citations
- ... are downloaded more often
- ... garner greater impact
- ... allow authors to retain the copyright



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

## First@CIRSE

CIRSE 2019 will again feature a dedicated session for the first data release of several trials and studies on endovascular treatment, the authors themselves presenting the preliminary results.



Saturday, September 7, 16:15-17:15, Room 117

**Free Paper Session**

### FP 601 **FIRST@CIRSE**

**First data release on endovascular research**

*Moderators: F. Fanelli (Florence/IT), J.H. Rundback (Teaneck, NJ/US)*

- 601.1 e-PTFE covered stent to treat stenosis in arteriovenous fistula: "first look" at the 12-month results from the randomized AVeNEW study  
*B. Dolmatch; Mountain View, CA/US*
- 601.2 Primary endpoint results of the IN.PACT AV access randomized trial: outcomes through six months  
*A. Holden; Auckland/NZ*
- 601.3 Efficacy and safety of a novel paclitaxel-nano-coated balloon for femoro-popliteal angioplasty: 2-year results of EffPac trial  
*U. Teichgräber; Jena/DE*
- 601.4 Stellarex DCB in real world: 1000 patient analysis from the SAVER registry  
*B. Mees<sup>1</sup>, F.E. Vermassen<sup>2</sup>, G. Torsello<sup>3</sup>, A. Cremonesi<sup>4</sup>, A. Sauguet<sup>5</sup>;*  
*<sup>1</sup>Maastricht/NL, <sup>2</sup>Ghent/BE, <sup>3</sup>Münster/DE, <sup>4</sup>Cotignola/IT, <sup>5</sup>Toulouse/FR*
- 601.5 ZILVER<sup>®</sup> PTX<sup>®</sup> drug-eluting peripheral stent: latest update  
*M.D. Dake; Tucson, AZ/US*
- 601.6 Long-term mortality of matched patients with intermittent claudication treated by high-dose paclitaxel-coated balloon vs. plain balloon angioplasty: a real-world study  
*K.P. Donas<sup>1</sup>, A. Sohr<sup>1</sup>, G.A. Pitoulis<sup>1</sup>, F. Alfonso<sup>2</sup>, G. Torsello<sup>1</sup>;*  
*<sup>1</sup>Münster/DE, <sup>2</sup>Madrid/ES*

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

## 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 coordinators, 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 each session, allowing participants to ask questions and provide feedback.

Participating industry partners have been invited by CIRSE to provide an overview of their devices and technologies.

### How to participate:

Please note that participation is free of charge, but places are limited to 25 people per session and will be allocated on a first come, first served basis.

As all Hands-on Device Training sessions offer practical medical training, participation is for qualified medical professionals only.



## A CLOSER LOOK AT CLOSURE DEVICES

Room 130

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 7

**CD-HDT 1**

09:30-11:00

**CD-HDT 2**

12:30-14:00

*Coordinators: J.-Y. Chun (London/UK), L. Marques (Flensburg/DE)*

## CENTRAL LINES AND PORTS

Room 111

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 7

**CLP-HDT 1**

09:30-11:00

**CLP-HDT 2**

12:30-14:00

*Coordinators: C.E. Althoff (Berlin/DE), J.A. Guirola (Zaragoza/ES)*

## EMBOLISATION: MATERIALS AND TOOLS

Room 130

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

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

### Sunday, September 8

**EMT-HDT 1: liquid agents**

09:30-11:00

**EMT-HDT 2: liquid agents**

12:30-14:00

Liquid embolic agents include polymers such as N-butyl cyanoacrylate glue and ethylene vinyl alcohol (Onyx), as well as sclerosants (alcohol, polidocanol, etc.). Liquid embolics are widely used for the management of haemorrhage, post-EVAR endoleaks and vascular malformations due to their penetrating and inflammation-inducing capacity. This Hands-on Device Training (HDT) will offer attendees the opportunity to explore and learn about the various types of liquid agents, as well as their specific advantages and disadvantages.

*Coordinators: L. Defreyne (Ghent/BE), J. Urbano (Madrid/ES)*

### Monday, September 9

**EMT-HDT 3: coils & plugs**

09:30-11:00

**EMT-HDT 4: coils & plugs**

12:30-14:00

Metallic coils (pushable/injectable or detachable) and detachable plugs are established permanent mechanical embolic materials for the treatment of active bleeding, pseudoaneurysms and true aneurysms. Coils and plugs may also be used to prevent non-target embolisation or establish flow redistribution in patients undergoing transarterial tumour treatment, such as radioembolisation. This Hands-on Device Training (HDT) will offer attendees the opportunity to explore and learn about the various types of coils and plugs.

*Coordinators: M.C. Burgmans (Leiden/NL), M. Citone (Florence/IT)*

**Tuesday, September 10****EMT-HDT 5: particulate agents**

09:30-11:00

**EMT-HDT 6: particulate agents**

12:30-14:00

Today, particulate embolic agents are used both in emergency IR and interventional oncology due to their specific properties which allow distal penetration within the microvasculature. Certain particulate agents are also capable of loading and releasing chemotherapeutic drugs, enabling loco-regional endovascular chemotherapy. This Hands-on Device Training (HDT) will offer attendees the opportunity to become familiar with the various types of particulate agents and their indications.

*Coordinators: A.G. Rampoldi (Milan/IT), S. Spiliopoulos (Athens/GR)*

**PERIPHERAL MECHANICAL THROMBECTOMY****Room 132**

Treatment of patients with acute occlusions of the arterial or venous bed is becoming a more and more frequent occurrence. As technology has steadily developed, several systems have become available to help restore 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 7****PMT-HDT 1**

09:30-11:00

**PMT-HDT 2**

12:30-14:00

*Coordinators: R. de Graaf (Friedrichshafen/DE), D.K. Tsetis (Iraklion/GR)*

## STROKE THROMBECTOMY

Room 132

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

### Monday, September 9

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

*Coordinators: A. Krajina (Hradec Králové/CZ), H. van Overhagen (The Hague/NL)*

## TUMOUR ABLATION

Room 111

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 (HDT) will offer separate sessions to look at radiofrequency ablation, microwave ablation and alternative techniques, including cryoablation and other image-guided technologies.

### Sunday, September 8

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

Microwave ablation has been one of the last technologies to appear in the theatre of thermal ablation. Although the mechanism of action, coagulative necrosis, is similar to that of radiofrequency ablation, MWA has some potential advantages, like faster action, higher temperatures and a lower heat-sink effect. This Hands-on Device Training will offer attendees the opportunity to explore and learn about the latest commercially available technologies.

*Coordinators: J.L. del Cura Rodriguez (Bilbao/ES), A. Veltri (Orbassano/IT)*

**Monday, September 9****TA-HDT 3: RFA**

09:30-11:00

**TA-HDT 4: RFA**

12:30-14:00

This HDT will offer attendees the opportunity to look at radiofrequency ablation. In the last 10 to 15 years, technical developments in the available RFA systems have increased ablation volumes in a controllable, versatile and relatively inexpensive manner.

As the oldest and most widely used thermal ablation modality worldwide, RFA's effectiveness and safety have been fully proven. Radiofrequency tumour ablation has shown to be a useful method for creating thermally induced coagulation necrosis in tissues being treated. The host of clinical applications for RFA has expanded and RF has accordingly gained widespread clinical use for the treatment of hepatic, renal, lung, soft tissue and bony malignancies. RFA may also provide a means for the palliation of cancer-related pain in patients with metastatic bone disease, which may be unresponsive to other therapies.

*Coordinators: J.-Y. Gaubert (Marseille/FR), M. Tsitskari (Athens/GR)*

**Tuesday, September 10****TA-HDT 5: Image guided navigation and targeting**

09:30-11:00

This Hands-on Device Training will offer attendees the opportunity to explore and learn about the latest commercially available image-guided technologies for treatment planning and real-time navigation, as well as incorporating multi-modality image fusion, robotics and other image-guided techniques.

*Coordinators: C. Farrelly (Dublin/IE), R. Iezzi (Rome/IT)*

**Tuesday, September 10****TA-HDT 6: Cryo- and laser ablation,  
IRE and electrochemotherapy**

12:30-14:00

Percutaneous ablation is a key approach used within the field of interventional oncology. There are a variety of different and ever-evolving ablation techniques beyond MWA and RFA. This HDT will offer attendees the opportunity to explore and learn about modern ablation technologies, including cryoablation, laser ablation and non-thermal ablation techniques such as electroporation and electrochemotherapy.

*Coordinators: A.H. Mahnken (Marburg/DE), M.R. Meijerink (Amsterdam/NL)*

## VARICOSE VEINS

**Room 132**

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 range of devices available and different techniques.

### Sunday, September 8

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

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

## VERTEBRAL AUGMENTATION

**Room 132**

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 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.

### Tuesday, September 10

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

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

# CIRSE library

Access the CIRSE Library for a wealth of IR knowledge:

- 18 congresses across 5 years, including CIRSE, ECIO, ET and IROS
- 2,894 posters
- 5,114 presentations
- 3,137 speakers from around the world
- 8 core topics

Tailor your searches with flexible search filters, browse individual slides, stay up to date with monthly **topic packages** and **prepare for the EBIR** with specially selected presentations.

**CIRSE Members have free access!**

Join now, or choose from our range of access options!  
Keeping up with the world of IR has never been so easy.



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

## Safe sedation application during IR procedures

This practical workshop will give participants the opportunity to perform procedural sedation in a simulated environment and learn about 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.

In the advanced sessions, participants can additionally perform sedations in high-risk patients, e.g. those with hypertonia, severe cardiac diseases or pulmonary diseases like COPD. Participants in these sessions should visit a basic session first or should have substantial experience in procedural sedation.

### Learning objectives

- To apply procedural sedation using different approaches
- To identify complications and challenges during procedural sedation
- To assess the value of various monitoring technologies
- To recognise the added value of capnography during sedation
- To select appropriate sedation techniques in high-risk patients
- To identify limitations and situations where the help of an anaesthesiologist is mandatory

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

### Location

Room 118

### How to participate:

Please note that participation is free of charge, but places are limited to 18 people per session (12 for advanced slots) and will be allocated on a first come, first served basis.

As Safe Sedation Training sessions offer practical medical training, participation is for qualified medical professionals only.



**Sunday, September 8**

<b>SED 1 – Safe Sedation Training</b>	08:15-09:45
<b>SED 2 – Safe Sedation Training</b>	12:45-14:15
<b>SED 3 – Safe Sedation Training</b>	16:00-17:30

**Monday, September 9**

<b>SED 4 – Safe Sedation Training</b> (advanced)	08:15-09:45
<b>SED 5 – Safe Sedation Training</b>	12:45-14:15
<b>SED 6 – Safe Sedation Training</b>	16:00-17:30

**Tuesday, September 10**

<b>SED 7 – Safe Sedation Training</b> (advanced)	08:15-09:45
<b>SED 8 – Safe Sedation Training</b>	12:45-14:15

## Simulation Training

Participants at the Simulation Training (SIM) sessions 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 is comprised of a 20-minute 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.

There is no pre-registration required for Simulation Training sessions. Participation will be free of charge, limited to eight delegates, and will be handled on a first come, first served basis. As SIM sessions offer practical medical training, participation is for qualified medical professionals only.

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

### Location

Simulator Gallery

### How to participate:

Please note that participation is free of charge, but places are limited to 8 people per group and will be allocated on a first come, first served basis.

As all Simulation Training sessions offer practical medical training, participation is for qualified medical professionals only.

**Saturday, September 7**

08:30-13:50

**SIM 1: Prostatic artery embolisation: basics, current role and future perspectives**  
(advanced)*Session organiser: H. Hoppe (Bern/CH)**Instructors: A. Augustin (Würzburg/DE), M.J. Glenck (Zurich/CH), S. Kos (Luzern/CH),  
N. Shaida (Cambridge/UK)***SIM 1.1 (group 1)** 08:30-09:50**SIM 1.2 (group 2)** 09:50-11:10**SIM 1.3 (group 3)** 11:10-12:30**SIM 1.4 (group 4)** 12:30-13:50

*Each session is comprised of a 20-minute round-table discussion and 60-minute simulation training.*

**Learning objectives**

- To understand the management, assessment, relevant vascular anatomy and imaging of patients with benign prostatic hyperplasia
- To become familiar with the materials used for prostatic artery embolisation and precautions to be taken with polyvinyl alcohol particles/microspheres
- To learn about optimal patient selection for prostatic artery embolisation
- To understand how to improve outcomes and how to prevent non-target embolisation
- To perform prostatic artery embolisation on a simulator

**Sunday, September 8**

08:30-13:50

**SIM 2: Basic principles of mechanical thrombectomy in ischaemic stroke** (advanced)*Session organiser: K.E. Wilhelm (Bonn/DE)**Instructors: L. De Paoli (Klagenfurt/AT), E.R. Gizewski (Innsbruck/AT), C.C. Pieper (Bonn/DE), T. Struffert (Giessen/DE)*

<b>SIM 2.1 (group 1)</b>	08:30-09:50
<b>SIM 2.2 (group 2)</b>	09:50-11:10
<b>SIM 2.3 (group 3)</b>	11:10-12:30
<b>SIM 2.4 (group 4)</b>	12:30-13:50

*Each session is comprised of a 20-minute round-table discussion and 60-minute simulation training.*

**Learning objectives**

- To gather insights on the management, assessment and imaging of patients with acute ischaemic stroke
- To discuss the results of landmark trials in endovascular mechanical thrombectomy
- To become familiar with stent-based mechanical thrombectomy for acute middle cerebral artery occlusion
- To understand how to manage complications resulting from mechanical thrombectomy
- To learn how to perform mechanical thrombectomy on a simulator

**Monday, September 9**

08:30-13:50

**SIM 3: Emergency embolisation in trauma: state of the art** (intermediate)*Session organiser: R. Lely (Amsterdam/NL)**Instructors: M.W. de Haan (Maastricht/NL), G.S. Goh (Melbourne, VIC/AU),**I. Insausti Gorbea (Pamplona/ES), R.W. Van der Meer (Leiden/NL)***SIM 3.1 (group 1)** 08:30-09:50**SIM 3.2 (group 2)** 09:50-11:10**SIM 3.3 (group 3)** 11:10-12:30**SIM 3.4 (group 4)** 12:30-13:50

*Each session is comprised of a 20-minute round-table discussion and 60-minute simulation training.*

**Learning objectives**

- To reinforce the principles behind the management, assessment and imaging of patients with trauma
- To become aware of treatment techniques for embolisation of solid organs, the gastrointestinal tract and blood vessels
- To understand treatment algorithms and indications for embolisation in patients with trauma
- To learn how to improve results in embolisation
- To perform particulate or coil embolisation on a simulator

**Tuesday, September 10**

08:30-13:50

**SIM 4: Peripheral artery disease: angioplasty and stenting (core)***Session organiser: M.A. Ruffino (Turin/IT)**Instructors: C. Del Giudice (Paris/FR), F. Fluck (Würzburg/DE), A. Moelker (Rotterdam/NL), W.E.A. Saad (Washington, DC/US)*

<b>SIM 4.1 (group 1)</b>	08:30-09:50
<b>SIM 4.2 (group 2)</b>	09:50-11:10
<b>SIM 4.3 (group 3)</b>	11:10-12:30
<b>SIM 4.4 (group 4)</b>	12:30-13:50

*Each session is comprised of a 20-minute round-table discussion and 60-minute simulation training.*

**Learning objectives**

- To understand the management, assessment and imaging of patients with peripheral arterial occlusive disease
- To realise current treatment strategies (exercise, best medical therapy, POBA, DCB angioplasty, DES, stent grafting, surgery)
- To understand indications, choice of treatment modality, and choice of different access routes for endovascular procedures
- To acquire skills on how to prevent/reduce complications
- To perform balloon angioplasty and stenting in simulated conditions

## Saturday, September 7

08:30-09:30, Room 117

### Focus Session

#### FS 101 Technologies and techniques in peripheral vascular disease: evolution and outstanding questions

Moderators: *W.A. Gray (Philadelphia, PA/US), J.H. Rundback (Teaneck, NJ/US)*

- 101.1 Practice guidelines across societies: status and critical review  
*J.A. Kaufman (Portland, OR/US)*
- 101.2 Calcium solutions: which calcium needs treatment and how?  
*K. Rocha-Singh (Springfield, IL/US)*
- 101.3 Overcoming angiography limitations: rationale for IVUS-guided revascularisation  
*F. Fanelli (Florence/IT)*
- 101.4 Drugs, doses and excipients: DCBs under the spotlight  
*G. Tepe (Rosenheim/DE)*
- 101.5 Distinguishing between class effect and device/brand-specific features: how to decide what deserves adoption?  
*M. Brodmann (Graz/AT)*
- 101.6 Dissections: do they matter and how can they be managed?  
*T. Zeller (Bad Krozingen/DE)*

08:30-09:30, Room 115

### Focus Session

#### FS 102 Pancreatic cancer: role of IR

Moderators: *O. Akhan (Ankara/TR), J. Susman (New York, NY/US)*

- 102.1 Pain management  
*M. Tsitskari (Athens/GR)*
- 102.2 Irreversible electroporation  
*M.R. Meijerink (Amsterdam/NL)*
- 102.3 Thermal ablation  
*K.P. van Lienden (Amsterdam/NL)*
- 102.4 Intra-arterial chemotherapy  
*T. Tanaka (Kashihara/JP)*









08:30-09:30, Room 114

**Fundamental Course**■ **FC 103 Management of benign musculoskeletal tumours***Moderators: F.H. Cornelis (Paris/FR), E.P. Eyheremendy (Buenos Aires/AR)*

- 103.1 Diagnostics and imaging  
*A. Feydy (Paris/FR)*
- 103.2 Benign bone tumours: local therapies  
*U. Pua (Singapore/SG)*
- 103.3 Desmoids and desmoid fibromatosis: the case for ablation  
*J. Garnon (Strasbourg/FR)*
- 103.4 MR-guided focused ultrasound ablation for salvage treatment of desmoids  
*S.M. Tutton (Milwaukee, WI/US)*

08:30-09:30, Auditorium 2

**Clinical Evaluation Course**■ **CEC 104 Ilio-femoral venous stenting masterclass***Moderators: S. Black (London/UK), G.J. O'Sullivan (Galway/IE)*

-  104.1 Pre-operative imaging  
*C.W.K.P. Arnoldussen (Venlo/NL)*
-  104.2 How to plan for ilio-femoral venous reconstruction: what kit do you need?  
*A. Bravo De Laguna Taboada (Las Palmas/ES)*
-  104.3 How in-flow determines the access point  
*N. Karunanithy (London/UK)*
-  104.4 Balloon angioplasty or balloon angioplasty plus stent  
*S.D. Qanadli (Lausanne/CH)*
-  104.5 Surgical salvage options  
*H. Jalaie (Aachen/DE)*
-  104.6 Post-operative care  
*A. Diamantopoulos (London/UK)*

Round-table discussion



08:30-09:30, Room 112

**Expert Round Table**

**ERT 105 Artificial intelligence, machine learning and robotics in IR**

*Moderators: T.F. Jakobs (Munich/DE), M.R. Sapoval (Paris/FR)*

Introduction

- 105.1 Deep learning techniques  
*K. Seals (Los Angeles, CA/US)*
- 105.2 Artificial intelligence and augmented reality  
*M.E. Krokidis (Cambridge/UK)*
- 105.3 Virtual reality in interventional radiology training  
*Z.J. Haskal (Charlottesville, VA/US)*
- 105.4 Robotics development  
*R.H. Kassamali (Birmingham/UK)*

Round-table discussion

Conclusion and take-home points

08:30-09:50, Simulator Gallery

**Simulation Training**

**SIM 1.1 Prostatic artery embolisation: basics, current role and future perspectives** (advanced)

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

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

*Instructors: A. Augustin (Würzburg/DE), M.J. Glenck (Zurich/CH), S. Kos (Luzern/CH), N. Shaida (Cambridge/UK)*

08:30-09:30, Room 116

**Student Programme**

**SP 106 Introducing IR**

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

- 106.1 Welcome from the president & general introduction to IR  
*R.A. Morgan (London/UK)*
- 106.2 Introduction to the congress and student programme  
*T.J. Kroencke (Augsburg/DE), O.M. van Delden (Amsterdam/NL)*
- 106.3 IR and its applications in modern medicine  
*A. Gangi (Strasbourg/FR), C.A. Binkert (Winterthur/CH)*
- 106.4 IR training and career perspectives  
*G.C. Makris (Oxford/UK), S.M. Protto (Tampere/FI)*

09:30-11:00, Room 130

**Hands-on Device Training**

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

*Coordinators: J.-Y. Chun (London/UK), L. Marques (Flensburg/DE)*

09:30-11:00, Room 111

**Hands-on Device Training**

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

*Coordinators: C.E. Althoff (Berlin/DE), J.A. Guirola (Zaragoza/ES)*

09:30-11:00, Room 132

**Hands-on Device Training**

**PMT-HDT 1 Peripheral mechanical thrombectomy**

*Coordinators: R. de Graaf (Friedrichshafen/DE), D.K. Tsetis (Iraklion/GR)*

09:50-11:10, Simulator Gallery

### Simulation Training

#### **SIM 1.2 Prostatic artery embolisation: basics, current role and future perspectives** (advanced)

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

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

*Instructors: A. Augustin (Würzburg/DE), M.J. Glenck (Zurich/CH),*

*S. Kos (Luzern/CH), N. Shaida (Cambridge/UK)*

10:00-11:00, Auditorium 1

### Hot Topic Symposium

#### **HTS 201 Hot debates on drug-eluting technologies**

*Moderators: A. Holden (Auckland/NZ), K. Rocha-Singh (Springfield, IL/US)*

#### Introduction

- 201.1 RCTs, registries and the real world: what evidence is needed?  
What is doable and what is utopian?  
*W.A. Gray (Philadelphia, PA/US)*
- 201.2 Is safety a real issue for drug-eluting devices in peripheral arterial disease?  
*K.N. Katsanos (Patras/GR)*
- 201.3 Meta-analysis: critical review of the methods  
*P. Jüni (Toronto, ON/CA)*
- 201.4 Where do we stand? Overview of current positions  
*F. Fanelli (Florence/IT)*





#### Round-table discussion

*F. Fanelli (Florence/IT), W.A. Gray (Philadelphia, PA/US),  
A. Holden (Auckland/NZ), P. Jüni (Toronto, ON/CA),  
K.N. Katsanos (Patras/GR), M.J. Lee (Dublin/IE),  
K. Rocha-Singh (Springfield, IL/US), T. Zeller (Bad Krozingen/DE)*

#### Conclusion and take-home points

10:00-11:00, Room 117

**Fundamental Course**■ **FC 202 Ablative therapies: the basics***Moderators: R. Iezzi (Rome/IT), D.A. Woodrum (Rochester, MN/US)*

-  202.1 Radiofrequency ablation  
*J.M. Abadal Villayandre (Madrid/ES)*
-  202.2 Microwave ablation  
*R. Cioni (Pisa/IT)*
-  202.3 Cryoablation  
*J.Y. Won (Seoul/KR)*
-  202.4 Irreversible electroporation  
*H.J. Scheffer (Amsterdam/NL)*

10:00-11:00, Room 115

**Focus Session**■ **FS 203 Future trends in spine treatments***Moderators: G.C. Anselmetti (Milan/IT), P.N.M. Lohle (Tilburg/NL)*

- 203.1 Cements in the spine: percutaneous polymethylmethacrylate and beyond  
*X. Buy (Bordeaux/FR)*
- 203.2 Spine implants  
*A.D. Kelekis (Athens/GR)*
- 203.3 Intervertebral disc regeneration techniques  
*D.P. Beall (Oklahoma City, OK/US)*
- 203.4 Minimally invasive therapies for spinal stenosis  
*S. Marcia (Cagliari/IT)*

10:00-11:00, Auditorium 2

### Expert Round Table

#### ERT 204 Portal hypertension management

Moderators: N. McEniff (Dublin/IE), S. Sabri (Washington, DC/US)

Introduction

- 204.1 The increasing role of TIPS in variceal bleeding  
*G.M. Richter (Stuttgart/DE)*
- 204.2 TIPS for refractory ascites  
*R. Loffroy (Dijon/FR)*
- 204.3 Budd-Chiari syndrome  
*O.M. van Delden (Amsterdam/NL)*
- 204.4 Hepatic encephalopathy: prevention and management  
*G. Maleux (Leuven/BE)*

Round-table discussion

Conclusion and take-home points

10:00-11:00, Room 116

### Video Learning Session

#### VL 205 Embolisation

Moderators: L. Defreyne (Ghent/BE), J.B. Spies (Washington, DC/US)

- 205.1 Prostate embolisation  
*C. Bent (Bournemouth/UK)*
- 205.2 Variceal embolisation as an adjunctive procedure to TIPS  
*Z.L. Bercu (Atlanta, GA/US)*
- 205.3 Bronchial artery embolisation  
*S. Roy-Choudhury (Stoke on Trent/UK)*

10:00-11:00, Room 113

**IR Trainee Session**

■ **IRT 206 Future IR technologies**

*Moderators: M.S. Hamady (London/UK), G.C. Makris (Oxford/UK)*

- 206.1 Augmented reality for interventional oncology  
*L. Solbiati (Rozzano/IT)*
- 206.2 Big data, AI and machine learning  
*K. Seals (Los Angeles, CA/US)*
- 206.3 Robotics and guided catheters  
*M.S. Hamady (London/UK)*
- 206.4 Virtual reality and interventional radiology  
*Z.J. Haskal (Charlottesville, VA/US)*
- 206.5 Panel discussion

11:10-12:30, Simulator Gallery

**Simulation Training**

■ **SIM 1.3 Prostatic artery embolisation: basics, current role and future perspectives** (advanced)

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

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

*Instructors: A. Augustin (Würzburg/DE), M.J. Glenck (Zurich/CH),  
S. Kos (Luzern/CH), N. Shaida (Cambridge/UK)*

11:30-12:30, Room 117

**Focus Session**

**FS 301 Real-world endovascular management of claudication**

*Moderators: T.J. Cleveland (Sheffield/UK), C.S. Pena (Miami, FL/US)*

- 301.1 How to treat long CTOs  
*Y. Gouëffic (Nantes/FR)*
- 301.2 CTO crossing: true lumen or subintimal?  
*C. Hohl (Siegen/DE)*
- 301.3 Is vessel preparation required for all lesions?  
*E. Blessing (Karlsbad/DE)*
- 301.4 Role of debulking: lumen gain or more than that?  
*R. Sachar (Raleigh, NC/US)*
- 301.5 Drug-eluting technologies in long, real-world fem-pop segments: review of evidence  
*M.K. Razavi (Orange, CA/US)*
- 301.6 DCB, DES or BMS?  
*K.R. Deloose (Dendermonde/BE)*

11:30-12:30, Auditorium 2

**Clinical Evaluation Course**

**CEC 302 Intrahepatic cholangiocarcinoma**

*Moderators: A. Denys (Lausanne/CH), U. Pua (Singapore/SG)*

- 302.1 Update on recent guidelines  
*M. Bezzi (Rome/IT)*
- 302.2 Established systemic therapies and pivotal trials  
*J.I. Bilbao (Pamplona/ES)*
- 302.3 The surgeon's perspective  
*D. Seehofer (Leipzig/DE)*
- 302.4 Is ablation alone enough?  
*R. Duran (Lausanne/CH)*
- 302.5 Intra-arterial therapies: transcatheter arterial chemoembolisation first  
*F. Orsi (Milan/IT)*
- 302.6 Intra-arterial therapies: transarterial radioembolisation first  
*T.K. Helmberger (Munich/DE)*

Round-table discussion



e-voting



recommended for EBIR preparation

11:30-12:30, Room 112

**Focus Session**■ **FS 303 Lymphatic interventions***Moderators: A.M. Barnacle (London/UK), M. Itkin (Philadelphia, PA/US)*

- 303.1 Classification and diagnosis of lymphatic malformations  
*A. Alonso Burgos (Madrid/ES)*
- 303.2 Interventional therapy for malformations  
*R. Müller-Wille (Regensburg/DE)*
- 303.3 Paediatric lymphatic malformations  
*W.A. Wohlgemuth (Halle/DE)*
- 303.4 Challenging chylothorax and chyloperitoneum  
*W. Prevoo (Amsterdam/NL)*

11:30-12:30, Auditorium 1

**Focus Session**■ **FS 304 Superior vena cava syndromes***Moderators: G.S. Goh (Melbourne, VIC/AU), R. Lakshminarayan (Hull/UK)*

- 304.1 Malignant occlusion  
*L. Tselikas (Villejuif/FR)*
- 304.2 Catheter-related superior vena cava syndromes  
*J.G. Caridi (New Orleans, LA/US)*
- 304.3 Techniques for recanalisation  
*M. Guimaraes (Charleston, SC/US)*
- 304.4 Other therapeutic options  
*H. Jalaie (Aachen/DE)*



11:30-12:30, Room 116

**Controversy Session**



**CS 305 Fibroids and adenomyosis**



Moderators: *M.P. Kohi (San Francisco, CA/US), D.A. Valenti (Montreal, QC/CA)*

- 305.1 UFE is a fertility-preserving procedure: pro  
*J.B. Spies (Washington, DC/US)*
- 305.2 UFE is a fertility-preserving procedure: con  
*A. Torre (Nottingham/UK)*
- 305.3 Embolisation for adenomyosis: pro  
*P.N.M. Lohle (Tilburg/NL)*
- 305.4 Embolisation for adenomyosis: con  
*F. Sorbi (Florence/IT)*
- 305.5 HIFU is better than embolisation: pro  
*M. Matzko (Dachau/DE)*
- 305.6 HIFU is better than embolisation: con  
*J.-P. Pelage (Caen/FR)*

11:30-12:30, Room 113

**CIRSE meets**

**CM 306 CIRSE meets APSCVIR**

Moderators: *A. Holden (Auckland/NZ), R.A. Morgan (London/UK)*

- 306.1 Interventional radiology for the management of trauma patients  
*C.W. Kim (Busan/KR)*
- 306.2 New developments in TACE: super-selective and balloon-assisted TACE  
*T. Hasebe (Hachioji, Tokyo/JP)*
- 306.3 Experience in developing an IR practice in Myanmar, a developing country in Asia  
*K.Z. Ya (Yangon/MM)*



12:30-14:00, Room 130

**Hands-on Device Training****CD-HDT 2 A closer look at closure devices***Coordinators: J.-Y. Chun (London/UK), L. Marques (Flensburg/DE)*

12:30-14:00, Room 111

**Hands-on Device Training****CLP-HDT 2 Central lines and ports***Coordinators: C.E. Althoff (Berlin/DE), J.A. Guirola (Zaragoza/ES)*

12:30-14:00, Room 132

**Hands-on Device Training****PMT-HDT 2 Peripheral mechanical thrombectomy***Coordinators: R. de Graaf (Friedrichshafen/DE), D.K. Tsetis (Iraklion/GR)*

12:30-13:50, Simulator Gallery

**Simulation Training****SIM 1.4 Prostatic artery embolisation: basics, current role and future perspectives** (advanced)*Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)**Session organiser: H. Hoppe (Bern/CH)**Instructors: A. Augustin (Würzburg/DE), M.J. Glenck (Zurich/CH),**S. Kos (Luzern/CH), N. Shaida (Cambridge/UK)*

13:00-14:00

**Satellite Symposia**

For the detailed programmes, please refer to pages 146-147.

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

### News on Stage

#### NoS 404 Peripheral interventions

Moderators: *E. Stabile (Naples/IT), G. Tepe (Rosenheim/DE)*

- 404.1 ZILVERPASS study - ZILVER PTX versus bypass surgery for long femoropopliteal lesions: final 12-month and preliminary 24-month results  
*M. Bosiers; Hamme/BE*
- 404.2 Benefits of DEB post stenting in diabetic patients and males: subgroup analysis of the randomized Freeway stent study  
*J. Tacke <sup>†1</sup>, K.A. Hausegger<sup>2</sup>, S. Müller-Hülsbeck<sup>3</sup>, H. Schröder<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>Flensburg/DE, <sup>4</sup>Berlin/DE, <sup>5</sup>Bonn/DE*
- 404.3 Cost-effectiveness of a polymer-coated, paclitaxel-eluting stent (Eluvia) compared to a polymer-free, paclitaxel-coated stent (Zilver PTX) for endovascular femoropopliteal intervention: a payer perspective  
*S. Müller-Hülsbeck<sup>1</sup>, P.W.M. Elroy<sup>2</sup>, R. Akehurst<sup>3</sup>, S.L. Amorosi<sup>4</sup>, C. Giretti<sup>5</sup>, R.I. Griffiths<sup>6</sup>, W.A. Gray<sup>7</sup>; <sup>1</sup>Flensburg/DE, <sup>2</sup>Utrecht/NL, <sup>3</sup>Sheffield/UK, <sup>4</sup>Marlborough, MA/US, <sup>5</sup>Milan/IT, <sup>6</sup>Maple Grove, MN/US, <sup>7</sup>Philadelphia, PA/US*
- 404.4 T.I.N.T.I.N. trial: combining luminor DCB and iVolution self-expanding stent in real life: 6-month outcomes  
*K.R. Deloose; Dendermonde/BE*
- 404.5 Cost-effectiveness of drug-eluting stents versus PTA with bail-out bare metal stents for infrapopliteal lesions in critical limb ischemia (PADI Trial)  
*T. Wakkie<sup>1</sup>, M. Spreen<sup>1</sup>, L. Konijn<sup>1</sup>, J. Wever<sup>1</sup>, R. van Eps<sup>1</sup>, H. Veger<sup>1</sup>, L.C. van Dijk<sup>1</sup>, W.P.T.M. Mali<sup>2</sup>, M. Maessen<sup>3</sup>, N. van Herpen<sup>3</sup>, H. van Overhagen<sup>1</sup>; <sup>1</sup>The Hague/NL, <sup>2</sup>Utrecht/NL, <sup>3</sup>Arnhem/NL*
- 404.6 The Lutonix® global drug coated balloon registry real world patients with below the knee disease  
*M. Lichtenberg<sup>1</sup>, M. Brodmann<sup>2</sup>, D. Scheinert<sup>3</sup>; <sup>1</sup>Arnsberg/DE, <sup>2</sup>Graz/AT, <sup>3</sup>Leipzig/DE*

14:00-14:30

### Satellite Symposium

For the detailed programme, please refer to page 147.

14:30-16:00, Auditorium 1

**OP 500 Opening and Awards Ceremony**

Welcome Addresses

**CVIR Editor's Medal Award:**

**M.R. Meijerink (Amsterdam/NL), R.S. Puijk (Amsterdam/NL)**

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

*(R.W. Günther Foundation Award)*

**B. Guiu (Montpellier/FR) & M.T. Boulin (Dijon/FR)**

**Distinguished Fellow: V. Bérczi (Budapest/HU)**

*Laudation: T.J. Cleveland (Sheffield/UK)*

**Distinguished Fellow: R.D. García-Mónaco (Buenos Aires/AR)**

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

**Distinguished Fellow: J.E. Jackson (London/UK)**

*Laudation: A.M. Barnacle (London/UK)*

**Gold Medal: T. de Baère (Villejuif/FR)**

*Laudation: J. Palussière (Bordeaux/FR)*

16:15-17:15, Room 117

Free Paper Session


 FIRST  
@  
CIRSE
FP 601 **FIRST@CIRSE****First data release on endovascular research**Moderators: *F. Fanelli (Florence/IT), J.H. Rundback (Teaneck, NJ/US)*





- 601.1 e-PTFE covered stent to treat stenosis in arteriovenous fistula: "first look" at the 12-month results from the randomized AVeNEW study  
*B. Dolmatch; Mountain View, CA/US*
- 601.2 Primary endpoint results of the IN.PACT AV access randomized trial: outcomes through six months  
*A. Holden; Auckland/NZ*
- 601.3 Efficacy and safety of a novel paclitaxel-nano-coated balloon for femoro-popliteal angioplasty: 2-year results of EffPac trial  
*U. Teichgräber; Jena/DE*
- 601.4 Stellarex DCB in real world: 1000 patient analysis from the SAVER registry  
*B. Mees<sup>1</sup>, F.E. Vermassen<sup>2</sup>, G. Torsello<sup>3</sup>, A. Cremonesi<sup>4</sup>, A. Sauguet<sup>5</sup>;*  
*<sup>1</sup>Maastricht/NL, <sup>2</sup>Ghent/BE, <sup>3</sup>Münster/DE, <sup>4</sup>Cotignola/IT, <sup>5</sup>Toulouse/FR*
- 601.5 ZILVER<sup>®</sup> PTX<sup>®</sup> drug-eluting peripheral stent: latest update  
*M.D. Dake; Tucson, AZ/US*
- 601.6 Long-term mortality of matched patients with intermittent claudication treated by high-dose paclitaxel-coated balloon vs. plain balloon angioplasty: a real-world study  
*K.P. Donas<sup>1</sup>, A. Sohr<sup>1</sup>, G.A. Pitoulis<sup>1</sup>, F. Alfonso<sup>2</sup>, G. Torsello<sup>2</sup>;*  
*<sup>1</sup>Münster/DE, <sup>2</sup>Madrid/ES*

SAT

16:15-17:15, Auditorium 2

**Expert Round Table****ERT 602 Colorectal liver metastases: treatment with curative intent***Moderators: A. Adam (London/UK), L.M. Kenny (Brisbane, QLD/AU)*

Introduction

-  602.1 State-of-the-art imaging  
*R.G.H. Beets-Tan (Amsterdam/NL)*
-  602.2 The oncologist's point of view  
*M. Trepel (Augsburg/DE)*
-  602.3 The surgeon's point of view  
*to be announced*
-  602.4 The IR's point of view  
*I. Bargellini (Pisa/IT)*

Round-table discussion

Conclusion and take-home points

16:15-17:15, Room 115

**Case-based Discussion****CBD 603 Treatment of abdominal fluid collections***Moderators: M. Citone (Florence/IT), T. Sabharwal (London/UK)*

Introduction

-  603.1 Sclerotherapy of cysts  
*J.-M. Correas (Paris/FR)*
-  603.2 Treatment of hydatid cysts  
*O. Akhan (Ankara/TR)*
-  603.3 Necrotising pancreatitis  
*N. Zorger (Regensburg/DE)*
-  603.4 Complicated pelvic abscesses  
*A.M. Ierardi (Milan/IT)*

Conclusion and take-home points

16:15-17:15, Room 133

**Workshop**

**WS 604 Varicose veins**

604.1 *D. Karnabatidis (Patras/GR)*

604.2 *A. Willis (Birmingham/UK)*

16:15-17:15, Room 112

**Clinical Evaluation Course**

**CEC 605 Management of patients with benign prostate hyperplasia**

*Moderators: F.C. Carnevale (São Paulo/BR), O. Pellerin (Paris/FR)*

605.1 Underlying pathology and work-up

*M.J. Speakman (Trull, Taunton/UK)*

605.2 Imaging

*T. Bilhim (Lisbon/PT)*

605.3 Patient selection for PAE: good and bad candidates

*J.M. Da Motta Leal Filho (São Paulo/BR)*

605.4 Embolisation technique

*T.J. Bryant (Southampton/UK)*

605.5 Results and trials

*M.R. Sapoval (Paris/FR)*

605.6 The surgeon's view

*G. Siena (Florence/IT)*

Round-table discussion

16:15-17:15, Room 116

**Focus Session**

**FS 606 Collecting and evaluating evidence in IR**

*Moderators: M.S. Johnson (Indianapolis, IN/US), S.D. Qanadli (Lausanne/CH)*

606.1 How to collect high-quality data in peripheral arterial disease

*G. Chatellier (Paris/FR)*

606.2 How to collect high-quality data in interventional oncology

*J. Ricke (Munich/DE)*

606.3 How to perform high-quality meta-analysis and systematic reviews in IR

*S. Sharma (Delhi/IN)*

606.4 How to interpret scientific articles in IR

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

16:15-17:15, Room 113

**Free Paper Session****FP 607 Spinal interventions***Moderators: J.W. Jennings (St. Louis, MO/US), C.M. Sommer (Heidelberg/DE)*

- 607.1 CT-guided pulsed radiofrequency for the treatment of acute low back pain and sciatica: 1-year follow-up  
*A. Napoli, S. Dababou, C. Marrocchio, R. Scipione, G. Alfieri, D. Fierro, C. Catalano; Rome/IT*
- 607.2 Long term outcome from CT-guided transforaminal cervical epidural injection for pain and function. A prospective study including correlation with MRI appearances  
*Z.A.H. Aldin<sup>1</sup>, H. Mahmoud<sup>1</sup>, K. St Pierre<sup>1</sup>, T. Sadik<sup>1</sup>, M. Ahmed<sup>1</sup>, Z. Danawi<sup>1</sup>, A. Gul<sup>1</sup>, M.S. Hamady<sup>2</sup>, A.S. Syed-Noor<sup>3</sup>; <sup>1</sup>Essex/UK, <sup>2</sup>London/UK, <sup>3</sup>Umea/SE*
- 607.3 Preliminary results of percutaneous treatment of degenerative disc disease with intradiscal lumbar interbody fusion  
*R. Fiori, L. Spiritiglozzi, A. D'Onofrio, M. Forcina, C. Di Donna, A.U. Cavallo, R. Floris; Rome/IT*
- 607.4 Evaluation of the biomechanical performance of a novel transpedicular PEEK implant for the treatment of vertebral compression fracture  
*F.H. Cornelis<sup>1</sup>, M. Aebi<sup>2</sup>, C. Maas<sup>3</sup>, T. Di Pauli Von Treuheim<sup>4</sup>, H. Friedrich<sup>4</sup>, H.J. Wilke<sup>4</sup>; <sup>1</sup>Paris/FR, <sup>2</sup>Bern/CH, <sup>3</sup>Pessac/FR, <sup>4</sup>Ulm/DE*
- 607.5 Does vertebroplasty increase the risk of subsequent vertebral compression fracture? An evidence-based review of the literature.  
*C.A. Byrne<sup>1</sup>, M.P. Bolger<sup>2</sup>, L. Greene<sup>1</sup>, A.E. Strojescu<sup>1</sup>, J.B. Hennebray<sup>1</sup>, A.G. Ryan<sup>1</sup>; <sup>1</sup>Waterford/IE, <sup>2</sup>Dublin/IE*
- 607.6 Safety and effectiveness of the SpineJack® system versus the KyphX Xpander® inflatable bone tamp for the reduction of vertebral compression fractures: a prospective, international, multicenter, randomized clinical trial (SAKOS study)  
*D.C. Noriega<sup>1</sup>, S. Marcia<sup>2</sup>, N. Theumann<sup>3</sup>, B. Blondel<sup>4</sup>, A. Simon<sup>5</sup>, F. Hassel<sup>6</sup>, G. Maestretti<sup>7</sup>, A. Petit<sup>8</sup>, P.A. Weidle<sup>9</sup>, A. González Mandly<sup>10</sup>, J.-M. Kaya<sup>4</sup>, A. Touta<sup>4</sup>, S. Fuentes<sup>4</sup>, R. Pflugmacher<sup>11</sup>; <sup>1</sup>Valladolid/ES, <sup>2</sup>Cagliari/IT, <sup>3</sup>Lausanne/CH, <sup>4</sup>Marseille/FR, <sup>5</sup>Brest/FR, <sup>6</sup>Freiburg/DE, <sup>7</sup>Fribourg/CH, <sup>8</sup>Besancon/FR, <sup>9</sup>Mönchengladbach/DE, <sup>10</sup>Santander/ES, <sup>11</sup>Bonn/DE*
- 607.7 Preventive vertebroplasty for long-term consolidation of vertebral metastases  
*F. Deschamps, A. Delpla, L. Tselikas, T. de Baère; Villejuif/FR*



16:15-17:15, Room 114

### Free Paper Session

#### FP 608 Dialysis and AV fistula

Moderators: *D.A. Brisbois (Liège/BE), D.K. Rajan (Toronto, ON/CA)*

- 608.1 Significant reduction in radiation using intraoperative ultrasound and the 4 French instead of 6 Fr. WavelinQ endoAVF system in creating endovascular AV-fistulas  
*T.M. Steinke; Duesseldorf/DE*
- 608.2 Initial experience with the Covera™ covered stent for the treatment of dysfunctional or thrombosed arterio-venous grafts. A retrospective analysis of 64 patients  
*P.N. Papadimitos, P.M. Kitrou, K.N. Katsanos, M. Theofanis, M. Papatotiriou, S. Papadoulas, D. Karnabatidis; Patras/GR*
- 608.3 Stentgrafts as an endovascular option for hemodialysis-related venous occlusive disease (VOD)  
*T.M. Steinke, L. Nuth; Duesseldorf/DE*
- 608.4 Outcomes of sharp recanalization for treatment of upper extremity central venous occlusions  
*H. Chung<sup>1</sup>, D.Y. Sze<sup>2</sup>, J. Louie<sup>2</sup>; <sup>1</sup>Palo Alto, CA/US, <sup>2</sup>Stanford, CA/US*
- 608.5 The Lutonix Global AV Registry: final 6-month results and subgroup analysis of target lesion location  
*P.M. Kitrou; Patras/GR*
- 608.6 Safety and efficacy of midline and peripherally inserted central catheter for intravenous therapy: a randomized controlled trial  
*A. Bentrudi, G. Soulez, P. Gilbert, M.-F. Giroux, L. Bouchard, P. Perreault, V.L. Oliva, A. Chouinard, P. Bernier, E. Therasse; Montreal, QC/CA*
- 608.7 Impact of subcutaneous tunnels on peripherally inserted catheter placement: a multicenter retrospective study  
*D.J. Shim<sup>1</sup>, I.J. Kim<sup>2</sup>, J.H. Lee<sup>3</sup>, E.T. Kim<sup>4</sup>, J.H. Byeon<sup>1</sup>; <sup>1</sup>Incheon/KR, <sup>2</sup>Bucheon/KR, <sup>3</sup>Goyang-si/KR, <sup>4</sup>Guri/KR*

16:15-16:35

### Satellite Symposium

For the detailed programme, please refer to page 148.

17:30-18:30, Room 117

**Focus Session**■ **FS 701 Management of real-world critical limb ischaemia***Moderators: M. Brodmann (Graz/AT), T. Rand (Vienna/AT)*

- 701.1 Foot perfusion assessment: the emerging role of imaging  
*J.A. Reekers (Amsterdam/NL)*
- 701.2 Angiosome re-interpretation: which vessel to open, when to insist and when to stop  
*S. Kum (Singapore/SG)*
- 701.3 The resurgence of DCB in BTK  
*J.H. Rundback (Teaneck, NJ/US)*
- 701.4 Indications and prerequisites for intervening below the ankle  
*M.G. Manzi (Abano Terme/IT)*
- 701.5 Managing the “desert foot”: new options for no-option patients?  
*R. Ferraresi (Bergamo/IT)*
- 701.6 Beyond drug-eluting devices  
*A. Holden (Auckland/NZ)*

17:30-18:30, Room 116

**Workshop**■ **WS 702 Transcatheter arterial chemoembolisation**

- 702.1 *F. Nasser (São Paulo/BR)*
- 702.2 *M. Burrel (Barcelona/ES)*

17:30-18:30, Room 133

**Workshop**■ **WS 703 Biopsies**

- 703.1 *R. Marcello (Rome/IT)*
- 703.2 *S. Stojanovic (Novi Sad/RS)*

17:30-18:30, Room 113

**Free Paper Session**

**FP 704 Biliary interventions**

*Moderators: M.E. Krokidis (Cambridge/UK), F. Mondaini (Florence/IT)*

- 704.1 Simulation of the biliary metal stent recanalisation using endoluminal irreversible electroporation on porcine liver – in vivo experiment  
*T. Rohan, T. Andrašina, P. Matkulčík, T. Juza, J. Zavadil, I. Svobodova, D. Cervinka, V. Válek; Brno/CZ*
- 704.2 Percutaneous endoluminal RFA & stenting for biliary and pancreatic duct recanalization in cases of unresectable cancer of the head of pancreas  
*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*
- 704.3 ReCAAP (retrograde CBD access with anterograde puncture) technique to cross challenging proximal biliary strictures  
*J. Kyaw Tun, M.R. Akhtar, A. Hussain, A. Antonietti, O.S. Jaffer, I. Renfrew, T. Fotheringham; London/UK*
- 704.4 Novel use of a disposable, single-use, digital endoscope for percutaneous transhepatic cholangioscopy: technical success, advantages, and cost comparison  
*R.W. England, H. Singh, A. Solomon, M. Thomas, K. Hong; Baltimore, MD/US*
- 704.5 Combined fluoroscopic and endoscopic approach to performing endoscopic ultrasound-guided hepatogastrostomy (EUS-HGS) in patients with malignant biliary obstruction  
*B. Moosavi, Y.-I. Chen, D.A. Valenti, L.-M.N.J. Boucher, T. Cabrera, K. Muchantef, A. Bessissow; Montreal, QC/CA*
- 704.6 Biodegradable versus multiple plastic stent implantation in benign biliary strictures: A systematic review and meta-analysis  
*G.G.G. Almeida, P. Donato; Coimbra/PT*
- 704.7 Preoperative virtual planning, 3D printing, and computer-assisted radiology and surgery (CARS) for intractable biliary strictures after liver transplantation  
*P. Huespe, L. Ritacco, J.C. Spina, A.S. Oggero, M. de Santibañes, G. Boldrini, J. Pekolj, D. D'Agostino, M. Ciardullo, E. de Santibañes, S.H. Hyon; Buenos Aires/AR*

17:30-18:30, Room 114

**Free Paper Session****FP 705 Non-vascular interventions***Moderators: C. Nice (Newcastle-upon-Tyne/UK), M. Pieraccini (Grosseto/IT)*

- 705.1 Computed tomography guided percutaneous radiofrequency ablation of the splanchnic nerves for pain reduction in patients with pancreatic cancer: a single center study  
*M. Ioannidi, Mazioti-Filippiadis, L. Reppas, A.D. Kelekis, E. Brountzos, N.L. Kelekis, D.K. Filippiadis; Athens/GR*
- 705.2 CT-guided gasserian ganglion continuous radiofrequency ablation for the treatment of trigeminal neuralgia  
*M. Tsitskari<sup>1</sup>, P. Zavidis<sup>2</sup>, D.K. Filippiadis<sup>1</sup>; <sup>1</sup>Athens/GR, <sup>2</sup>Nicosia/CY*
- 705.3 Percutaneous sclerotherapy of head and neck cystic malformations: ten years experience  
*I. Paladini, R. Menozzi, A. Gritti, A. Gemignani, A. Andreone, E. Epifani, C. Marcato; Parma/IT*
- 705.4 Image-guided percutaneous sclerotherapy of orbital low flow vascular malformations  
*O. Abdelaziz, K. Elessawy, F. Hassan, S. Emad-Eldin, R. Elessawy; Cairo/EG*
- 705.5 Radiofrequency treatment of benign symptomatic thyroid nodules: initial success experience of a Latin American reference center  
*A. Rahal Jr, E.M. Volpi, P.M. Falsarella, J.T. Hidal, G.C. Mariotti, G. Mendes, M.R.G. Queiroz, R.G. Garcia; São Paulo/BR*
- 705.6 IR and EUS guided gastro-jejunal bypass: the McGill experience  
*A. Ngo, Y.-I. Chen, D.A. Valenti, L.-M.N.J. Boucher, T. Cabrera, K. Muchantef, A. Bessissow; Montreal, QC/CA*
- 705.7 Safety of lusutrombopag for thrombocytopenia in patients with chronic liver disease undergoing an invasive procedure: pooled safety data from 3 studies  
*R.S. Brown, Jr.<sup>1</sup>, N. Izumi<sup>2</sup>, T. Kano<sup>3</sup>, T. Ochiai<sup>3</sup>, M. Kurosaki<sup>2</sup>, F. Violi<sup>4</sup>, P. Shrestha<sup>5</sup>; <sup>1</sup>New York, NY/US, <sup>2</sup>Tokyo/JP, <sup>3</sup>Osaka/JP, <sup>4</sup>Rome/IT, <sup>5</sup>Florham Park, NJ/US*

17:30-18:30, Room 134

**Free Paper Session**

**FP 706 Radiation safety issues**

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

- 706.1 Advanced robotic angiography systems for image guidance during conventional transarterial chemoembolization: impact on radiation-dose and image-quality  
*L.S. Alizadeh, T.J. Vogl, R. Maeder, N.N. Naguib; Frankfurt/DE*
- 706.2 Chronic radiodermatitis following interventional radiology  
*J. Guersen, M. Guesnier, L. Cassagnes, B. Pereira, P. Motreff, P. Chabrot, L. Boyer, M. D'Incan; Clermont-Ferrand/FR*
- 706.3 Surfacar inside out system – single center use demonstrates safe and effective performance and significant reduction in radiation in comparison to standard recanalisation procedures in total central venous occlusion  
*T.M. Steinke, L. Nuth; Duesseldorf/DE*
- 706.4 Radiation protection – why take the risk? A study utilising real-time dose monitoring  
*C. Aleman, K. Harborne, W.R. Thomas, G. Hickson; Birmingham/UK*
- 706.5 Radiation exposure in prostatic artery embolization (PAE) dependent of the interventional radiologist – implication on the procedure and protocol optimization  
*M. Zeile<sup>1</sup>, R.M. Wentz<sup>1</sup>, D. Rothfuchs<sup>1</sup>, M. Karul<sup>1</sup>, H.D. Nage<sup>2</sup>, C.R. Habermann<sup>1</sup>; <sup>1</sup>Hamburg/DE, <sup>2</sup>Buchholz/DE*
- 706.6 Investigating the clinical value of pelvic parametric X-ray angiography for image guidance in prostatic artery embolization  
*L.S. Alizadeh<sup>1</sup>, T.J. Vogl<sup>1</sup>, D. Szöllösi<sup>2</sup>, M. Gyánó<sup>2</sup>, K. Szigeti<sup>2</sup>, S. Osváth<sup>2</sup>, J.P. Kiss<sup>2</sup>, V.I. Óriás<sup>2</sup>; <sup>1</sup>Frankfurt/DE, <sup>2</sup>Budapest/HU*
- 706.7 Optimizing cone-beam-CT in prostatic artery embolization (PAE) to reduce radiation exposure – proposition of a CBCT classification in PAE  
*M. Zeile<sup>1</sup>, R.M. Wentz<sup>1</sup>, D. Rothfuchs<sup>1</sup>, H.D. Nage<sup>2</sup>, P. Steffen<sup>1</sup>, C.R. Habermann<sup>1</sup>; <sup>1</sup>Hamburg/DE, <sup>2</sup>Buchholz/DE*
- WITHDRAWN

## Sunday, September 8

08:00-08:20

### Satellite Symposia

For the detailed programmes, please refer to page 149.

08:15-09:45, Room 118

### Safe Sedation Training

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

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

08:30-09:30, Auditorium 2

### Focus Session

#### FS 901 The NICE guidelines: nice or not so nice?

IDEAS  
2 0 1 9

Moderators: *R.M. Greenhalgh (London/UK), M.S. Hamady (London/UK)*






- 901.1 Reasons for NICE  
*C.J. Hammond (Leeds/UK)*
- 901.2 Why NICE cannot be implemented  
*M.P. Jenkins (London/UK)*
- 901.3 Why are other guidelines different?  
*C.S. Pena (Miami, FL/US)*
- 901.4 How to improve long-term success of EVAR  
*A. Holden (Auckland/NZ)*

08:30-09:30, Auditorium 1

**Clinical Evaluation Course**

**CEC 902 Diabetic foot**

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

-  902.1 Diabetic patient management  
*G. Clerici (Bergamo/IT)*
-  902.2 Clinical evaluation of the lower limbs  
*W.A. Gray (Philadelphia, PA/US)*
-  902.3 Pre-treatment vascular imaging  
*O. Mironov (Hamilton, ON/CA)*
-  902.4 Percutaneous revascularisation  
*M. Palena (Abano Terme/IT)*
-  902.5 Bypass and amputation  
*C.P. Twine (Bristol/UK)*
-  902.6 Aftercare and rehabilitation  
*M. Monami (Florence/IT)*

Round-table discussion

08:30-09:30, Room 112

**Expert Round Table**

**ERT 903 Colorectal cancer lung metastasis**

*Moderators: L. Crocetti (Pisa/IT), T.F. Jakobs (Munich/DE)*

Introduction

- 903.1 Concept of oligometastasis  
*T. de Baère (Villejuif/FR)*
- 903.2 Advances in lung surgery  
*D.A. Saldaña Garrido (Madrid/ES)*
- 903.3 Thermal ablation  
*J. Palussière (Bordeaux/FR)*
- 903.4 Stereotactic body radiotherapy  
*R. Sharma (London/UK)*

Round-table discussion

Conclusion and take-home points





08:30-09:30, Room 116

**Fundamental Course****FC 904 Pain management***Moderators: D.K. Filippiadis (Athens/GR), P.M. Paprottka (Munich/DE)*

- 904.1 Interventional radiology techniques for sports athletes  
*L.M. Sconfienza (Milan/IT)*
- 904.2 Pulsed radiofrequency stimulation for pain syndromes  
*S. Masala (Rome/IT)*
- 904.3 Neurolysis for benign pain  
*C.S. Georgiades (Baltimore, MD/US)*
- 904.4 Neurolysis for malignant pain  
*M. Pantel (The Hague/NL)*

08:30-09:30, Room 117

**Focus Session****FS 905 Pre-operative portal vein embolisation***Moderators: R.-T. Hoffmann (Dresden/DE), K.P. van Lienden (Amsterdam/NL)*

-  905.1 Indications and patient selection  
*B. Guiu (Montpellier/FR)*
-  905.2 Technique and materials  
*D.C. Madoff (New Haven, CT/US)*
-  905.3 Augmented portal vein embolisation techniques  
*A. Lunardi (Pisa/IT)*
-  905.4 Follow-up and complications  
*B. Gebauer (Berlin/DE)*

08:30-09:50, Simulator Gallery

**Simulation Training****SIM 2.1 Basic principles of mechanical thrombectomy in ischaemic stroke (advanced)***Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)**Session organiser: K.E. Wilhelm (Bonn/DE)**Instructors: L. De Paoli (Klagenfurt/AT), E.R. Gizewski (Innsbruck/AT), C.C. Pieper (Bonn/DE), T. Struffert (Giessen/DE)*



09:30-11:00, Room 130

**Hands-on Device Training**

- **EMT-HDT 1 Embolisation: materials and tools – liquid agents**

*Coordinators: L. Defreyne (Ghent/BE), J. Urbano (Madrid/ES)*

09:30-11:00, Room 111

**Hands-on Device Training**

- **TA-HDT 1 Tumour ablation – MWA**

*Coordinators: J.L. Del Cura Rodriguez (Bilbao/ES), A. Veltri (Orbassano/IT)*

09:30-11:00, Room 132

**Hands-on Device Training**

- **VV-HDT 1 Varicose veins**

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

09:50-11:10, Simulator Gallery

**Simulation Training**

- **SIM 2.2 Basic principles of mechanical thrombectomy in ischaemic stroke** (advanced)

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

*Session organiser: K.E. Wilhelm (Bonn/DE)*

*Instructors: L. De Paoli (Klagenfurt/AT), E.R. Gizewski (Innsbruck/AT), C.C. Pieper (Bonn/DE), T. Struffert (Giessen/DE)*

10:00-11:00, Auditorium 2

**Focus Session**■ **FS 1001 Acute type B dissection**IDEAS  
2 0 1 9*Moderators: M.S. Hamady (London/UK), H. Rousseau (Toulouse/FR)*

- 1001.1 How to define the need for urgent TEVAR  
*M.D. Dake (Tucson, AZ/US)*
- 1001.2 When is TEVAR alone not enough?  
*G.M. Richter (Stuttgart/DE)*
- 1001.3 Primary extended techniques  
*E. Verhoeven (Nuremberg/DE)*
- 1001.4 Outcome of TEVAR for acute type B dissection  
*C. Nienaber (London/UK)*

10:00-11:00, Room 117

**Fundamental Course**■ **FC 1002 Update on drug-eluting technologies***Moderators: M.K. Razavi (Orange, CA/US), T. Zeller (Bad Krozingen/DE)*

- 1002.1 Different drugs and mechanisms of action  
*S. Spiliopoulos (Athens/GR)*
- 1002.2 Drug-coated balloons: are there any differences?  
*G. Tepe (Rosenheim/DE)*
- 1002.3 Drug-eluting stents: are there any differences?  
*S. Müller-Hülsbeck (Flensburg/DE)*
- 1002.4 Adjunctive therapies to enhance drug-eluting efficacy  
*A. Holden (Auckland/NZ)*

10:00-11:00, Room 116

**Video Learning Session**■ **VL 1003 Interventional Oncology***Moderators: I. Bargellini (Pisa/IT), K. Malagari (Athens/GR)*

- 1003.1 DEB TACE for hepatic metastasis in colorectal cancer  
*F. Orsi (Milan/IT)*
- 1003.2 Thermoablation in primary or secondary lung cancer  
*M. Al Ahmar (Villejuif/FR)*
- 1003.3 Renal cryoablation  
*E. de Kerviler (Paris/FR)*

10:00-11:00, Auditorium 1

**Expert Round Table**

**ERT 1004 Vertebral augmentation: alive and kicking**

*Moderators: G.C. Anselmetti (Milan/IT), D.P. Beall (Oklahoma City, OK/US)*

Introduction

- 1004.1 The latest data on percutaneous vertebroplasty  
*A.G. Ryan (Waterford City/IE)*
- 1004.2 The role of spinal surgery  
*P. Clavert (Strasbourg/FR)*
- 1004.3 The rheumatologist's point of view  
*A. Cauli (Cagliari/IT)*
- 1004.4 Alternative techniques  
*M. Muto (Naples/IT)*

Round-table discussion

Conclusion and take-home points

10:00-11:00, Room 112

**Focus Session**

**FS 1005 Update on pelvic embolisation**

*Moderators: R.E. Beasley (Miami Beach, FL/US), T.J. Kroencke (Augsburg/DE)*

- 1005.1 Pelvic congestion syndrome  
*J. Egge (Haugesund/NO)*
- 1005.2 Complicated pelvic vein embolisation  
*A.C. Roberts (La Jolla, CA/US)*
- 1005.3 Varicocele  
*M. Citone (Florence/IT)*
- 1005.4 Haemorrhoids  
*V. Vidal (Marseille/FR)*

10:00-11:00, Room 114

**IR Trainee Session**

**IRT 1006 Building an IR career**

*Moderators: K. Pyra (Lublin/PL), L. Ratnam (London/UK)*

- 1006.1 Welcome and introduction to the ETF  
*G.C. Makris (Oxford/UK)*
- 1006.2 Developing your academic career as an IR  
*L. Ratnam (London/UK)*
- 1006.3 How to write a scientific paper  
*J.A. Reekers (Amsterdam/NL)*
- 1006.4 The EBIR Exam  
*R. Uberoi (Oxford/UK)*
- 1006.5 Establishing private clinics and clinical entrepreneurship  
*D.J. West (Stoke-on-Trent/UK)*

11:10-12:30, Simulator Gallery

**Simulation Training**

**SIM 2.3 Basic principles of mechanical thrombectomy in ischaemic stroke** (advanced)

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

*Session organiser: K.E. Wilhelm (Bonn/DE)*

*Instructors: L. De Paoli (Klagenfurt/AT), E.R. Gizewski (Innsbruck/AT),  
C.C. Pieper (Bonn/DE), T. Struffert (Giessen/DE)*

11:30-12:30, Auditorium 1

**Controversy Session**

**CS 1101 Carotid artery disease**



*Moderators: T. Jargiełło (Lublin/PL), S. Müller-Hülsbeck (Flensburg/DE)*

- 1101.1 Carotid artery stenting for asymptomatic patients  
*D. Vorwerk (Ingolstadt/DE)*
- 1101.2 Carotid artery stenting is just for symptomatic patients  
*T.J. Cleveland (Sheffield/UK)*
- 1101.3 Single-layer technology is still valid  
*R. Sachar (Raleigh, NC/US)*
- 1101.4 Multi-layer technology can improve outcomes  
*E. Stabile (Naples/IT)*
- 1101.5 Stenting is the first option  
*W.A. Gray (Philadelphia, PA/US)*
- 1101.6 Surgery in all patients  
*S. Michelagnoli (Florence/IT)*

11:30-12:30

**Satellite Symposia**

For the detailed programmes, please refer to pages 150-151.

12:30-14:00, Room 130

**Hands-on Device Training**

**EMT-HDT 2 Embolisation: materials and tools – liquid agents**

*Coordinators: L. Defreyne (Ghent/BE), J. Urbano (Madrid/ES)*

12:30-13:50, Simulator Gallery

**Simulation Training**

**SIM 2.4 Basic principles of mechanical thrombectomy in ischaemic stroke** (advanced)

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

*Session organiser: K.E. Wilhelm (Bonn/DE)*

*Instructors: L. De Paoli (Klagenfurt/AT), E.R. Gizewski (Innsbruck/AT), C.C. Pieper (Bonn/DE), T. Struffert (Giessen/DE)*

12:30-14:00, Room 111

**Hands-on Device Training**

■ **TA-HDT 2 Tumour ablation – MWA**

*Coordinators: J.L. Del Cura Rodriguez (Bilbao/ES), A. Veltri (Orbassano/IT)*

12:30-14:00, Room 132

**Hands-on Device Training**

■ **VV-HDT 2 Varicose veins**

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

12:45-14:15, Room 118

**Safe Sedation Training**

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

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

13:00-14:00

**Satellite Symposia**

For the detailed programmes, please refer to pages 153-156.

SUN

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

### News on Stage

#### NoS 1204 Embolisation

Moderators: *M. Bezzi (Rome/IT), J.E. Jackson (London/UK)*

- 1204.1 Ethylene vinyl alcohol copolymer (Onyx) for treatment of large venous vascular malformations: long term results and histology  
*A.S. Gomes, P.A. Monteleone, S.V. Bukata, J.W. Sayre; Los Angeles, CA/US*
- 1204.2 Bronchial artery embolization for massive hemoptysis: experience from a tertiary referral center in Cape Town, South Africa  
*H. Chung<sup>1</sup>, M. Wojno<sup>2</sup>, K.-L. Poo<sup>3</sup>; <sup>1</sup>Palo Alto, CA/US, <sup>2</sup>Cape Town/ZA, <sup>3</sup>Los Angeles, CA/US*
- 1204.3 Retrospective multivariate study of the clinical outcomes in patients affected by different grades of varicocele treated using different endovascular approaches  
*G. Bianchi, M.V.M. Micelli, P. Palumbo, A. Izzo, A.V. Giordano, S. Carducci, M. Varrassi, A. Barile, C. Masciocchi; L'Aquila/IT*
- 1204.4 Treatment of high-flow priapism: superselective arterial embolization  
*G. de Magistris<sup>1</sup>, F. Pane<sup>1</sup>, F. Corvino<sup>1</sup>, F. Giurazza<sup>1</sup>, F. Amodio<sup>1</sup>, M. Coppola<sup>1</sup>, E. Cavaglià<sup>1</sup>, M. Silvestre<sup>1</sup>, G. Cangiano<sup>1</sup>, A. Borzelli<sup>1</sup>, A. Paladini<sup>2</sup>, R. Niola<sup>1</sup>; <sup>1</sup>Naples/IT, <sup>2</sup>Novara/IT*
- 1204.5 Diagnosis and management of thoracic and shoulder arteriovenous malformations  
*W.F. Yakes; Englewood, CO/US*
- 1204.6 Percutaneous glue embolisation as a primary treatment for visceral pseudoaneurysms  
*U. Gorsj, V. Bhatia, N. Kalra, M. Kang, M.S. Sandhu; Chandigarh/IN*

14:30-15:00, Auditorium 1

### Honorary Lecture

#### HL 1301 Andreas Gruentzig Lecture

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

Laudation: *J. Lammer (Vienna/AT)*

- 1301.1 25 years of endovascular therapy of abdominal aortic aneurysms: where do we stand now?  
*W. Jaschke (Innsbruck/AT)*

15:00-16:00, Auditorium 1

**Hot Topic Symposium**■ **HTS 1302 Does ATTRACT change our DVT management practice?***Moderators: M. Das (Duisburg/DE), S.O. Trerotola (Philadelphia, PA/US)*

Introduction

- 1302.1 What is ATTRACT?  
*W.E.A. Saad (Washington, DC/US)*
- 1302.2 What is wrong with ATTRACT?  
*G.J. O'Sullivan (Galway/IE)*
- 1302.3 Has ATTRACT affected my practice?  
*R. de Graaf (Friedrichshafen/DE)*
- 1302.4 Where will we be in five years' time?  
*S. Black (London/UK)*

Round-table discussion

Conclusion and take-home points

14:30-15:30

**Satellite Symposia**

For the detailed programmes, please refer to pages 156-157.

15:00-16:00, Auditorium 2

**Workshop**■ **WS 1303 Fundamentals in EVAR**

- 1303.1 *F. Fanelli (Florence/IT)*
- 1303.2 *N.J. Mosquera (Ourense/ES)*

16:00-17:30, Room 118

**Safe Sedation Training****SED 3 Safe sedation application during IR procedures***Coordinators: M. Heinrichs (Mainz/DE), W. Heinrichs (Mainz/DE)*IDEAS  
2 0 1 9



16:15-17:15, Auditorium 2

**Case-based Discussion**

■ **CBD 1401 My worst day in the angiosuite I**



Moderators: R.G. McWilliams (Liverpool/UK), S. Michelagnoli (Florence/IT)

Introduction

- 1401.1 Case topic 1  
*F.E. Vermassen (Ghent/BE)*
- 1401.2 Case topic 2  
*H. Rousseau (Toulouse/FR)*
- 1401.3 Case topic 3  
*P. Geisbuesch (Heidelberg/DE)*
- 1401.4 Case topic 4  
*M.D. Dake (Tucson, AZ/US)*

Conclusion and take-home points

16:15-17:15, Room 112

**Expert Round Table**

■ **ERT 1402 Aorto-iliac stenotic occlusive disease**

Moderators: A. Buecker (Homburg/DE), J.H. Peregrin (Prague/CZ)

Introduction

- 1402.1 Kissing stents  
*M.W. de Haan (Maastricht/NL)*
- 1402.2 Bare-metal vs. covered stents  
*J.P. Schaefer (Kiel/DE)*
- 1402.3 Balloon-expandable vs. self-expanding stents  
*D.K. Tsetis (Iraklion/GR)*
- 1402.4 Re-entry devices  
*T. Rand (Vienna/AT)*

Round-table discussion

Conclusion and take-home points

16:15-17:15, Room 115

**Workshop****WS 1403 Biliary interventions**1403.1 *W. Uller (Regensburg/DE)*1403.2 *C. Gonzalez-Junyent (Barcelona/ES)*

16:15-17:15, Room 116

**Case-based Discussion****CBD 1404 Arteriovenous malformations and lymphatics***Moderators: P. Haage (Wuppertal/DE), W.S. Rilling (Milwaukee, WI/US)*

Introduction

1404.1 High- vs. low-flow malformations

*J.A. Brookes (London/UK)*

1404.2 How to approach a craniofacial arteriovenous malformation

*R. van den Berg (Amsterdam/NL)*

1404.3 Lymphatic malformations

*S. Sierre (Buenos Aires/AR)*

1404.4 Interventional radiology in the lymphatic system

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

Conclusion and take-home points

16:15-17:15, Auditorium 1

**AI 1405 Amazing interventions***Coordinator: C.A. Binkert (Winterthur/CH)**Case presenters: A. Koops (Berlin/DE), M. Guimaraes (Charleston, SC/US),**T. Sabharwal (London/UK), F. Orsi (Milan/IT), X. Buy (Bordeaux/FR),**K.N. Katsanos (Patras/GR)*

16:15-17:15, Room 113

**Free Paper Session**

**FP 1406 Ablation of liver tumours**

*Moderators: R. Argirò (Rome/IT), F.G. Irani (Singapore/SG)*

- 1406.1 Radiofrequency versus microwave liver ablation: intermediate analysis of a randomized clinical trial  
*A. Radosevic, R. Quesada, A. Zugazaga, J. Sanchez Parrilla, F. Burdío; Barcelona/ES*
- 1406.2 Comparison of microwave and radiofrequency ablation for the treatment of liver metastases: randomized prospective study (MIRA study)  
*T.J. Vogl, Y. Jaraysa, S. Martin, A. Mehmedovi, N.-E.A. Nour-Eldin, T. Gruber-Rouh, R. Hammerstingl; Frankfurt/DE*
- 1406.3 A preoperative mathematic model for computed tomographic guided microwave ablation treatment of hepatic dome tumors  
*F. Gao; Guangzhou/CN*
- 1406.4 Microwave ablation outperforms RFA in the treatment of HCC  
*J.F. Amaral; Oldsmar, FL/US*
- 1406.5 Iatrogenic arterioportal fistula caused by radiofrequency ablation of hepatocellular carcinoma: clinical courses and treatment outcomes  
*J.W. Choi<sup>1</sup>, H.J. Jae<sup>1</sup>, W.S. Choi<sup>2</sup>, B. Kang<sup>1</sup>, Y.S. Jeong<sup>1</sup>, H.-C. Kim<sup>1</sup>, J.W. Chung<sup>1</sup>; <sup>1</sup>Seoul/KR, <sup>2</sup>Seongnam/KR*
- 1406.6 Transarterial chemoembolization with radiofrequency ablation versus hepatectomy in hepatocellular carcinoma beyond the Milan criteria: a retrospective study  
*H. Yuan, P. Cao, H.L. Li, H.T. Hu, C.Y. Guo, Y. Zhao, Q.J. Yao, X. Geng; Zhengzhou/CN*
- 1406.7 Locoregional treatments for unresectable early stage HCC in patients with high risk for intraprocedural bleeding: is single-step combined therapy safe and feasible?  
*E. Carchesio, R. Iezzi, A. Posa, A. Tanzilli, A. Gasbarrini, R. Manfredi; Rome/IT*



16:15-17:15, Room 114

**Free Paper Session****FP 1407 Experimental studies in IR***Moderators: I. Keussen (Lund/SE), G. Mauri (Milan/IT)*

- 1407.1 Analysis of circulating hypoxia-related microRNAs in transarterial chemoembolization with biodegradable and non-degradable embolic agents – preliminary results  
*J. Zavadil<sup>1</sup>, T. Andrašina<sup>1</sup>, J. Juracek<sup>1</sup>, B. Cechova<sup>1</sup>, O. Slaby<sup>1</sup>, N. Goldberg<sup>2</sup>; <sup>1</sup>Brno/CZ, <sup>2</sup>Jerusalem/IL*
- 1407.2 In-vitro evaluation of tissue adhesives in lymphatic fluids – influences of glue type and procedural parameters  
*C.C. Pieper, D. Kütting; Bonn/DE*
- 1407.3 pHPC hydrophilic antithrombogenic NiTi coating: evaluation of bare and surface modified low profile flow diverters using the Chandler Loop  
*T. Lenz-Habijan<sup>1</sup>, M. Brodde<sup>2</sup>, C. Bannewitz<sup>1</sup>, M. Aguilar Perez<sup>3</sup>, H. Monstadt<sup>1</sup>, H. Henkes<sup>3</sup>; <sup>1</sup>Bochum/DE, <sup>2</sup>Münster/DE, <sup>3</sup>Stuttgart/DE*
- 1407.4 Pickering-emulsion for local delivery of immunotherapies  
*L. Tselikas<sup>1</sup>, F. Deschamps<sup>1</sup>, L. Moine<sup>2</sup>, T. Isoardo<sup>1</sup>, S. Susini<sup>1</sup>, S. Denis<sup>2</sup>, N. Tsapis<sup>2</sup>, A. Paci<sup>2</sup>, A. Marabelle<sup>1</sup>, T. de Baère<sup>1</sup>; <sup>1</sup>Villejuif/FR, <sup>2</sup>Chatenay-Malabry/FR*
- 1407.5 Intra-arterial CT hepatic angiography for tumor detection and ablation endpoint assessment: a proof-of-concept analysis  
*E.Y. Lin<sup>1</sup>, G. Chintalapani<sup>2</sup>, K. Brock<sup>2</sup>, R. Avritscher<sup>2</sup>, B.C. Odisio<sup>2</sup>; <sup>1</sup>Sugar Land, TX/US, <sup>2</sup>Houston, TX/US*
- 1407.6 In vivo feasibility of arterial embolization with permanent and absorbable suture: The FAIREMBO concept  
*V. Vidal<sup>1</sup>, J.-F. Hak<sup>1</sup>, P. Brige<sup>1</sup>, G. Soulez<sup>2</sup>, J.-M. Bartoli<sup>1</sup>, B. Guillet<sup>1</sup>; <sup>1</sup>Marseille/FR, <sup>2</sup>Montreal, QC/CA*
- 1407.7 Reduced non-target embolization and increased targeted delivery with SEQUIRE microcatheter demonstrated in swine model  
*G. Maleux<sup>1</sup>, T. de Baère<sup>2</sup>, F. Sun<sup>3</sup>, N. Holtzman<sup>4</sup>, O. Harbater<sup>4</sup>, S. Rizzitelli<sup>5</sup>, P. Robert<sup>5</sup>, C. Robic<sup>5</sup>, A. Seron<sup>5</sup>, C. Corot<sup>5</sup>; <sup>1</sup>Leuven/BE, <sup>2</sup>Villejuif/FR, <sup>3</sup>Caceres/ES, <sup>4</sup>Rehovot/IL, <sup>5</sup>Roissy/FR*

16:15-17:15, Room 133

**Free Paper Session**

**FP 1408 Aortic interventions**



Moderators: *M. Cariati (Milan/IT), M. Midulla (Dijon/FR)*

- 1408.1 Early outcomes of the off-the-shelf t-branch for the treatment of thoracoabdominal aneurysms: a post-market registry  
*M.J. Bosiers, M. Austermann; Münster/DE*
- 1408.2 Impact of aortic stent-graft oversizing on outcomes of the chimney endovascular technique based on a new analysis of 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*
- 1408.3 A novel technique to flush and de-air unsheathed TEVAR stent-grafts to reduce gaseous embolisation during stent-graft deployment  
*L. Hanna, R.G.J. Gibbs, M.S. Hamady; London/UK*
- 1408.4 Performance of BeGraft and BeGraft+ stent-grafts as bridging devices for fenestrated endovascular aneurysm repair – an in-vitro study  
*G.F. Torsello<sup>1</sup>, M. Herten<sup>2</sup>, A. Frank<sup>3</sup>, M. Müller<sup>3</sup>, G. Torsello<sup>3</sup>, M. Austermann<sup>3</sup>; <sup>1</sup>Berlin/DE, <sup>2</sup>Essen/DE, <sup>3</sup>Münster/DE*
- 1408.5 Rethinking our treatment paradigm for EVAR: mid-term results from a vascular centre  
*K. Khan, R.K. Fisher; Liverpool/UK*
- 1408.6 Investigation of the quality reserve provided by digital variance angiography in fenestrated and branched endovascular aortic aneurysm repair setting  
*E. Verhoeven<sup>1</sup>, A. Katsargyris<sup>1</sup>, D. Szöllösi<sup>2</sup>, M. Gyánó<sup>2</sup>, K. Szigeti<sup>2</sup>, S. Osváth<sup>2</sup>, J.P. Kiss<sup>2</sup>, V.I. Óriás<sup>2</sup>; <sup>1</sup>Nuremberg/DE, <sup>2</sup>Budapest/HU*
- 1408.7 Remodeling of aorta after thoracic endovascular aortic repair (TEVAR) for aortic dissection  
*K. Nakajima<sup>1</sup>, N. Kato<sup>1</sup>, T. Hashimoto<sup>1</sup>, T. Higashigawa<sup>1</sup>, T. Ouchi<sup>1</sup>, S. Chino<sup>1</sup>, H. Sakuma<sup>1</sup>, T. Tokui<sup>2</sup>; <sup>1</sup>Tsu/JP, <sup>2</sup>Ise/JP*

16:15-16:35

**Satellite Symposium**

For the detailed programme, please refer to page 157.





16:45-17:15

**Satellite Symposium**

For the detailed programme, please refer to page 158.

17:30-18:30, Auditorium 2

**Focus Session****FS 1501 Subacute and chronic type B dissection**IDEAS  
2 0 1 9*Moderators: P. Geisbuesch (Heidelberg/DE), J.P. Schaefer (Kiel/DE)*

-  1501.1 Imaging findings supporting TEVAR  
*A. Chavan (Neustadt/DE)*
-  1501.2 Knickerbockers and candy plugs: do they work?  
*T. Kölbl (Hamburg/DE)*
-  1501.3 When do we need fenestrated stent-grafts?  
*K. Oikonomou (Regensburg/DE)*
-  1501.4 Prevention and management of spinal cord ischaemia  
*M.A. Funovics (Vienna/AT)*

17:30-18:30, Room 133





**Workshop****WS 1502 Radial access**

- 1502.1 *L. Moretti Monsignore (São Paulo/BR)*
- 1502.2 *D. Klass (Vancouver, BC/CA)*

17:30-18:30, Room 116

**Case-based Discussion****CBD 1503 IR salvage for abdominal surgical disasters***Moderators: P. Lucatelli (Rome/IT), D.Y. Sze (Stanford, CA/US)*

Introduction

-  1503.1 Biliary tract surgery  
*V. Pedicini (Rozzano/IT)*
-  1503.2 Pancreatic surgery  
*P. Reimer (Karlsruhe/DE)*
-  1503.3 Bowel surgery  
*P.A.M.S. Almeida (Viseu/PT)*
-  1503.4 Kidney transplantation  
*G.S. Goh (Melbourne, VIC/AU)*

Conclusion and take-home points

17:30-18:30, Room 113

**Free Paper Session**

**FP 1504 Venous interventions**

*Moderators: M. Al Hajriy (Muscat/OM), F. Wolf (Vienna/AT)*

- 1504.1 Treatment of venous iliofemoral occlusive disease with a self-expanding venous stent: a “first look” at 24-month results from the prospective, multicenter VERNACULAR trial  
*M.D. Dake<sup>1</sup>, G.J. O’Sullivan<sup>2</sup>; <sup>1</sup>Tucson, AZ/US, <sup>2</sup>Galway/IE*
- 1504.2 Safety, procedural success and outcome of the Aspirex S endovascular thrombectomy system in the treatment of iliofemoral deep vein thrombosis: data from the Arnsberg Aspirex registry  
*M. Lichtenberg<sup>1</sup>, R. de Graaf<sup>2</sup>; <sup>1</sup>Arnsberg/DE, <sup>2</sup>Friedrichshafen/DE*
- 1504.3 Acute deep vein thrombosis: early and midterm results of a multicenter prospective Zelé registry of desobstruction using a rheolytic thrombectomy device  
*C. Del Giudice<sup>1</sup>, C. Zadro<sup>2</sup>, A. Galloula<sup>1</sup>, P. Marek<sup>2</sup>, E. Messas<sup>1</sup>, A. Bura-Rivière<sup>2</sup>, M.R. Sapoval<sup>1</sup>, H. Rousseau<sup>2</sup>; <sup>1</sup>Paris/FR, <sup>2</sup>Toulouse/FR*
- 1504.4 Patency rates, safety and clinical results of the sinus-Obliquus venous stent in the treatment of chronic ilio-femoral venous outflow obstruction: data from the Arnsberg venous registry  
*M. Lichtenberg<sup>1</sup>, R. de Graaf<sup>2</sup>; <sup>1</sup>Arnsberg/DE, <sup>2</sup>Friedrichshafen/DE*
- 1504.5 Risk stratification of inferior vena cava (IVC) filters in preparation for safe retrieval: the Alfred guideline  
*H.K. Moriarty, G.S. Goh, W. Clements; Melbourne, VIC/AU*
- 1504.6 Mechanochemical endovenous ablation of lateral marginal vein in pediatric patients with Klippel-Trenaunay syndrome  
*G. Lambert, M.W. Silva, D.J. Teplisky, I. Szhafir, J.F. Lutereau, M. Garriga, S. Sierre; Buenos Aires/AR*
- 1504.7 The results of balloon angioplasty of the pulmonary artery in patients with chronic thromboembolic pulmonary hypertension  
*N. Marukyan, V. Privorotsky, D. Zverev, O. Moiseeva; Saint-Petersburg/RU*

17:30-18:30, Room 134

**Free Paper Session****FP 1505 Interventional oncology beyond liver***Moderators: B. Gonçalves (Porto/PT), B. Rafiee (Karaj/IR)*

- 1505.1 Should lung nodule biopsy be performed prior to or concomitantly with thermal ablation?  
*Z. Hartley-Blossom, T. Healey; Providence, RI/US*
- 1505.2 Ablation therapy compared to SBRT and no treatment for unresectable non–small cell lung cancer: a National Cancer Data Base study  
*J. Wu<sup>1</sup>, H.X. Bai<sup>2</sup>, Z.-S. Zhang<sup>3</sup>; <sup>1</sup>Changsha/CN, <sup>2</sup>Philadelphia, PA/US, <sup>3</sup>Hunan/CN*
- 1505.3 Mutation status Is not a significant predictor of local recurrence in patients undergoing image-guided ablation of lung metastases  
*M. Drabkin, A. Moussa, F.E. Boas, C.T. Sofocleous, S.B. Solomon, E. Ziv; New York, NY/US*
- 1505.4 A phase 2 study of transarterial chemoperfusion treatment with Cisplatin, Methotrexate and Gemcitabine in patients with unresectable pleural mesothelioma – initial results  
*B. Kis, M. Pereira, J. Logeman, G. El-Haddad, J. Choi, J. Fontaine, B. Creelan, T. Tanvetyanov; Tampa, FL/US*
- 1505.5 Cryoablation for stage 1 renal cell carcinoma: oncologic outcomes from a 10-year, prospective study  
*K. Porosnicu Rodriguez, J. Morkos, A.L. Zhou, C. Frangakis, C.S. Georgiades; Baltimore, MD/US*
- 1505.6 Outcome predictors in percutaneous cryoablation for renal cell carcinoma: single center cohort study  
*K. Mahmoud, A.J. Gunn, H. EL Khudari, W. Joe, A. Salei, E. Keasler, E. Bready, P. Patten, R. Varma, A.K. Abdel Aal; Birmingham, AL/US*
- 1505.7 Prostate cancer chemoembolization in dog pet model: DOGXEL a proof of concept study  
*O. Pellerin<sup>1</sup>, S. Djaber<sup>1</sup>, C. Déan<sup>1</sup>, P. Reb<sup>2</sup>, C. Chaix<sup>2</sup>, D. Tierny<sup>3</sup>, M.R. Sapoval<sup>1</sup>; <sup>1</sup>Paris/FR, <sup>2</sup>Roissy En France/FR, <sup>3</sup>Villeneuve d'Ascq/FR*



17:30-18:30, Room 114

**Free Paper Session**

**FP 1506 Peripheral vascular disease intervention 1**

*Moderators: A. Cannavale (Rome/IT), N.D. Ptohis (Athens/GR)*

- 1506.1 Results of the BIOFLEX-COF RCT, comparing high vs low chronic outward force of nitinol stents in the SFA  
*A. Wressnegger, M.A. Funovics; Vienna/AT*
- 1506.2 The hemodynamical significance of low-grade serial stenoses  
*L. van de Velde<sup>1</sup>, E. Groot Jebbink<sup>1</sup>, M. Versluis<sup>2</sup>, M.M.P.J. Reijnen<sup>1</sup>; <sup>1</sup>Arnhem/NL, <sup>2</sup>Enschede/NL*
- 1506.3 Bollinger scoring application in evaluation of infrainguinal peripheral arterial disease in MR angiography  
*A.G. Smith, S. Seedat, L. Kenning, D.F. Ettles, R. Lakshminarayan; Hull/UK*
- 1506.4 The utility of two-dimensional perfusion angiography (2D-PA) in critical limb ischemia (CLI): a single center experience  
*A.J. Alvi, Z.A. Asseri, A. Bin Habjar, M. Al-Moaiqel; Riyadh/SA*
- 1506.5 Demonstrating compliance in Thiel-embalmed arteries: implications for image-guided, minimally-invasive therapies  
*C. Fitton, H. Donald-Simpson, R. Ross, T. Wilkinson, J.G. Houston; Dundee/UK*
- 1506.6 BioMimics 3D Stent System. 2-year results of the MIMICS-2 Study  
*P.A. Gaines; Sheffield/UK*
- 1506.7 Next generation of DCB: efficacy and tolerance of drug-coated hyper-compliant balloons (DCHCB) in peripheral arteries of swine  
*M. Kusmierczuk<sup>1</sup>, S. Bienek<sup>1</sup>, S. Schurmann-Kaufeld<sup>1</sup>, A. Mittag<sup>2</sup>, U. Speck<sup>1</sup>, B. Scheller<sup>3</sup>; <sup>1</sup>Berlin/DE, <sup>2</sup>Rottmersleben/DE, Homburg/DE*

17:30-17:50

**Satellite Symposium**

For the detailed programme, please refer to page 158.

## Monday, September 9

07:50-08:20

### Satellite Symposia

For the detailed programmes, please refer to page 159.

08:15-09:45, Room 118

### Safe Sedation Training

#### SED 4 Safe sedation application during IR procedures (advanced)

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

08:30-09:30, Auditorium 2

### Expert Round Table

#### ERT 1701 How I treat bad necks in EVAR

IDEAS  
2 0 1 9

Moderators: A. Holden (Auckland/NZ), E. Verhoeven (Nuremberg/DE)

Introduction

- 1701.1 How I treat short necks  
*K.P. Donas (Münster/DE)*
- 1701.2 How I treat angulated necks  
*R. Uberoi (Oxford/UK)*
- 1701.3 How I treat wide necks  
*L.B. Lönn (Copenhagen/DK)*
- 1701.4 How I treat the short, angulated and wide neck  
*M. Gargiulo (Bologna/IT)*

Round-table discussion





Conclusion and take-home points

08:30-09:30, Room 112

**Focus Session**

**FS 1702 Endovascular masterclass: intermittent claudication**

*Moderators: K.R. Deloose (Dendermonde/BE), M. Katoh (Krefeld/DE)*

-  1702.1 Supervised exercise therapy and lifestyle  
*B.S. Tan (Singapore/SG)*
-  1702.2 Guidewire and crossing techniques  
*C.S. Pena (Miami, FL/US)*
-  1702.3 Drug-eluting technology: randomised trials and real-world practice  
*K. Rocha-Singh (Springfield, IL/US)*
-  1702.4 Plaque modification vs. debulking  
*E. Blessing (Karlsbad/DE)*

08:30-09:30, Room 116

**Focus Session**

**FS 1703 Everything you wanted to know about immunotherapy in IR**

*Moderators: A. Adam (London/UK), T.K. Helmberger (Munich/DE)*

- 1703.1 Immunotherapy: big business vs. evidence  
*D.Y. Sze (Stanford, CA/US)*
- 1703.2 Ablative therapies as a primer for immunotherapies and vice versa  
*R. Lencioni (Pisa/IT)*
- 1703.3 Transarterial delivery of immunotherapy: how could it work – does it make sense?  
*B.J. Wood (Bethesda, MD/US)*
- 1703.4 Imagining the ideal minimally invasive treatment concept  
*D. Arnold (Hamburg/DE)*







08:30-09:30, Room 117

**Fundamental Course****FC 1704 Porto-mesenteric vein thrombosis***Moderators: J.G. Caridi (New Orleans, LA/US), J. Urbano (Madrid/ES)*

- 1704.1 Background in pathophysiology and imaging  
*A.J. Wigham (Oxford/UK)*
- 1704.2 When to intervene  
*E. Velasco Sánchez (Madrid/ES)*
- 1704.3 How to intervene  
*S. Kee (Los Angeles, CA/US)*
- 1704.4 The role of surgery  
*D. Seehofer (Leipzig/DE)*

08:30-09:30, Auditorium 1

**Clinical Evaluation Course****CEC 1705 Trauma***Moderators: C. Nice (Newcastle-upon-Tyne/UK), A.G. Ryan (Waterford City/IE)*

-  1705.1 Work-up of the polytraumatised patient in the trauma team  
*C. Dodt (Munich/DE)*
-  1705.2 Imaging algorithms  
*V. Miele (Florence/IT)*
-  1705.3 Chest trauma  
*T. Kratimenos (Athens/GR)*
-  1705.4 Solid organ injury (liver, spleen, kidney)  
*I. Robertson (Glasgow/UK)*
-  1705.5 Pelvic fracture  
*O. Pellerin (Paris/FR)*
-  1705.6 Damage-control surgery  
*K.J. Ponsen (Alkmaar/NL)*

Round-table discussion

08:30-09:50, Simulator Gallery

**Simulation Training**

- **SIM 3.1 Emergency embolisation in trauma: state of the art** (intermediate)

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

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

*Instructors: M.W. de Haan (Maastricht/NL), G.S. Goh (Melbourne, VIC/AU), I. Insausti Gorbea (Pamplona/ES), R.W. Van der Meer (Leiden/NL)*

09:30-11:00, Room 130

**Hands-on Device Training**

- **EMT-HDT 3 Embolisation: materials and tools – coils & plugs**

*Coordinators: M.C. Burgmans (Leiden/NL), M. Citone (Florence/IT)*

09:30-11:00, Room 132

**Hands-on Device Training**

- **ST-HDT 1 Stroke thrombectomy**

*Coordinators: A. Krajina (Hradec Králové/CZ),*

*H. van Overhagen (The Hague/NL)*

09:30-11:00, Room 111

**Hands-on Device Training**

- **TA-HDT 3 Tumour ablation – RFA**

*Coordinators: J.-Y. Gaubert (Marseille/FR), M. Tsitskari (Athens/GR)*

09:50-11:10, Simulator Gallery

**Simulation Training**

- **SIM 3.2 Emergency embolisation in trauma: state of the art** (intermediate)

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

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

*Instructors: M.W. de Haan (Maastricht/NL), G.S. Goh (Melbourne, VIC/AU), I. Insausti Gorbea (Pamplona/ES), R.W. Van der Meer (Leiden/NL)*

10:00-11:00, Auditorium 2

**Focus Session**■ **FS 1801 Endoleaks in EVAR**IDEAS  
2 0 1 9*Moderators: J.A. Brennan (Liverpool/UK), F. Nasser (São Paulo/BR)*

- 1801.1 When to embolise pre-operatively?  
*D. Branzan (Leipzig/DE)*
- 1801.2 Aneurysm growth without endoleak  
*I. Loftus (London/UK)*
- 1801.3 Reasons and treatment options for late type I endoleaks  
*S. Michelagnoli (Florence/IT)*
- 1801.4 Reasons and treatment options for late type II endoleaks  
*A. Chavan (Neustadt/DE)*

10:00-11:00, Room 115

**Focus Session**■ **FS 1802 Medical therapy to improve outcomes of PAD interventions***Moderators: A. Micari (Bergamo/IT), R. Sachar (Raleigh, NC/US)*

- 1802.1 The role of statins  
*T.W.I. Clark (Philadelphia, PA/US)*
- 1802.2 Single vs. double antiplatelet therapy: any evidence?  
*N.D. Ptohis (Athens/GR)*
- 1802.3 A new generation of anticoagulation  
*A. Cannavale (Rome/IT)*
- 1802.4 Risk stratifications for strong anticoagulation regimens  
*M. Burbelko (Berlin/DE)*

10:00-11:00, Auditorium 1

### Expert Round Table

#### ERT 1803 Current management of metastatic lesions from breast cancer

*Moderators: S.J. Park (Incheon/KR), L. Solbiati (Rozzano/IT)*

Introduction

- 1803.1 Recent guidelines  
*J. Kettenbach (Wiener Neustadt/AT)*
- 1803.2 The role of radiotherapy  
*L.M. Kenny (Brisbane, QLD/AU)*
- 1803.3 The role of IR  
*B. Gonçaves (Porto/PT)*
- 1803.4 Oligometastatic patients  
*F. Deschamps (Villejuif/FR)*

Round-table discussion



Conclusion and take-home points

10:00-11:00, Room 116

### Focus Session





#### FS 1804 Dialysis masterclass

*Moderators: D. Karnabatidis (Patras/GR), B.S. Tan (Singapore/SG)*

-  1804.1 Failing arteriovenous fistulas and grafts: epidemiology and pathobiology  
*B. Dolmatch (Palo Alto, CA/US)*
- 1804.2 Haemodialysis access: randomised trials of drug-coated balloons and covered stents  
*S.O. Trerotola (Philadelphia, PA/US)*
-  1804.3 Balloon angioplasty of the central outflow venous system: indications and results  
*P.M. Kitrou (Patras/GR)*
- 1804.4 Percutaneous creation of haemodialysis arteriovenous fistulas: technique and early results  
*D.K. Rajan (Toronto, ON/CA)*

10:00-11:00, Room 117

**Fundamental Course****FC 1805 Peripheral arteriovenous malformations***Moderators: J.A. Brookes (London/UK), P. Saari (Kuopio/FI)*

-  1805.1 Arteriovenous malformations  
*L.J. Schultze Kool (Nijmegen/NL)*
-  1805.2 Venous malformations  
*L. Ratnam (London/UK)*
-  1805.3 Arteriovenous fistula  
*W.S. Rilling (Milwaukee, WI/US)*
-  1805.4 Vascular malformation in children  
*A.M. Barnacle (London/UK)*

10:00-11:00, Room 114

**IR Trainee Session****IRT 1806 Clinical practice for trainees, residents and young IRs***Moderators: R. Cervelli (Pisa/IT), M.J. Lee (Dublin/IE)*

- 1806.1 Making patient checklists, approaching patients and follow ups  
*M.J. Lee (Dublin/IE)*
- 1806.2 Multidisciplinary clinical collaboration  
*C.A. Binkert (Winterthur/CH)*
- 1806.3 Evidence based medicine in IR and why it matters  
*K.N. Katsanos (Patras/GR)*
- 1806.4 Web-based innovations, clinical practice and patient care  
*G.C. Makris (Oxford/UK)*
- 1806.5 Interventional radiology in environments with limited resources  
*A. Kesselman (New York, NY/US)*



11:10-12:30, Simulator Gallery

**Simulation Training**

**SIM 3.3 Emergency embolisation in trauma: state of the art** (intermediate)

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

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

*Instructors: M.W. de Haan (Maastricht/NL), G.S. Goh (Melbourne, VIC/AU), I. Insausti Gorbea (Pamplona/ES), R.W. Van der Meer (Leiden/NL)*

11:30-12:30, Room 112

**Expert Round Table**

**ERT 1901 Anaesthesia in IR activity**

*Moderators: F. Orsi (Milan/IT), R. Uberoi (Oxford/UK)*

Introduction

- 1901.1 Conscious sedation for interventional procedures: how I use dexmedetomidine  
*P. Balsorano (Florence/IT)*
- 1901.2 I need the anaesthetist on my team  
*M.J. Lee (Dublin/IE)*
- 1901.3 I do not need the anaesthetist on my team  
*C.A. Binkert (Winterthur/CH)*
- 1901.4 No sedation vs. sedation: outcomes in IR  
*F. Barbani (Florence/IT)*

Round-table discussion

Conclusion and take-home points

11:30-12:30

**Satellite Symposia**

For the detailed programmes, please refer to pages 161-164.

12:30-13:50, Simulator Gallery

**Simulation Training**

- **SIM 3.4 Emergency embolisation in trauma: state of the art** (intermediate)

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

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

*Instructors: M.W. de Haan (Maastricht/NL), G.S. Goh (Melbourne, VIC/AU),  
I. Insausti Gorbea (Pamplona/ES), R.W. Van der Meer (Leiden/NL)*

12:30-14:00, Room 130

**Hands-on Device Training**

- **EMT-HDT 4 Embolisation: materials and tools – coils & plugs**

*Coordinators: M.C. Burgmans (Leiden/NL), M. Citone (Florence/IT)*

12:30-14:00, Room 132

**Hands-on Device Training**

- **ST-HDT 2 Stroke thrombectomy**

*Coordinators: A. Krajina (Hradec Králové/CZ),  
H. van Overhagen (The Hague/NL)*

12:30-14:00, Room 111

**Hands-on Device Training**

- **TA-HDT 4 Tumour ablation – RFA**

*Coordinators: J.-Y. Gaubert (Marseille/FR), M. Tsitskari (Athens/GR)*

12:45-14:15, Room 118

**Safe Sedation Training**

- SED 5 Safe sedation application during IR procedures**

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

13:00-14:00

**Satellite Symposia**

For the detailed programmes, please refer to pages 164-165.

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

**News on Stage**

**NoS 2004 Interventional oncology**

*Moderators: R. Lencioni (Pisa/IT), C.T. Sofocleous (New York, NY/US)*

- 2004.1 Performance of a new needle for the displacement of critical structure in thermal ablation  
*P. Auloge, R.L. Cazzato, J. Caudrelier, P.P. Rao, G. Koch, J. Garnon, A. Gangi; Strasbourg/FR*
- 2004.2 Effects of ablation on systemic therapy for metastatic pulmonary sarcoma: potential synergy?  
*K. Menon, A. Doshi, K. Ganjoo, D. Wang, G. Hwang; Stanford, CA/US*
- 2004.3 Randomized embolization trial for neuroendocrine tumors (RETNET): first safety report  
*M.C. Soulen<sup>1</sup>, N. Fidelman<sup>2</sup>, R.D. Garcia-Mónaco<sup>3</sup>, S.B. White<sup>4</sup>, R. Avritscher<sup>5</sup>, G. El-Haddad<sup>6</sup>, E.P. Wileyto<sup>1</sup>; <sup>1</sup>Philadelphia, PA/US, <sup>2</sup>San Francisco, CA/US, <sup>3</sup>Buenos Aires/AR, <sup>4</sup>Milwaukee, WI/US, <sup>5</sup>Houston, TX/US, <sup>6</sup>Tampa, FL/US*
- 2004.4 Chemoembolization for treatment of hepatocellular carcinoma: national registry-based analysis  
*T. Andrašina, M. Uher, T. Rohan, P. Matkulčik, J. Zavadil, B. Cechova, L. Jandurova, V. Válek; Brno/CZ*
- 2004.5 Transarterial chemoembolization with degradable starch microspheres (DSM-TACE) vs. selective internal radiation therapy (SIRT) in multifocal hepatocellular carcinoma (HCC)  
*T.A. Auer, M. Jonczyk, F. Colletini, B. Hamm, B. Gebauer; Berlin/DE*
- 2004.6 Multimodality quantitative volumetric and metabolic assessment of early tumor response and survival in patients with uveal melanoma liver metastases undergoing Y90-radioembolization  
*F. Tabotta, S. Gnesin, A. Ponti, A. Denys, A. Hocquelet, A. Digklla, J. Prior, J.-F. Knebel, N. Schaefer, R. Duran; Lausanne/CH*

14:30-15:15, Auditorium 1

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

*Moderators: L. Crocetti (Pisa/IT), G.J. O'Sullivan (Galway/IE)*

**Team A:** *N. McEniff (Dublin/IE), A.M. Barnacle (London/UK), M. Casare Santiago (Palma de Mallorca/ES), S.Kee (Los Angeles,CA/US),*  
**Team B:** *R. Iezzi (Rome/IT), G. Eldem (Ankara/TR), J. Garnon (Strasbourg/FR), M.R. Meijerink (Amsterdam/NL)*

14:30-15:30

### **Satellite Symposium**

For the detailed programme, please refer to page 166.

15:15-16:00, Auditorium 1

### **Hot Topic Symposium**

#### ■ **HTS 2102 Is renal tumour ablation ready for prime time?**

*Moderators: X. Buy (Bordeaux/FR), R.F. Grasso (Rome/IT)*

Introduction

- 2102.1 Latest guidelines  
*A. Veltri (Orbassano/IT)*
- 2102.2 The urologist's point of view  
*G. Siena (Florence/IT)*
- 2102.3 State-of-the-art of interventional radiology treatment  
*D.J. Breen (Southampton/UK)*
- 2102.4 What can we expect in the next five years?  
*A. Gangi (Strasbourg/FR)*

Round-table discussion

Conclusion and take-home points

14:30-15:30, Auditorium 2

**Case-based Discussion**

■ **CBD 2103 My worst day in the angiosuite II**



*Moderators: H. Rousseau (Toulouse/FR), E. Verhoeven (Nuremberg/DE)*

Introduction

- 2103.1 Case topic 1  
*R.G.J. Gibbs (London/UK)*
- 2103.2 Case topic 2  
*A. Holden (Auckland/NZ)*
- 2103.3 Case topic 3  
*H. Kobeiter (Créteil/FR)*
- 2103.4 Case topic 4  
*V. Rimbau (Barcelona/ES)*

Conclusion and take-home points

15:30-16:00

**Satellite Symposia**

For the detailed programmes, please refer to pages 166-167.

16:00-17:30, Room 118

**Safe Sedation Training**

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

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

16:15-17:15, Auditorium 2

**Expert Round Table**

■ **ERT 2201 How to achieve durability in F-/B-EVAR**



*Moderators: G.M. Richter (Stuttgart/DE), F.E. Vermassen (Ghent/BE)*

Introduction

- 2201.1 Landing zone  
*K. Kichikawa (Kashihara/JP)*
- 2201.2 Choice of fenestration and branches  
*H. Meissner (Stuttgart/DE)*
- 2201.3 Target vessels  
*R. Ghotbi (Munich/DE)*
- 2201.4 Surveillance  
*A. Winterbottom (Cambridge/UK)*

Round-table discussion

Conclusion and take-home points

16:15-17:15, Room 133

**Workshop**

■ **WS 2202 Thermal protection for ablative therapies**

- 2202.1 *E. de Kerviler (Paris/FR)*
- 2202.2 *A.N. Kurup (Rochester, MN/US)*

MON

16:15-17:15, Room 115

**Case-based Discussion**

**CBD 2203 IR in gynaecological emergencies**



*Moderators: J.-P. Pelage (Caen/FR), A.C. Roberts (La Jolla, CA/US)*

Introduction

- 2203.1 Postpartum haemorrhage  
*T.J. Kroencke (Augsburg/DE)*
- 2203.2 Abnormal placentation  
*A.V. Giordano (L'Aquila/IT)*
- 2203.3 Gynaecological malignancies  
*M.P. Kohi (San Francisco, CA/US)*
- 2203.4 Septic conditions  
*S. Ameli-Renani (London/UK)*

Conclusion and take-home points

16:15-17:15, Room 117

**Focus Session**

**FS 2204 New in endovascular thrombectomy**

*Moderators: S. Mangiafico (Florence/IT), H. van Overhagen (The Hague/NL)*

- 2204.1 What do the DAWN and the DEFUSE-3 trials tell us about stroke imaging?  
*P. Mordasini (Bern/CH)*
- 2204.2 What can be learned from the thrombus removal trials?  
*W.H. van Zwam (Maastricht/NL)*
- 2204.3 New tips and tricks  
*J.D. Molina Nuevo (Albacete/ES)*
- 2204.4 Carotid stenting during stroke treatment  
*L.C. van Dijk (The Hague/NL)*



e-voting



recommended for EBIR preparation

16:15-17:15, Room 112

**Expert Round Table**

■ **ERT 2205 SFA - the unsolved question: angioplasty vs. stent**

*Moderators: Y. Gouëffic (Nantes/FR), B.T. Katzen (Miami, FL/US)*

Introduction

2205.1 Drug-coated balloons in 2019

*M. Brodmann (Graz/AT)*

2205.2 New data to support the use of drug-eluting stents

*T. Zeller (Bad Krozingen/DE)*

2205.3 A new generation of percutaneous transluminal angioplasty

*J.H. Rundback (Teaneck, NJ/US)*

2205.4 The new generation of stents

*K.R. Deloose (Dendermonde/BE)*

Round-table discussion

Conclusion and take-home points



16:15-17:15, Room 113

**Free Paper Session**

**FP 2206 Prostate artery embolisation**

*Moderators: L. Novosel (Zagreb/HR), U. Teichgräber (Jena/DE)*

- 2206.1 A CT protocol for 4D angiography and perfusion imaging of the prostate for embolization planning: proof of concept study  
*A. Kobe<sup>1</sup>, G. Puippe<sup>1</sup>, E. Klotz<sup>2</sup>, H. Alkadhi<sup>1</sup>, T. Pfammatter<sup>1</sup>;*  
*<sup>1</sup>Zurich/CH, <sup>2</sup>Forchheim/DE*
- 2206.2 Prostatic artery embolization with HydroPearls: safety and efficacy  
*A. Kovács, P. Bischoff, A. Schäfer, A. El Mansouri; Bonn/DE*
- 2206.3 Prostatic artery embolization for benign prostatic hyperplasia: anatomical, technical and radiation exposure considerations in 168 cases  
*M. Shaker, E.Y. Hashem, A.A.M.B. Okba, R.T.M. Khafagy, K. Abd El Tawab;*  
*Cairo/EG*
- 2206.4 PAE provides a proportionately greater change in storage symptoms compared with surgery: multivariate analysis of the UK-ROPE database  
*G. Vigneswaran, D. Maclean, S. Modi, M.R. Harris, T.J. Bryant, N. Hacking;*  
*Southampton/UK*
- 2206.5 Correlation between peri-procedural prostate enhancement and the number of prostatic arterial targets during prostate artery embolisation  
*T.F. Barge, A.C. Macdonald, P. Boardman, C.R. Tapping; Oxford/UK*
- 2206.6 Outcome of prostatic artery embolization for benign prostatic hyperplasia: 1550 patients follow up to 10 years  
*J.M. Pisco †, T. Bilhim, N.V. Costa, L.C. Pinheiro, D. Torres, J. Pisco, A.G. Oliveira;*  
*Lisbon/PT*
- 2206.7 The proSTatic aRtery EmbolizAtion for the treatMent of benign prostatic hyperplasia (STREAM) study: two-year results from a prospective cohort  
*A.C. Macdonald<sup>1</sup>, T. MacKinnon<sup>1</sup>, J. El-Sheikha<sup>1</sup>, D. Kearns<sup>1</sup>, R. Macpherson<sup>1</sup>, J. Crew<sup>1</sup>, M.W. Little<sup>2</sup>, P. Boardman<sup>1</sup>, C.R. Tapping<sup>1</sup>;*  
*<sup>1</sup>Oxford/UK, <sup>2</sup>Reading/UK*

16:15-17:15, Room 116

**Free Paper Session****FP 2207 Transarterial approaches for liver tumours***Moderators: T.F. Jakobs (Munich/DE), P. Reimer (Karlsruhe/DE)*

- 2207.1 Spectral CT-based iodized oil quantification to develop a tumor response prediction model for chemoembolization of hepatocellular carcinoma  
*W.S. Choi<sup>1</sup>, B. Kang<sup>2</sup>, Y.H. So<sup>2</sup>, Y.S. Jeong<sup>2</sup>, J.W. Chung<sup>2</sup>, J.W. Choi<sup>2</sup>, S. Hur<sup>2</sup>; <sup>1</sup>Seongnam/KR, <sup>2</sup>Seoul/KR*
- 2207.2 Efficacy and feasibility of temporary protective embolization of non-target liver vessels in 90Y-radioembolization  
*P.F. Sieben, M. Schulze-Hagen, A. Tschinaev, F. Pedersoli, M. Liebl, C.K. Kuhl, P. Bruners, P. Isfort, A. Heinzl; Aachen/DE*
- 2207.3 Comparison of the efficacy of hypertrophy induction by unilobar 90Y radioembolisation vs portal vein embolization: a prospective animal study  
*F. Pedersoli, A. Tschinaev, M. Liebl, M. Zimmermann, M. Schulze-Hagen, P.F. Sieben, V. Van den Bosch, E. Barzakova, A. Heinzl, C.K. Kuhl, P. Bruners, P. Isfort; Aachen/DE*
- 2207.4 Transarterial chemoembolization of hepatic neuroendocrine metastases: the effect of fatty liver on treatment response  
*K. Jumaa, D. Wiseman, A. Mujoomdar; London, ON/CA*
- 2207.5 A phase II open-label, single centre, non-randomised trial of Y90-radioembolization in combination with nivolumab in Asian patients with advanced hepatocellular carcinoma: an interim analysis  
*F.G. Irani, A. Gogna, N.K.K. Venkatanarasimha, T. Hennedige, D. Ng, K. Loke, H.L. Huang, C. Tham, S.-L. Koo, S.H. Tan, H.S. Chong, X.W. Lee, P. Chow, B. Goh, K.H. Lim, J. Yeong, E.W. Newell, H.C. Toh, D. Tai, S.P. Choo; Singapore/SG*
- 2207.6 LifePearl® Anthracyclin registry in selective chemo-embolization of patients with unresectable hepatocellular carcinoma: safety, tolerability and efficacy (PARIS study)  
*T. de Baèrè<sup>1</sup>, L. Tselikas<sup>1</sup>, G. Verset<sup>2</sup>, B. Guiu<sup>3</sup>, M. Ronot<sup>4</sup>, P. Chevalleri<sup>5</sup>, G. Sergent<sup>6</sup>, P.P. Goffette<sup>2</sup>; <sup>1</sup>Villejuif/FR, <sup>2</sup>Brussels/BE, <sup>3</sup>Montpellier/FR, <sup>4</sup>Clichy/FR, <sup>5</sup>Nice/FR, <sup>6</sup>Lille/FR*
- 2207.7 HepaSphere (30–60 µm) transarterial chemoembolization vs. conventional transarterial chemoembolization for the treatment of hepatocellular carcinoma: propensity score matched analysis of early clinical outcomes  
*H.H. Chu, C. Park, J.Y. Kim, M. Park, J. Hur, J.W. Kim, J.H. Kim, J.H. Shin, D.I. Gwon; Seoul/KR*

16:15-17:15, Room 114

**Free Paper Session**

**FP 2208 Peripheral vascular disease intervention 2**

*Moderators: G.N. Kouvelos (Larissa/GR), L. Patrone (London/UK)*

- 2208.1 Risk factors of distal edge stenosis after stenting for isolated mesenteric artery dissection  
*Z. Jia; Changzhou/CN*
- 2208.2 The peripheral bleeding score: a novel easy-to-use preprocedural score to predict bleeding complications of endovascular peripheral arterial interventions  
*M. Boulougouri, L. Reppas, S. Spiliopoulos, A. Tsochatzis, G. Festas, F. Christidi, K. Palialexis, E. Brountzos; Athens/GR*
- 2208.3 Can legflow improve treatment of long femoropopliteal lesions: the REFLOW outcomes  
*J. Wauters, M. Bosiers; Dendermonde/BE*
- 2208.4 BIO4AMB: a multicenter, controlled trial evaluating ambulatory endovascular treatment of PAD for 4 French and 6 French femoral access strategies  
*M. Brodmann<sup>1</sup>, J.C. van den Berg<sup>2</sup>, K.R. Deloose<sup>3</sup>, E. Steinmetz<sup>4</sup>; <sup>1</sup>Graz/AT, <sup>2</sup>Lugano/CH, <sup>3</sup>Dendermonde/BE, <sup>4</sup>Dijon/FR*
- 2208.5 The Ulysse prospective single center registry: midterm angiographic and clinical outcomes of ultrasound plasty associated to plain angioplasty for below the knee lesions in patient with critical limb ischemia  
*C. Del Giudice<sup>1</sup>, R. Gandini<sup>2</sup>; <sup>1</sup>Paris/FR, <sup>2</sup>Rome/IT*
- 2208.6 Final 1-year outcomes of the 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.R. 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>Antwerp/BE, <sup>7</sup>Bad Krozingen/DE*
- 2208.7 Tackling challenging infrainguinal arterial recanalization through retrograde use of the Outback re-entry catheter: a multi-centre cohort experience  
*B. Dharmarajah<sup>1</sup>, L. Patrone<sup>1</sup>, S. Theivacumar<sup>1</sup>, E. Blessing<sup>2</sup>; <sup>1</sup>London/UK, <sup>2</sup>Karlsbad/DE*

16:15-16:35

**Satellite Symposium**

For the detailed programme, please refer to page 167.

17:30-18:30, Auditorium 2

**Workshop**■ **WS 2301 Fundamentals in TEVAR**

- 2301.1 *P. Holt (London/UK)*
- 2301.2 *R. Philip Thomas (Marburg/DE)*

IDEAS  
2 0 1 9

17:30-18:30, Room 113

**Workshop**■ **WS 2302 Genitourinary IR interventions: basic and advanced**

- 2302.1 *G. Gabbani (Florence/IT)*
- 2302.2 *R. Das (London/UK)*

17:30-18:30, Room 114

**Workshop**■ **WS 2303 Pulmonary and bronchial artery embolisation**

- 2303.1 *J. Rodríguez Mesa (Málaga/ES)*
- 2303.2 *A. Khalil (Paris/FR)*

17:30-18:30, Room 115

**Free Paper Session**

**FP 2304 TIPS and portal vein intervention**

*Moderators: G. Maleux (Leuven/BE), S. Sabri (Washington, DC/US)*

- 2304.1 Indications for transjugular portosystemic shunts (TIPS) at a US liver transplant center: trends during the last 10 years  
*K.J. Moore, P.F. Laeseke, M.A. Woods, O. Ozkan; Madison, WI/US*
- 2304.2 Percutaneous transhepatic creation of intrahepatic portosystemic shunt with a combination of tip-angled guiding needle and coaxial straight needle  
*Y. Takeuchi<sup>1</sup>, N. Sakamoto<sup>2</sup>, H. Morishita<sup>1</sup>, Y. Arai<sup>3</sup>; <sup>1</sup>Kyoto/JP, <sup>2</sup>Hyogo/JP, <sup>3</sup>Tokyo/JP*
- 2304.3 Stability over time of global and intra-stent pressure gradients in under-dilated TIPS placed for refractory/recurrent ascites in cirrhotic patients  
*F. Prampolini, G. Musacchia, S. Pizzuto, F. Casari, C. Caporali, P. Torricelli, L. Turco, F. Schepis; Modena/IT*
- 2304.4 Transjugular intrahepatic portosystemic shunt versus endoscopic therapy for the treatment of variceal bleeding with hepatocellular carcinoma meeting the Milan criteria: a propensity score-matching analysis  
*J. Luo, M. Li, Z. Jiang, M. Huang; Guangzhou/CN*
- 2304.5 Association of sarcopenia and growth rate of the future liver remnant after portal vein embolization  
*M. Schulze-Hagen, D. Truhn, F. Duong, F. Pedersoli, C.K. Kuhl, G. Lurje, P. Isfort, P. Bruners, M. Zimmermann; Aachen/DE*
- 2304.6 HCC complication by PVT – percutaneous management by image-guided endoportals RFA, followed by metal stent implantation  
*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*
- 2304.7 Primary tumor location is an independent prognostic factor for time-to-progression in patients with colorectal liver metastases undergoing portal vein embolization and subsequent right hepatectomy  
*L. Hitpaß, F. Pedersoli, M. Schulze-Hagen, P. Isfort, C.K. Kuhl, P. Bruners, M. Zimmermann; Aachen/DE*

17:30-18:30, Room 133

**Free Paper Session****FP 2305 Musculoskeletal interventions***Moderators: M. Cifrian Perez (Valencia/ES), S.M. Tutton (Milwaukee, WI/US)*

- 2305.1 Utilization of motor and somatosensory evoked potentials for neural thermoprotection in ablations of musculoskeletal lesions  
*J.T. Yoon, J. Nesbitt, B.L. Raynor, M. Roth, C.C. Zertan, J.W. Jennings; St. Louis, MO/US*
- 2305.2 Ablation-osteoplasty-reinforcement-internal fixation (AORIF) for osteolytic skeletal metastases  
*I. Latich, F. Lee; New Haven, CT/US*
- 2305.3 Cryoablation as second line treatment for fibro-adipose vascular anomaly (FAVA)  
*C. Kaufman, A.E. Frodsham, R. Arnold; Salt Lake City, UT/US*
- 2305.4 Magnetic resonance-guided high intensity focused ultrasound (MRgFUS) for the treatment of oligometastatic prostate cancer bone metastases: non-invasive use of sound waves can downstage cancer spread  
*C. Marrocchio, A. Napoli, R. Scipione, S. Dababou, H.-P. Erasmus, C. Catalano; Rome/IT*
- 2305.5 Feasibility, safety and efficacy of genicular artery embolization for relief of knee pain related to osteoarthritis  
*S. Sharma, R. Rajagopal, S. Kumar, V. Verma, R. Malhotra; Delhi/IN*
- 2305.6 MR-guided focused ultrasound (MRgFUS) in the treatment of osteoid osteoma: a safe, effective and durable therapeutic option  
*S. Dababou, A. Napoli, C. Marrocchio, R. Scipione, G. Alfieri, D. Fierro, C. Catalano; Rome/IT*
- 2305.7 Evaluation of the role and feasibility of radiofrequency ablation for chondroblastoma: experience from tertiary care centre in India  
*N.S. Shetty, S.S. Kulkarni, K.B. Gala, S. Mohd, A. Puri, A. Gulia; Mumbai/IN*

17:30-18:30, Room 134

**Free Paper Session**

**FP 2306 Embolotherapy**

*Moderators: H. Kidikas (Riga/LV), M.J.M. Sousa (Porto/PT)*

- 2306.1 Genuclate artEry embolisatioN in patiEnts with oSteoarthrltiS of the knee (GENESIS): preliminary results from the first European prospective study  
*M.W. Little, M. Gibson; Reading/UK*
- 2306.2 Clinical outcomes of transcatheter arterial embolization for chronic knee pain: severe versus mild to moderate knee osteoarthritis  
*T. Kim<sup>1</sup>, S.-H. Lee<sup>2</sup>, Y.H. So<sup>3</sup>; <sup>1</sup>Seongnam-si, Gyeonggi-do/KR, <sup>2</sup>Nambusunhwan-ro, Gwanak-gu, Seoul/KR, <sup>3</sup>Seoul/KR*
- 2306.3 Effects of transcatheter arterial embolization for persistent trapezius myalgia refractory to conservative treatment  
*M. Shibuya, Y. Okuno; Yokohama/JP*
- 2306.4 Impact of uterine fibroids embolization on uterine contractility and female quality of life  
*V.A.V. Fornazari<sup>1</sup>, D. Szejnfeld<sup>1</sup>, S.M. Goldman<sup>1</sup>, J. Szejnfeld<sup>1</sup>, T.F. Nunes<sup>2</sup>, G.M. Salazar<sup>3</sup>, S.A. Vayego<sup>4</sup>; <sup>1</sup>São Paulo/BR, <sup>2</sup>Campo Grande/BR, <sup>3</sup>Boston, MA/US, <sup>4</sup>Curitiba/BR*
- 2306.5 Comparison of embolization of the superior rectal arteries with conventional surgical correction in the treatment of internal hemorrhoidal disease: initial results  
*P.M. Falsarella, S.E.A. Araujo, F. Nasser, A.S. Portilho, B.B. Vailati, F.L. Galastri, B.B. Affonso, J.M. Da Motta Leal Filho, R.G. Garcia, M. Katz; São Paulo/BR*
- 2306.6 Assessment of angiographic outcome using 2D parametric parenchymal blood flow (2D-PPBF) technique in patients with hypersplenism undergoing partial spleen embolization (PSE)  
*T.C. Meine<sup>1</sup>, S.K. Maschke<sup>1</sup>, M. Kirstein<sup>1</sup>, T. Werncke<sup>1</sup>, J. Baumgart<sup>2</sup>, C.L.A. Dewald<sup>1</sup>, F. Wacker<sup>1</sup>, B.C. Meyer<sup>1</sup>, J.B. Hinrichs<sup>1</sup>; <sup>1</sup>Hannover/DE, <sup>2</sup>Chicago, IL/US*
- 2306.7 Identifying active extravasation on arteriograms using artificial intelligence  
*M. Shen<sup>1</sup>, M. Ozturk<sup>2</sup>, P.-L. Loh<sup>1</sup>, V. Jog<sup>1</sup>, P.F. Laeseke<sup>1</sup>, D. Morgan<sup>1</sup>, M. Kleedehn<sup>1</sup>; <sup>1</sup>Madison, WI/US, <sup>2</sup>Samsun/TR*



17:30-18:30, News on Stage Area

**News on Stage****SP-NoS 2307 Students on Stage***Moderators: G.M. Jorgensen (Odense/DK), G.C. Makris (Oxford/UK)*

- 2307.1 A single center study on the risk of mortality in patients treated with paclitaxel-coated devices for femoropopliteal disease  
*V. Linehan<sup>1</sup>, M. Doyle<sup>1</sup>, H.M. Coffey<sup>1</sup>, M. Earle<sup>2</sup>, B. Barrett<sup>1</sup>, R. Gullipalli<sup>1</sup>;*  
*<sup>1</sup>St. John's, NL/CA, <sup>2</sup>Toronto, ON/CA*
- 2307.2 UK radiology and IR career promotion on the RiISE: two years of Radiological Imaging and Intervention Symposium Edinburgh – an annual event for medical students and foundation doctors  
*N.P. Burke, K. Kind; Edinburgh/UK*
- 2307.3 Developing sarcopenia predicts long-term mortality after elective EVAR  
*L.A. Lindström, S.M. Protto, N. Khan, N. Sillanpää, J. Hernesniemi, N. Oksala; Tampere/FI*
- 2307.4 Initial experience using a novel magnetic-catheter based IVC filter retrieval device  
*S. Periyasamy, K.J. Moore, W. Flanigan, J. Ashley, A. Doersch, E. Foran, B. Struthers, M.A. Woods, P.F. Laeseke; Madison, WI/US*
- 2307.5 Comparison of TROcar versus SELdinger technique for percutaneous cholecystostomy: the multicenter TROSELC study  
*D. Konstantopoulos<sup>1</sup>, L. Reppas<sup>1</sup>, N. Arkoudis<sup>1</sup>, M. Theofanis<sup>2</sup>, S. Spiliopoulos<sup>1</sup>, P.M. Kitrou<sup>2</sup>, D.K. Fillipiadis<sup>1</sup>, K.N. Katsanos<sup>2</sup>, K. Palialexis<sup>1</sup>, A.D. Kelekis<sup>1</sup>, D. Karnabatidis<sup>2</sup>, E. Brountzos<sup>1</sup>;*  
*<sup>1</sup>Athens/GR, <sup>2</sup>Patras/GR*
- 2307.6 Clinical outcomes in patients who had delayed cholecystectomy or percutaneous biliary endoscopy following percutaneous cholecystostomy for acute cholecystitis: ten-year, single-center retrospective review  
*B.J. Amos, R. Artrip, A. Burdette; Hershey, PA/US*

17:30-18:30, Room 116

**GA 2308 General Assembly** – members only



## Tuesday, September 10

08:15-09:45, Room 118

### Safe Sedation Training

**SED 7 Safe sedation application during IR procedures** (advanced)

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

08:30-09:30, Auditorium 2

### Focus Session

**FS 2501 Radiation exposure: are we doing enough?**

IDEAS  
2019

*Moderators: W. Jaschke (Innsbruck/AT), M.P. Jenkins (London/UK)*

- 2501.1 Radiation exposure of EVAR/TEVAR: present status in the EU  
*W. Jaschke (Innsbruck/AT)*
- 2501.2 How to use high-quality hardware responsibly  
*G. Bartal (Kfar-Saba/IL)*
- 2501.3 The importance of software in exposure reduction  
*T. Trabold (Stuttgart/DE)*
- 2501.4 The importance of training and skills in exposure reduction  
*E. Brontzos (Athens/GR)*



08:30-09:30, Auditorium 1





**Clinical Evaluation Course****CEC 2502 Acute mesenteric arterial ischaemia***Moderators: T.W.I. Clark (Philadelphia, PA/US), G.S. Goh (Melbourne, VIC/AU)*

-  2502.1 Clinical presentation  
*M.C. Ferraro (Florence/IT)*
-  2502.2 Diagnostic imaging  
*G. Papageorgiou (N. Faliro/GR)*
-  2502.3 Guidelines  
*M. Szczerbo-Trojanowska (Lublin/PL)*
-  2502.4 The role of interventional radiology  
*J.A. Kaufman (Portland, OR/US)*
-  2502.5 The role of surgery  
*C. Pilasi Menichetti (London/UK)*
-  2502.6 Post-procedural management and follow-up  
*M. Cejna (Feldkirch/AT)*

Round-table discussion

08:30-09:30, Room 117

**Fundamental Course****FC 2503 Intra-arterial stroke management***Moderators: A. Consoli (Suresnes/FR), K.A. Hausegger (Klagenfurt/AT)*

-  2503.1 For whom should thrombectomy be considered?  
*P. Mordasini (Bern/CH)*
-  2503.2 Imaging the brain and the clot  
*T. Struffert (Giessen/DE)*
-  2503.3 Thrombectomy and aspiration  
*S. Hopf-Jensen (Flensburg/DE)*
-  2503.4 What do the trials tell us?  
*E.R. Gizewski (Innsbruck/AT)*

08:30-09:30, Room 116

**Focus Session**

**FS 2504 Urinary tract embolisation**

*Moderators: A.N. Chatziaoannou (Athens/GR), J.H. Shin (Seoul/KR)*

- 2504.1 Iatrogenic bleeding  
*J. Irurzun (Alicante/ES)*
- 2504.2 Angiomyolipoma  
*N. Moussa (Paris/FR)*
- 2504.3 Pre-operative embolisation  
*F. Mondaini (Florence/IT)*
- 2504.4 Haematuria  
*C. Scheurig-Muenkler (Augsburg/DE)*

08:30-09:30, Room 112

**Focus Session**

**FS 2505 Standardising planning to achieve optimal ablation**

*Moderators: T. de Baère (Villejuif/FR), C.T. Sofocleous (New York, NY/US)*

- 2505.1 Why we need standardisation  
*M.R. Callstrom (Rochester, MN/US)*
- 2505.2 Simulation planning before radiofrequency ablation  
*M. Reinhardt (Leipzig/DE)*
- 2505.3 Simulation planning before cryoablation  
*C. Essert (Strasbourg/FR)*
- 2505.4 Simulation planning before microwave ablation  
*J. Chiang (Los Angeles, CA/US)*

08:30-09:50, Simulator Gallery

**Simulation Training**

**SIM 4.1 Peripheral artery disease: angioplasty and stenting (core)**

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

*Session organiser: M.A. Ruffino (Turin/IT)*

*Instructors: C. Del Giudice (Paris/FR), F. Fluck (Würzburg/DE),  
A. Moelker (Rotterdam/NL), W.E.A. Saad (Washington, DC/US)*

09:30-11:00, Room 130

**Hands-on Device Training**

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

*Coordinators: A.G. Rampoldi (Milan/IT), S. Spiliopoulos (Athens/GR)*

09:30-11:00, Room 111

**Hands-on Device Training**

- **TA-HDT 5 Tumour ablation – Image guided navigation and targeting**

*Coordinators: C. Farrelly (Dublin/IE), R. Iezzi (Rome/IT)*

09:30-11:00, Room 132

**Hands-on Device Training**

- **VA-HDT 1 Vertebral augmentation**

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

09:50-11:10, Simulator Gallery

**Simulation Training**

- **SIM 4.2 Peripheral artery disease: angioplasty and stenting (core)**

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

*Session organiser: M.A. Ruffino (Turin/IT)*

*Instructors: C. Del Giudice (Paris/FR), F. Fluck (Würzburg/DE),*

*A. Moelker (Rotterdam/NL), W.E.A. Saad (Washington, DC/US)*

TUE



**ERT 2601 Don't forget the iliacs!**



10:00-11:00, Auditorium 2

**Expert Round Table**

*Moderators: K.P. Donas (Münster/DE), L.B. Lönn (Copenhagen/DK)*

Introduction

- 2601.1 Narrow iliacs  
*J.L. De Bruin (London/UK)*
- 2601.2 Wide iliacs  
*M.W. de Haan (Maastricht/NL)*
- 2601.3 Hypogastric perfusion  
*J. Wilkins (London/UK)*
- 2601.4 Aneurysmal iliacs  
*G.N. Kouvelos (Larissa/GR)*

Round-table discussion

Conclusion and take-home points

10:00-11:00, Auditorium 1

**Expert Round Table**



**ERT 2602 Open questions in below-the-knee procedures**

*Moderators: E. Blessing (Karlsbad/DE), K.N. Katsanos (Patras/GR)*

Introduction

- 2602.1 Is percutaneous transluminal angioplasty still the first option?  
*R. Ferraresi (Bergamo/IT)*
- 2602.2 Drug-eluting stents in critical limb ischaemia: cost-effective compared to percutaneous transluminal angioplasty?  
*M. Brodmann (Graz/AT)*
- 2602.3 Lessons learned from the first generation of drug-coated balloons  
*S. Kum (Singapore/SG)*
- 2602.4 Treatment of heavily calcified lesions  
*M.G. Manzi (Abano Terme/IT)*

Round-table discussion

Conclusion and take-home points



e-voting



recommended for EBIR preparation

TUE

10:00-11:00, Room 116

**Video Learning Session**

**VL 2603 Neurointervention**

*Moderators: M. Ribó (Barcelona/ES), W.H. van Zwam (Maastricht/NL)*





- 2603.1 Aneurysm coiling  
*K. Zeleňák (Martin/SK)*
- 2603.2 Endovascular treatment of intracranial aneurysm  
*K. Zeleňák (Martin/SK)*
- 2603.3 CT guided cervical epidural injection  
*Z.A.H. Aldin (Essex/UK)*

10:00-11:00, Room 117

**Focus Session**

**FS 2604 Gastrointestinal bleeding**

*Moderators: P.E. Andersen (Odense /DK), P. Vilares Morgado (Porto/PT)*

-  2604.1 Imaging work-up  
*N.L. Kelekis (Athens/GR)*
-  2604.2 The endoscopist's role  
*G. Braun (Augsburg/DE)*
-  2604.3 Upper GI  
*A. Basile (Catania/IT)*
-  2604.4 Lower GI  
*R. Uberoi (Oxford/UK)*







TUE

10:00-11:00, Room 112

**Clinical Evaluation Course**

**CEC 2605 Strategies for T1 renal cell carcinoma**

*Moderators: G. Papageorgiou (N. Faliro/GR), O. Pellerin (Paris/FR)*

-  2605.1 State-of-the-art imaging  
*E. Bertelli (Florence/IT)*
-  2605.2 The role of active surveillance  
*A. Alcaraz (Barcelona/ES)*
-  2605.3 When to biopsy  
*R.E. Beasley (Miami Beach, FL/US)*
-  2605.4 Partial nephrectomy  
*G. Siena (Florence/IT)*
-  2605.5 Percutaneous ablation  
*D.K. Filippiadis (Athens/GR)*
-  2605.6 Combined treatments  
*A.H. Mahnken (Marburg/DE)*

Round-table discussion

10:00-11:00, Room 114

**IR Trainee Session**

**IRT 2606 IRs: from the angiosuite to industry boardrooms and the road to innovation**

*Moderators: A. Gangi (Strasbourg/FR), S.M. Protto (Tampere/FI)*

- 2606.1 Medical devices, innovation and venture capital firms; a beginners' guide  
*A. Gkelou (Paris/FR)*
- 2606.2 Experience with the IR Venture Forum  
*T.P. Murphy (Providence, RI/US)*
- 2606.3 Building your own start-up as an IR  
*A. El Zein (Oxford/UK)*
- 2606.4 Working with the medical devices industry as an IR  
*A. Gangi (Strasbourg/FR)*
- 2606.5 Panel discussion

11:10-12:30, Simulator Gallery

**Simulation Training**■ **SIM 4.3 Peripheral artery disease: angioplasty and stenting (core)***Coordinators: R. Kickuth (Würzburg/DE), J.C. van den Berg (Lugano/CH)**Session organiser: M.A. Ruffino (Turin/IT)**Instructors: C. Del Giudice (Paris/FR), F. Fluck (Würzburg/DE),  
A. Moelker (Rotterdam/NL), W.E.A. Saad (Washington, DC/US)*

11:30-12:30, Auditorium 2

**Expert Round Table**■ **ERT 2701 What's next for EVAR?**IDEAS  
2 0 1 9*Coordinators: F. Fanelli (Florence/IT), R.M. Greenhalgh (London/UK)*

## Introduction

- 2701.1 Device development  
*V. Riambau (Barcelona/ES)*
- 2701.2 Individualised follow-up  
*C.S.P. van Rijswijk (Leiden/NL)*
- 2701.3 Fusion imaging and virtual reality  
*G.M. Richter (Stuttgart/DE)*
- 2701.4 More off-the-shelf in emergency  
*T. Kölbl (Hamburg/DE)*

## Round-table discussion

## Conclusion and take-home points



11:30-12:30, Room 117

**Focus Session**

**FS 2702 Radial access: how and when**

*Moderators: D. Mullan (Manchester/UK), K.H. Stensaeth (Trondheim/NO)*

- 2702.1 The rationale behind it  
*M. Guimaraes (Charleston, SC/US)*
- 2702.2 Radial vs. femoral vs. brachial  
*E. Brountzos (Athens/GR)*
- 2702.3 Which procedure, which devices?  
*G. Andrade (Recife/BR)*
- 2702.4 Complications and their management  
*M. Schoder (Vienna/AT)*

11:30-12:30, Room 112

**Clinical Evaluation Course**

**CEC 2703 Stroke management**





*Moderators: R. Gandini (Rome/IT), P. Mordasini (Bern/CH)*

- 2703.1 Logistics in stroke  
*M. Ribó (Barcelona/ES)*
- 2703.2 Essential imaging for treatment  
*S. Duda (Berlin/DE)*
- 2703.3 Are the time windows extended by the new trials?  
*S. Mangiafico (Florence/IT)*
- 2703.4 Should patients with basilar artery thrombosis be randomised?  
*J.A. Vos (Nieuwegein/NL)*
- 2703.5 How to deal with difficult access  
*A. Consoli (Suresnes/FR)*
- 2703.6 How to deal with complications  
*A. Krajina (Hradec Králové/CZ)*

Round-table discussion

11:30-12:30, Room 115

**Fundamental Course****FC 2704 Essential skills for a clinical interventional radiologist***Moderators: A.-M. Belli (London/UK), D. Vorwerk (Ingolstadt/DE)*

-  2704.1 10 commandments for interventional radiologists  
*B.T. Katzen (Miami, FL/US)*
-  2704.2 What you need to know about coagulation  
*J. Garnon (Strasbourg/FR)*
-  2704.3 Pain management  
*A. Buecker (Homburg/DE)*
-  2704.4 Consulting and breaking bad news  
*J.C. van den Berg (Lugano/CH)*

11:30-12:30, Room 116

**Focus Session****FS 2705 Musculoskeletal: metastatic disease***Moderators: A.D. Kelekis (Athens/GR), S. Masala (Rome/IT)*

- 2705.1 Biopsy in the spine and the peripheral skeleton  
*M. Cifrian Perez (Valencia/ES)*
- 2705.2 Advanced image guidance for musculoskeletal interventions  
*S.M. Tutton (Milwaukee, WI/US)*
- 2705.3 Treatment algorithm in spinal metastatic disease  
*J.W. Jennings (St. Louis, MO/US)*
- 2705.4 Treatment algorithm in peripheral skeleton metastatic disease  
*R.F. Grasso (Rome/IT)*

11:30-12:30, Room 113

**CIRSE meets****CM 2706 CIRSE meets CAIR***Moderators: R.A. Morgan (London/UK), J.K. Wong (Calgary, AB/CA)*

- 2706.1 From CIRA to CAIR, the evolution of IR in Canada  
*R. Abraham (Halifax, NS/CA)*
- 2706.2 Endovascular stroke therapy: a Canadian perspective  
*M. Eesa (Calgary, AB/CA)*
- 2706.3 Experience and lessons learned in a stroke endovascular thrombectomy programme performed by IRs  
*A. Menard (Kingston, ON/CA)*

12:30-14:00, Room 130

**Hands-on Device Training**

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

*Coordinators: A.G. Rampoldi (Milan/IT), S. Spiliopoulos (Athens/GR)*

12:30-13:50, Simulator Gallery

**Simulation Training**

**SIM 4.4 Peripheral artery disease: angioplasty and stenting (core)**

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

*Session organiser: M.A. Ruffino (Turin/IT)*

*Instructors: C. Del Giudice (Paris/FR), F. Fluck (Würzburg/DE),  
A. Moelker (Rotterdam/NL), W.E.A. Saad (Washington, DC/US)*

12:30-14:00, Room 111

**Hands-on Device Training**

**TA-HDT 6 Tumour ablation – Cryo- and laser ablation, IRE and electrochemotherapy**

*Coordinators: A.H. Mahnken (Marburg/DE), M.R. Meijerink (Amsterdam/NL)*

12:30-14:00, Room 132

**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 118

**Safe Sedation Training**

**SED 8 Safe sedation application during IR procedures**

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

13:00-14:00

**Satellite Symposium**

For the detailed programme, please refer to page 168.

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

### News on Stage

#### NoS 2802 From science to practice

*Moderators: Y. Arai (Tokyo/JP), M.D. Darcy (St. Louis, MO/US)*

- 2802.1 Perfusion imaging with 320-slice spiral computed tomography and color-coded digital subtraction angiography for assessing acute skeletal muscle ischemia-reperfusion injury in a rabbit model  
*C. Li; Guangzhou/CN*
- 2802.2 Radiation exposure during transarterial chemoembolization: angio-CT versus cone-beam CT  
*L. Piron<sup>1</sup>, J. Le Roy<sup>1</sup>, C. Cassinotto<sup>1</sup>, J. Delicque<sup>1</sup>, A. Belgour<sup>1</sup>, C. Allimant<sup>1</sup>, J.-P. Beregi<sup>2</sup>, J. Greffier<sup>2</sup>, N. Molinari<sup>1</sup>, B. Guiu<sup>1</sup>; <sup>1</sup>Montpellier/FR, <sup>2</sup>Nîmes/FR*
- 2802.3 A randomized and controlled study comparing patient controlled and radiologist controlled intra-procedural conscious sedation, using midazolam and fentanyl, for patients undergoing insertion of a central venous line  
*W. Clements<sup>1</sup>, D. Sneddon<sup>1</sup>, H. Kavnoudias<sup>1</sup>, T. Joseph<sup>1</sup>, G.S. Goh<sup>1</sup>, J. Koukounaras<sup>1</sup>, T.M. Snow<sup>2</sup>; <sup>1</sup>Melbourne, VIC/AU, <sup>2</sup>Brisbane, QLD/AU*
- 2802.4 Left distal Percutaneous Radial hEmostasis using a Truncated dEflation Algorithm; IdPROTEA: safety and nursing impact assessment  
*D. Klass, L. Cardarelli-Leite, A. Hadjivassiliou, J. Chung, D.M. Liu, S. Ho; Vancouver, BC/CA*
- 2802.5 Women in interventional radiology: Australia's gender gap  
*M. Foo<sup>1</sup>, J. Maingard<sup>2</sup>, M. Wang<sup>1</sup>, K. Phan<sup>3</sup>, R. Lim<sup>4</sup>, H.K. Kok<sup>5</sup>, R. Chandra<sup>2</sup>, M.J. Lee<sup>6</sup>, H. Asad<sup>2</sup>, M. Brooks<sup>1</sup>; <sup>1</sup>Heidelberg, VIC/AU, <sup>2</sup>Clayton, VIC/AU, <sup>3</sup>Liverpool, NSW/AU, <sup>4</sup>Frankston, VIC/AU, <sup>5</sup>Melbourne, VIC/AU, <sup>6</sup>Dublin/IE*
- 2802.6 Platform for preclinical MRI-guided focused ultrasound hyperthermia  
*U. Roy<sup>1</sup>, M. Fournelle<sup>2</sup>, S. Greiser<sup>1</sup>, R.V. Gorkum<sup>3</sup>, D. Speicher<sup>2</sup>, T. Grunwald<sup>1</sup>, S. Kozerke<sup>3</sup>, S. Tretbar<sup>2</sup>, L. Landgraf<sup>1</sup>, A. Melzer<sup>1</sup>; <sup>1</sup>Leipzig/DE, <sup>2</sup>St. Ingbert/DE, <sup>3</sup>Zurich/CH*

14:30-15:00, Auditorium 1

### Honorary Lecture

#### HL 2901 Josef Roesch Lecture

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

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

- 2901.1 Pathways and challenges to innovation in interventional oncology  
*G. Narayanan (Miami, FL/US)*

15:00-16:00, Auditorium 1

**Hot Topic Symposium**

■ **HTS 2902 Durability: the Achilles heel of EVAR**



*Moderators: R.A. Morgan (London/UK), G.M. Richter (Stuttgart/DE)*

Introduction

- 2902.1 Adherence to IFU: essential to durability?  
*J.C. van den Berg (Lugano/CH)*
- 2902.2 Are more fenestrations better for longer durability?  
*A. Katsargyris (Nuremberg/DE)*
- 2902.3 New devices and adjuncts: will they improve durability?  
*M.S. Hamady (London/UK)*
- 2902.4 Take all the options into consideration  
*M.P. Jenkins (London/UK)*

Round-table discussion

Conclusion and take-home points

16:15-17:15, Auditorium 2

**Focus Session**

■ **FS 3001 Open surgery vs. endoluminal treatment for TAAA**



*Moderators: M.P. Jenkins (London/UK), J. Lammer (Vienna/AT)*

- 3001.1 Role of open surgery after failed TEVAR in the thoracic and thoraco-abdominal segment  
*M. Shrestha (Hannover/DE)*
- 3001.2 When is thoraco-abdominal surgery still needed?  
*J. Kalder (Aachen/DE)*
- 3001.3 De-branching surgery still needed?  
*F.E. Vermassen (Ghent/BE)*
- 3001.4 Technical options in endovascular repair  
*M.S. Hamady (London/UK)*

16:15-17:15, Room 133

**Workshop**

**WS 3002 Enteral feeding: gastrostomy, gastrojejunostomy and direct jejunostomy**

3002.1 *M.K. Glynos (Athens/GR)*3002.2 *P. Vilares Morgado (Porto/PT)*

16:15-17:15, Room 112

**Expert Round Table**

**ERT 3003 Controversies in endovascular thrombectomy**

*Moderators: F. López Zárraga (Vitoria/ES), T. Struffert (Giessen/DE)*

Introduction

3003.1 Bypassing primary stroke centres

*V. Costalat (Montpellier/FR)*

3003.2 Skipping vs. bridging in tandem lesions

*L. De Paoli (Klagenfurt/AT)*

3003.3 Local and general anaesthesia, sedation

*W.H. van Zwam (Maastricht/NL)*

3003.4 Thrombectomy, aspiration first, combined treatment

*A. Consoli (Suresnes/FR)*

Round-table discussion

Conclusion and take-home points

16:15-17:15, Room 115


**Focus Session**

**FS 3004 Musculoskeletal: ablation, consolidation, embolisation**


*Moderators: T. Heller (Rostock/DE), N. Karunanithy (London/UK)*

 3004.1 Percutaneous consolidation: basics of biomechanics


*P. Clavert (Strasbourg/FR)*

 3004.2 Overview of ablation methods

*M.R. Callstrom (Rochester, MN/US)*

 3004.3 Ablation and consolidation

*A.N. Kurup (Rochester, MN/US)*

 3004.4 The role of arterial embolisation

*A.G. Ryan (Waterford City/IE)*

16:15-17:15, Room 113

**Workshop**

**WS 3005 Venous access**

3005.1 *D. Savio (Turin/IT)*

3005.2 *M. Casares Santiago (Palma de Mallorca/ES)*

16:15-17:15, Room 134

**Workshop**

**WS 3006 Management of visceral aneurysms and pseudoaneurysms**

3006.1 *M.A. Ruffino (Turin/IT)*

3006.2 *F. Wolf (Vienna/AT)*

16:15-17:15, Room 116

**Case-based Discussion**

**CBD 3007 Below the knee**



*Moderators: A. Micari (Bergamo/IT), M. Palena (Abano Terme/IT)*

Introduction

3007.1 The role of perfusion angiography

*J.A. Reekers (Amsterdam/NL)*

3007.2 The new generation of drug-coated balloons

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

3007.3 The new generation of drug-eluting stents

*H. van Overhagen (The Hague/NL)*

3007.4 Deep venous arterialisation

*S. Kum (Singapore/SG)*

Conclusion and take-home points



e-voting



recommended for EBIR preparation

16:15-17:15, Room 114

Free Paper Session

FP 3008 **Super Tuesday**SUPER  
TUESDAY*Moderators: M.S. Johnson (Indianapolis, IN/US),**T.J. Kroencke (Augsburg/DE)*

- 3008.1 Impact of combined coiling and liquid sclerotherapy compared with coiling only on symptoms of pelvic congestion syndrome: a randomised controlled trial  
*M.A.H. Soliman; Mansoura/EG*
- 3008.2 Randomised controlled trial comparing drug eluting balloon versus conventional balloon angioplasty for below the knee arteries in patients with critical limb ischemia  
*B.S. Tan<sup>1</sup>, A. Patel<sup>1</sup>, F.G. Irani<sup>1</sup>, U. Pua<sup>1</sup>, T.T. Chong<sup>1</sup>, S. Leong<sup>1</sup>, G. Tan<sup>1</sup>, E. Chan<sup>1</sup>, K. Damodharan<sup>1</sup>, N.K. Karaddi<sup>1</sup>, L.H.H. Quek<sup>1</sup>, K.D. Zhuang<sup>1</sup>, S.X.J.M. Chan<sup>1</sup>, A. Gogna<sup>1</sup>, C.W. Too<sup>1</sup>, L. Toh<sup>1</sup>, M.C. Burgmans<sup>2</sup>, K. Gummalla<sup>1</sup>, D. Matchar<sup>1</sup>, S.P. Chng<sup>1</sup>, H.H. Win<sup>1</sup>, Y. Wei<sup>1</sup>, S. Chandramohan<sup>1</sup>, P. Kumar<sup>1</sup>, J.M.E. Chua<sup>1</sup>, R.H.G. Lo<sup>1</sup>, K.-H. Tay<sup>1</sup>; <sup>1</sup>Singapore/SG, <sup>2</sup>Leiden/NL*
- 3008.3 Totally percutaneous deep foot veins arterialization: a single centre experience  
*B. Migliara; Peschiera Del Garda/IT*
- 3008.4 Viable allograft intervertebral disc augmentation: preliminary results and safety data in the first 24 patients  
*E. Yoon<sup>1</sup>, D.P. Beall<sup>2</sup>, D. Wagoner<sup>1</sup>; <sup>1</sup>Edmond, OK/US, <sup>2</sup>Oklahoma City, OK/US*
- 3008.5 Intra-operative and post-operative pain management of conventional transarterial chemoembolization (cTACE) for hepatoocular carcinoma (HCC) by different route of intraarterial lidocaine administration: a randomized controlled trial  
*Y.-D. Xiao; Changsha/CN*
- 3008.6 A comparison of retrievability and indwelling complications of Celect and Denali infrarenal vena cava filters: a randomized controlled trial  
*S.H. Baek, K. Han, G.M. Kim, J.H. Kwon, J.Y. Won, M.D. Kim, D.Y. Lee, J. Lee; Seoul/KR*
- 3008.7 MR-guided focused ultrasound (MRgFUS) versus external beam radiation therapy (EBRT) for the treatment of painful bone metastases: a multicenter, phase III, randomized case-control trial  
*S. Dababou, A. Napoli, C. Marrocchio, R. Scipione, G. Alfieri, D. Fierro, C. Catalano; Rome/IT*



17:30-18:30, Auditorium 2

**Workshop**

**WS 3101 FEVAR and BEVAR**



3101.1 *A. Katsargyris (Nuremberg/DE)*

3101.2 *R.G. McWilliams (Liverpool/UK)*

17:30-18:30, Room 116

**Focus Session**

**FS 3102 Biliary**

*Moderators: A. Hatzidakis (Iraklion/GR), A. Manca (Candiolo/IT)*



3102.1 PTBD for benign disease: strictures and stones

*C. Lanciego (Toledo/ES)*



3102.2 PTBD for palliation of malignant bile duct obstruction

*P.E. Huppert (Darmstadt/DE)*



3102.3 PTBD for biliary leakage, bowel perforation and enteral feeding

*A. Moelker (Rotterdam/NL)*



3102.4 PTBD in the ERCP era

*H.-U. Laasch (Manchester/UK)*

17:30-18:30, Room 133

**Workshop**

**WS 3103 Acute stroke management**

3103.1 *R. Gandini (Rome/IT)*

3103.2 *J.D. Molina Nuevo (Albacete/ES)*



e-voting



recommended for EBIR preparation

17:30-18:30, Room 134

**Free Paper Session****FP 3104 Neurointerventions***Moderators: S. Hopf-Jensen (Flensburg/DE), F. López Zárrega (Vitoria/ES)*

- 3104.1 Interim 30-day safety outcomes of Roadsaver dual-layer micromesh carotid artery stent: evidence from a large multicentre European study  
*S. Müller-Hülsbeck<sup>1</sup>, S.A. Kedev<sup>2</sup>, R. Langhoff<sup>3</sup>, K.R. Deloose<sup>4</sup>, R. Beelen<sup>5</sup>, O. Francois<sup>6</sup>, Z. Vajda<sup>7</sup>, A. Szolics<sup>8</sup>, B. Faurie<sup>9</sup>, J.-L. Banos<sup>10</sup>; <sup>1</sup>Flensburg/DE, <sup>2</sup>Skopje/MK, <sup>3</sup>Berlin/DE, <sup>4</sup>Dendermonde/BE, <sup>5</sup>Aalst/BE, <sup>6</sup>Kortrijk/BE, <sup>7</sup>Kaposvár/HU, <sup>8</sup>Pécs/HU, <sup>9</sup>Grenoble/FR, <sup>10</sup>Bayonne/FR*
- 3104.2 Initial clinical results and in-vitro testings of the new CGuard™ MicroNet® covered carotid-stent: one size fits all  
*C. Wissgott<sup>1</sup>, C. Brandt-Wunderlich<sup>2</sup>, C. Kopetsch<sup>1</sup>, W. Schmidt<sup>2</sup>, R. Andresen<sup>1</sup>; <sup>1</sup>Heide/DE, <sup>2</sup>Rostock/DE*
- 3104.3 Selective transvenous embolization combined with balloon angioplasty of occluded inferior petrosal sinus for the treatment of cavernous sinus dural arteriovenous fistulas  
*H. Kiyosue<sup>1</sup>, S. Ide<sup>1</sup>, K. Tokuyama<sup>2</sup>, Y. Hori<sup>2</sup>; <sup>1</sup>Yufu/JP, <sup>2</sup>Oira/JP*
- 3104.4 Safety and efficacy of transvenous embolization of ruptured brain arteriovenous malformations as a last resort: a prospective single arm study  
*Y. He, W. Bai, L. Tianxiao; Zhengzhou/CN*
- 3104.5 Breaking new ground – flow diversion beyond the circle of Willis: endovascular aneurysm treatment in peripheral cerebral arteries employing a novel low-profile flow diverting stent  
*S. Schob; Leipzig/DE*
- 3104.6 Early cerebral vein opacification as imaging marker for hemorrhagic reconversion in ischemic stroke: a retrospective study  
*A. Ferrari, F. Schirru, F. Fusaro, P. Enne, C. Ganau, S. Corraïne, S. Comelli; Cagliari/IT*
- 3104.7 Preliminary results of the GPX embolic in a rabbit aneurysm model  
*R. Mühl-Benninghaus, F. Fries, U. Yilmaz, A. Simgen, T. Tomori, W. Reith; Homburg/DE*

17:30-18:30, Room 113

**Free Paper Session**

**FP 3105 Gynaecology and urogenital interventions**

*Moderators: J.J. Ciampi Dopazo (Toledo/ES), A.V. Giordano (L'Aquila/IT)*

- 3105.1 Thermal ablation of renal tumors in patients with a solitary kidney: evaluation of renal function in patients with single tumor and with multiple tumors  
*P.B. García Jurado, M.E. Perez Montilla, J.J. Espejo Herrero, S. Lombardo Galera, I.D. Domínguez Paillacho, L.J. Zurera Tendero; Córdoba/ES*
- 3105.2 Benign prostatic hyperplasia treated by an ultrasound guided transperineal laser ablation, in local anaesthesia, by interventional radiologists: outcome in 81 patients with at least 6 months follow-up  
*G. Patelli<sup>1</sup>, S. Paganoni<sup>2</sup>, G. Mauri<sup>3</sup>, C.M. Pacella<sup>4</sup>; <sup>1</sup>Alzano Lombardo/IT, <sup>2</sup>Seriate/IT, <sup>3</sup>Milan/IT, <sup>4</sup>Albano Laziale/IT*
- 3105.3 Correlation of transabdominal contrast-enhanced ultrasound and magnetic resonance imaging for evaluation of prostate artery embolization procedures  
*A. Massmann, C. Niklas, R. Kubale, P. Fries, G.K. Schneider, A. Buecker; Homburg/DE*
- 3105.4 Endometrial assessment prior to uterine artery embolisation  
*M.K. O'Reilly, M.J. Lee, T. Geoghegan; Dublin/IE*
- 3105.5 Uterine artery embolisation for women with giant versus non-giant uterine fibroids: a systematic review & meta-analysis  
*O. Llewellyn<sup>1</sup>, N.R. Patel<sup>2</sup>, D. Mallon<sup>2</sup>, M.S. Hamady<sup>2</sup>; <sup>1</sup>Edinburgh/UK, <sup>2</sup>London/UK*
- 3105.6 A new approach: unilateral UFE in women with symptomatic fibroids  
*S.O.J.H. Adriaansens, A. Mohamad, A. Venmans, A.J. Smeets, P.N.M. Lohle; Tilburg/NL*
- 3105.7 Radial artery approach: a new opportunity  
*N. Romero<sup>1</sup>, A. Alguersuari<sup>1</sup>, E. Criado Paredes<sup>1</sup>, J. Guitart<sup>2</sup>, J.F. Falco-Fages<sup>1</sup>, M. Teixidor Vinas<sup>1</sup>; <sup>1</sup>Sabadell/ES, <sup>2</sup>Barcelona/ES*

17:30-18:30, Room 114

**Free Paper Session****FP 3106 Biopsy and drainage***Moderators: J. Kettenbach (Wiener Neustadt/AT), S. Stojanovic (Novi Sad/RS)*

- 3106.1 Minocycline hydrochloride as a soft sclerotizing agent for symptomatic simple renal and hepatic cysts: our experience  
*A. Paladini<sup>1</sup>, A. Borzell<sup>2</sup>, F. Pane<sup>2</sup>, G. Guzzardi<sup>1</sup>, G.E. Vallati<sup>3</sup>, G. Pizzi<sup>3</sup>, A. Carriero<sup>1</sup>, D. Negroni<sup>1</sup>, A. Galbiati<sup>1</sup>; <sup>1</sup>Novara/IT, <sup>2</sup>Naples/IT, <sup>3</sup>Rome/IT*
- 3106.2 Efficacy of the tract embolization technique with gelatin sponge slurry to reduce pneumothorax and chest tube placement after percutaneous CT-guided lung biopsy  
*F. Cousin, H. Renier, L. Gérard, P. Lamborelle, R. Hustinx; Liège/BE*
- 3106.3 Percutaneous image-guided drainage of the main pancreatic duct: what for and how  
*M. Mizandari<sup>1</sup>, T. Azrumelashvili<sup>1</sup>, G. Asatiani<sup>1</sup>, O. Kepuladze<sup>1</sup>, N. Habib<sup>2</sup>; <sup>1</sup>Tbilisi/GE, <sup>2</sup>London/UK*
- 3106.4 Preliminary study on the catheter-based endoluminal radiofrequency sealing of pancreatic duct  
*E. Ewertowska<sup>1</sup>, A. Andaluz<sup>2</sup>, X. MolP, A. Aguilar<sup>2</sup>, F. Garcia<sup>2</sup>, D. Fondevila<sup>2</sup>, R. Quesada<sup>2</sup>, M. Trujillo<sup>1</sup>, E. Berjano<sup>1</sup>, F. Burdío<sup>2</sup>; <sup>1</sup>Valencia/ES, <sup>2</sup>Barcelona/ES*
- 3106.5 Feasibility of non-invasive MR-based characterization of pleural effusions and ascites in patients with suspected lymphatic leakage using the 6-point mDIXON fat quantification method  
*C.C. Pieper, A.M. Sprinkart, D. Kütting; Bonn/DE*
- 3106.6 Novel use of guiding device for CT-guided transoral biopsies of challenging retropharyngeal lesions  
*H.Y. Tan, S. Leong, C.W. Too; Singapore/SG*
- 3106.7 Transvenous biopsy of native kidneys and renal transplants  
*A. Schmid, S. Svandrlik, K.F. Hilgers, K. Amann, M. Uder; Erlangen/DE*




## Wednesday, September 11

08:30-09:30, Room 113

### Focus Session

#### FS 3201 The 20 most important studies on hepatocellular carcinoma

Moderators: *J.I. Bilbao (Pamplona/ES), P.L. Pereira (Heilbronn/DE)*





-  3201.1 The 5 most important studies on ablation  
*L. Crocetti (Pisa/IT)*
-  3201.2 The 5 most important studies on transcatheter arterial chemoembolisation  
*K. Malagari (Athens/GR)*
-  3201.3 The 5 most important studies on transarterial radioembolisation  
*A. Denys (Lausanne/CH)*
- 3201.4 The 5 most important studies on systemic treatments  
*Y. Arai (Tokyo/JP)*

08:30-09:30, Room 115

### Focus Session

#### FS 3202 Prostate artery embolisation: 360°

Moderators: *M. Grosso (Cuneo/IT), R. Kickuth (Würzburg/DE)*

-  3202.1 The science behind prostate artery embolisation  
*F.C. Carnevale (São Paulo/BR)*
-  3202.2 Defining the anatomy  
*S. Modi (Southampton/UK)*
-  3202.3 Embolisation technique  
*A.G. Rampoldi (Milan/IT)*
-  3202.4 Complications and management  
*I. Insausti Gorbea (Pamplona/ES)*

08:30-09:30, Room 116

**Video Learning Session**

■ **VL 3203 Arterial Interventions**

*Moderators: C. Del Giudice (Paris/FR), T. Zander (Santa Cruz de Tenerife/ES)*

- 3203.1 Long CTO of the SFA  
*to be announced*
- 3203.2 Carotid stenting  
*A. Micari (Bergamo/IT)*
- 3203.3 Challenge BTK recanalisation (retrograde access)  
*L. Patrone (London/UK)*

10:00-11:00, Room 116

**Focus Session**

■ **FS 3301 Thyroid management of nodular diseases**

*Moderators: A. Bharadwaz (Aarhus/DK), G. Mauri (Milan/IT)*

- 3301.1 Tools and techniques for nodular thyroid diseases  
*F. Stacul (Trieste/IT)*
- 3301.2 Interventional radiology in benign thyroid lesions:  
how to select the “fit” patient  
*R. Cervelli (Pisa/IT)*
- 3301.3 Interventional radiology management options for thyroid  
cancer: algorithm proposal  
*J.-H. Kim (Seoul/KR)*
- 3301.4 Treatments in metastatic thyroid cancer  
*R.L. Cazzato (Strasbourg/FR)*

WED

10:00-11:00, Room 112

### Expert Round Table

## ERT 3302 Management of polytraumatised patients

*Moderators: J.G. Moss (Glasgow/UK), O.M. van Delden (Amsterdam/NL)*

Introduction

- 3302.1 The role of the trauma team  
*C. Pilasi Menichetti (London/UK)*
- 3302.2 Diagnostic modalities: US vs. CT  
*E. Bertelli (Florence/IT)*
- 3302.3 Interventional radiology techniques in trauma  
*J. Golzarian (Minneapolis, MN/US)*
- 3302.4 When the surgeon has to intervene  
*K.J. Ponsen (Alkmaar/NL)*

Round-table discussion

Conclusion and take-home points

10:00-11:00, Room 113

### Case-based Discussion

## CBD 3303 Venous mishaps, disasters and catastrophes: salvage approaches

*Moderators: P.A.M.S. Almeida (Viseu/PT),  
A. Bravo De Laguna Taboada (Las Palmas/ES)*

Introduction

- 3303.1 Superior vena cava rupture  
*A.N. Makris (Westmont, IL/US)*
- 3303.2 Massive pulmonary embolism during thrombectomy  
*P.E. Andersen (Odense/DK)*
- 3303.3 Iliac venous ruptures  
*M. Rossi (Rome/IT)*
- 3303.4 Stent migration  
*R. Lakshminarayan (Hull/UK)*

Conclusion and take-home points

11:30-12:30, Room 112

**MM 3401 Morbidity and Mortality Conference**



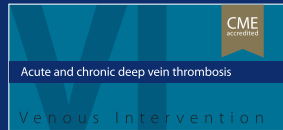
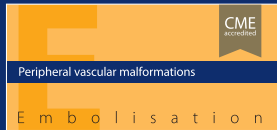
*Moderators: A. Hatzidakis (Iraklion/GR), A.G. Ryan (Waterford City/IE)*

- 3401.1 Veins against arteries  
*M.D. Darcy (St. Louis, MO/US)*
- 3401.2 The first cut is the deepest  
*A.M. Cahill (Philadelphia, PA/US)*
- 3401.3 Friday night. What else can go wrong?  
*A. Diamantopoulos (London/UK)*
- 3401.4 To remove or not to remove?  
*G.S. Goh (Melbourne, VIC/AU)*
- 3401.5 Be gentle with the liver  
*F.G. Irani (Singapore/SG)*
- 3401.6 We are not living this  
*K. Lagios (Athens/GR)*



From  
curriculum  
to career

# CIRSE academy



## The CIRSE Academy: online IR education at its best

A comprehensive range of **online courses** **curated by leading IR experts** in the field. **The 26 courses across 7 topics** are reviewed by the UEMS and **CME accredited**.

Based on the European Curriculum and Syllabus in IR, all courses include interactive learning via a range of texts, graphics, videos and quizzes. Become a better IR, gain CME points and prepare for the EBIR in **less than two hours**.

For a full list of available courses visit  
[cirse.org/education/academy](http://cirse.org/education/academy)



# P O S T E R S

This year, a record number of abstracts have been both submitted and accepted for electronic poster presentation! A staggering 850 posters will be presented at CIRSE 2019, offering delegates a huge range of new scientific and educational material to peruse.

Posters will be available to view on computers in the **Poster Area**, which is located in the exhibition hall on the entrance level of the congress centre (please see the floorplan on page 275).

## **Poster Area opening hours:**

Saturday, September 7	07:30-18:30
Sunday, September 8	07:30-18:30
Monday, September 9	07:30-18:30
Tuesday, September 10	07:30-18:30

In addition, the **CIRSE 2019 event app** will provide an overview of all available posters.

Congress attendees may browse through a wealth of scientific and educational abstracts as well as case reports, whenever they have time and at their own pace.

# AT CIRSE 2019

After the congress, all posters will be published in the **CIRSE Library**, our online resource for congress recordings, to which CIRSE members have free access.

In addition, the relevant abstracts can be found in the **CIRSE 2019 Book of Abstracts**, which will be published as a supplement of **CVIRonline**.

## Poster Awards

After a careful review process, some posters have been selected for one of the prestigious poster awards:



**Magna Cum Laude  
Cum Laude  
Certificate of Merit**

The award-winning posters and their authors will be announced in the congress newspaper.

**Congratulations to all winners!**

# ETF 2019

## European Trainee Forum

### Trainees, residents and young IRs at CIRSE 2019!

Are you currently in training to become an IR or at the start of your IR career? Then don't miss the exciting programme tailored especially to young IRs organised by the **CIRSE European Trainee Forum (ETF)**!

The ETF is an open forum aiming to enhance the participation of young physicians in international scientific and educational activities. One of the primary goals of the ETF is to facilitate career-furthering opportunities by bringing together young IRs-in-training to build a **European network within CIRSE**. The ETF activities are planned by the CIRSE ETF Subcommittee and executed exclusively at CIRSE's Annual Meeting.

The **CIRSE European Trainee Forum Subcommittee** was established in 2015, and since then it has become the voice of young European IRs-in-training, providing important input on IR training pathways across European countries. This crucial **feedback from 25 European countries** enables the Subcommittee to adjust the European Trainee Forum activities accordingly, highlighting all the benefits of the field for the next generation of IRs.



*The ETF Subcommittee at ECIO 2019*

The ETF Subcommittee has been very active throughout the past year and has put together a wide-ranging programme for this year's CIRSE, including both educational sessions and networking events. Trainees and residents can again look forward to popular **ETF Short Talks** and **IR Trainee Sessions** focused on future IR technologies, building an IR career, clinical practice or topics related to IR innovations. Additionally, all trainees and residents will have a chance to informally network with their peers at the **ETF Networking Event** and to put their knowledge gained at CIRSE 2019 to the test by taking part in the **ETF Quiz!**

**Boost your career by joining our ETF community and attending the special events and sessions organised by the European Trainee Forum!**

## **IR Trainee Sessions**

**Future IR technologies**

**Saturday, Sept 7, 10:00-11:00, Room 113**

**Building an IR career**

**Sunday, Sept 8, 10:00-11:00, Room 114**

**Clinical practice for trainees, residents and young IRs**

**Monday, Sept 9, 10:00-11:00, Room 114**

**IRs: From the angiosuite to industry boardrooms and the road to innovation**

**Tuesday, Sept 10, 10:00-11:00, Room 114**

## **ETF Short Talks**

**Clinical and academic opportunities in and outside the EU**

**Saturday, Sept 7, 11:45-12:45, News-on-Stage area**

**Interventional radiology, global health and reaching out to the rest of the world!**

**Sunday, Sept 8, 11:45-12:45, News-on-Stage area**

**Practical career advice for young IRs**

**Monday, Sept 9, 11:30-12:45, News-on-Stage area**

## **ETF Networking Event**

**Sunday, Sept 8, 13:00-14:00, Foyer Rambla**

## **ETF Quiz**

**Tuesday, Sept 10, 14:30-16:00, Foyer Rambla**

**The European Trainee Forum looks forward to welcoming you!**



# Dinner & Farewell Party

# CIRSE 2019

**Tuesday, September 10**

**Come join us to celebrate the end of another successful Annual Congress!**

**The CIRSE 2019 Dinner & Farewell Party will be held at Can Travi Nou restaurant, an authentic Catalan farmhouse situated in a picturesque rustic setting. You can look forward to a delicious three-course dinner, followed by a party in the compound's beautiful garden which is sure to last until the early morning hours.**

### **Dinner and party tickets**

*(include cocktail reception, dinner, complimentary drinks, entertainment):*

EUR 75 each

### **Party only tickets**

*(include 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 Kuoni Congress) is directed to participants of CIRSE 2019 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 2019 Dinner & Farewell Party is NOT included in the CIRSE 2019 registration fee!*

Barcelona, Spain  
September 7-11

# CIRSE 2019

## **CORPORATE ACTIVITIES & EXHIBITION**

**Satellite Symposia**

**Learning Centres**

**Industry Training Village**

**HDT Sponsors**

**Safe Sedation Training Sponsors**

**Simulation Training Sponsors**

**Technical Exhibition**

**Radiation Protection Pavilion**

**Societies**



# Proven design.

From the proximal to the distal seal, the Zenith Alpha™ Abdominal device is engineered to help you deliver a durable repair.

Zenith Alpha™  
ABDOMINAL ENDOVASCULAR GRAFT

≥15 MM  
SEAL  
ZONE

3-PIECE  
MODULAR  
SYSTEM

DURABLE  
REPAIR

## Learn more at

[cookmedical.eu/aortic-intervention](http://cookmedical.eu/aortic-intervention).

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

The Zenith Alpha™ Endovascular System consists of:

Zenith Alpha Abdominal Endovascular Graft

Zenith Alpha Spiral-Z® Endovascular Leg

Can also include:

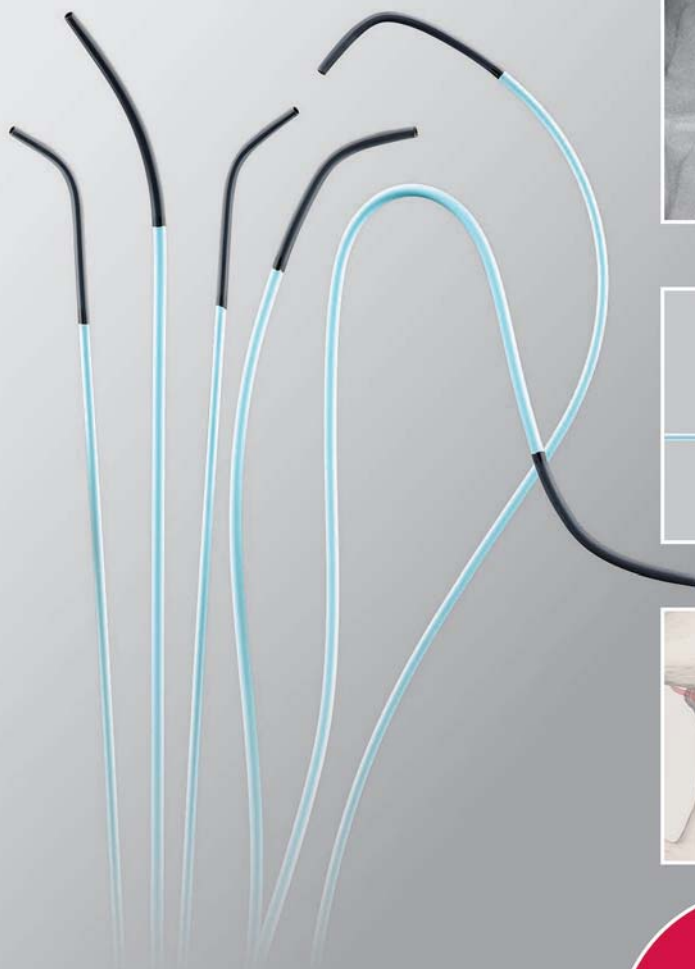
Zenith® Branch Endovascular Graft - Iliac Bifurcation



[cookmedical.eu](http://cookmedical.eu)



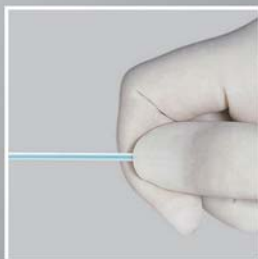
# It's back.



## VISIBILITY



## PUSHABILITY



## TORQUABILITY



**Cook Beacon<sup>®</sup> Tip 5.0 Fr**  
ANGIOGRAPHIC CATHETERS

Visit our booth  
to get hands-on  
with Beacon Tip.



## Satellite Symposia

### Saturday, September 7

13:00-14:00, Auditorium 2

#### Philips

#### **SY 401 Putting innovations in interventional radiology to work**

*Moderators: A. Gupta (Philadelphia, PA/US), G. Maleux (Leuven/BE),  
J. Palussiere (Bordeaux/FR)*

- 401.1 How perfusion angiography benefits CLI procedures  
*D.A. van den Heuvel (Nieuwegein/NL)*
- 401.2 See clearly. Treat optimally. The added value of intravascular imaging and vessel preparation to optimise outcomes  
*F. Fanelli (Florence/IT)*
- 401.3 Percutaneous lung tumour biopsy under CBCT guidance with PET-CT fusion imaging  
*C. Floridi (Milan/IT)*
- 401.4 Augmented reality based navigation during percutaneous vertebroplasty  
*P. Auloge (Strasbourg/FR)*

13:00-14:00, Room 114

#### PharmaCept

#### **SY 402 Chemoembolisation with degradable starch microspheres (DSM): experience in liver and lung tumors**

*Moderator: R. Iezzi (Rome/IT)*

- 402.1 The rationale for transient material in chemoembolisation – description of concept and use of DSM-TACE  
*K. Malagari (Athens/GR)*
- 402.2 DSM for TACE in liver tumours  
*T.J. Vogl (Frankfurt/DE)*
- 402.3 DSM for TPCE in lung tumours  
*A. Kovács (Bonn/DE)*

13:00-14:00, Room 117

**Cook Medical**

**SY 403 Paclitaxel: the latest in its safety and efficacy**

*Moderators: M.D. Dake (Tucson, AZ/US)*

Introduction by the moderator

- 403.1 Follow the data: Zilver PTX global data analysis  
*M.D. Dake (Tucson, AZ/US)*
- 403.2 Swedepad: an update  
*M. Delle (Stockholm/SE)*
- 403.3 Paclitaxel devices: real world evaluation of survival in peripheral vascular revascularisation  
*E. Secemsky (Boston, MA/US)*
- 403.4 Recent meta-analysis: how does this impact my daily clinical practice?  
*T. Zeller (Bad Krozingen/DE)*

Discussion and summary

14:00-14:30, Auditorium 2

**Abbott Vascular**

**SY 405 Importance of optimal diagnosis and treatment**

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

Introduction by the moderator

- 405.1 How to recognise and optimally diagnose PCS  
*J. Urbano (Madrid/ES)*
- 405.2 How to best treat PCS?  
*J. Urbano (Madrid/ES)*

Take home message

16:15-16:35, Room 134

**Biotronik AG**

**SY 609 Novel efficient approach to old expensive challenge**

*Moderator: K.R. Deloose (Dendermonde/BE)*

609.1 Crossing challenging lesions

*M. Palena (Abano Terme/IT)*

609.2 Opening challenging lesions

*J.C. van den Berg (Lugano/CH)*

## Sunday, September 8

08:00-08:20, Room 134

### Veryan Medical

#### **SY 801 BioMimics 3D® – The Swirling Flow® stent – the ideal alternative to drug elution**

*Moderator: P.A. Gaines (Sheffield/UK)*

- 801.1 The paclitaxel controversy: where we are now  
*P.A. Gaines (Sheffield/UK)*
- 801.2 Why Swirling Flow® is the ideal alternative to drug elution  
*M. Piorkowski (Frankfurt/DE)*
- 801.3 BioMimics 3D®: the latest clinical evidence  
*M. Lichtenberg (Arnsberg/DE)*

08:00-08:20, Room 133

### LifeTech Scientific

#### **SY 802 Experience sharing of LifeTech Ankura Stent Graft System**

- 802.1 Our TEVAR repair experience with LifeTech Ankura TAA  
*H.Z. İşcan (Ankara/TR)*
- 802.2 Our EVAR repair experience with LifeTech Ankura AAA  
*E.U. Ünal (Ankara/TR)*

11:30-12:30, Room 117

**Boston Scientific**

**SY 1102 Moving forward with drug eluting technologies: patient-centric approaches for peripheral arterial disease**

*Moderator: F. Fanelli (Florence/IT)*

Introduction by the moderator

- 1102.1 What have we learned about the application of paclitaxel via a balloon?  
*G. Tepe (Rosenheim/DE)*
- 1102.2 What have we learned about the application of paclitaxel via a stent?  
*Y. Gouëffic (Nantes/FR)*
- 1102.3 Navigating societies' and regulatory responses and next steps  
*K.R. Deloose (Dendermonde/BE)*
- 1102.4 Discussion: how do we develop a patient centric treatment approach?  
*K.R. Deloose (Dendermonde/BE), Y. Gouëffic (Nantes/FR), G. Tepe (Rosenheim/DE)*

Closing remarks and take-home message

11:30-12:30, Room 116

**Sirtex Medical Europe GmbH**

**SY 1103 Better selection – better SIRT with SIR-Spheres® Y-90 resin microspheres**

*Moderator: J.I. Bilbao (Pamplona/ES)*

- 1103.1 Frontline treatments for mCRC: which patients should receive SIR-Spheres®?  
*R. Sharma (London/UK)*
- 1103.2 SIRT-ablation with SIR-Spheres®: is a more flexible approach needed or is good patient selection sufficient?  
*M. Vouche (Brussels/BE)*
- 1103.3 BCLC subclass consideration in intermediate HCC: when to SIRT and when to TACE  
*P.L. Pereira (Heilbronn/DE)*
- 1103.4 A Game of Becquerels – the Battle of the IRon-Throne  
*H. Ilhan (Munich/DE)*
- 1103.5 The road-map for Sirtex: vision, care, collaboration and 100 000 doses ... and counting  
*W. Denman (Woburn, MA/US)*

Panel discussion

11:30-12:30, Room 115

**Biotronik AG**

**SY 1104 Optimising outcomes in FEMPOP occlusive diseases**

*Moderator: J.C. van den Berg (Lugano/CH)*

- 1104.1 Radial force(s?): the concept  
*J.C. van den Berg (Lugano/CH)*
- 1104.2 High COF shows increase of neointimal proliferation: pre-clinical evaluation of low vs high COF stents  
*R. Coscas (Boulogne-Billancourt/FR)*
- 1104.3 Increased outward force of self-expanding BMS in the SFA could be a significant risk factor for restenosis  
*M. Brodmann (Graz/AT)*
- 1104.4 Difference in clinical outcomes of low COF stent vs high COF stent proven in clinical practice  
*M.A. Funovics (Vienna/AT)*

# Future perspectives in Lipiodol® use for liver diseases management

**Chairman:** Prof. Ricky Sharma, UCL Cancer Institute,  
University College London, England



**Sunday,  
September 8<sup>th</sup>**



**13:00 - 14:00**



**Room 117**



**Barcelona,  
Spain**

- ◆ **Future perspectives in HCC treatment #1: combined cTACE & Immunotherapy**  
Dr. Rafael Duran, CHUV University Hospital, Lausanne – Switzerland
- ◆ **Future perspectives in HCC treatment #2: cTACE outside intermediate stage**  
Dr. Roman Kloeckner, University Medical Center Mainz, Mainz – Germany
- ◆ **Future perspectives in lymphography for lymphatic hepatic leakages**  
Prof. ChristofMatthias Sommer, University Hospital Heidelberg, Heidelberg – Germany
- ◆ **Q&A and Conclusion**  
By the Chairman

## Guerbet



**LIPODOL® ULTRA-FLUID. Composition:** Ethyl esters 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 frontal sinuses - Pre and postoperative 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 vascularization during Trans-Arterial Chemo-Embolization (TACE) of hepatocellular carcinoma at intermediate stage, in adults - Selective embolization in combination with Histoacryl glue (particularly for arteriovenous malformation or aneurysms) - Selective injections of LIPODOL 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. **Posology 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 LIPODOL 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 intravascular LIPODOL ULTRA-FLUID. Perform radiological monitoring during LIPODOL 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 LIPODOL 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 ≥8), advanced liver dysfunction, macroscopic invasion and/or extra-hepatic spread of the tumour. Renal insufficiency must be prevented by correct rehydration 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 dose 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 LIPODOL ULTRA-FLUID and certain surgical glues, or even certain batches of glue. Before using new batches of LIPODOL ULTRA-FLUID or surgical glue, the compatibility of LIPODOL ULTRA-FLUID and the glue must be tested in vitro. **Interaction with other medicinal products and other forms of interaction (\*\*)**: Metformin, beta blockers, vasoactive substances, angiotensin-converting enzyme inhibitors, angiotensin receptor antagonists, Diuretics, Interleukin II. **Fertility, pregnancy and lactation (\*\*)**: LIPODOL ULTRA-FLUID must only be used in pregnant women if absolutely necessary and under strict medical supervision. Breastfeeding should be discontinued if LIPODOL ULTRA-FLUID must be used. **Effects on ability to drive and use machines:** The effects on 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, diarrhea, nausea, fever, pain, dyspnea, cough, hypothyroidism, hyperthyroidism, thyroiditis, pulmonary embolism, cerebral embolism, retinal vein thrombosis, lymphoedema aggravation, hepatic vein thrombosis, granuloma.** **Overdose (\*\*)**: The total dose of LIPODOL 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 CdG cedex - FRANCE. Information: tel: 33 (0) 1 45 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. Indications and dosage may vary from country to country. Countries in which cTACE indication is registered: Austria, Belgium, Bulgaria, Brazil, Cambodia, Czech Republic, France, Hong Kong, Hungary, Luxembourg, Ireland, India, Iran, Mexico, Mongolia, New Zealand, Peru, Portugal, Philippines, South Korea, Switzerland, Turkey, The Netherlands, Thailand, Taiwan, Tunisia, Vietnam. Country in which adjustment of drugs or medical devices is registered: Japan. Lipiodol® is not commercialized in Spain. For complete information please refer to country's local SPC. For a copy of the SPC, please contact a member.



13:00-14:00, Room 117

**Guerbet**

**SY 1201 Future perspectives in Lipiodol® use for liver diseases management**

*Moderator: R. Sharma (London/UK)*

- 1201.1 Future perspectives in HCC treatment #1: combined cTACE & immunotherapy  
*R. Duran (Lausanne/CH)*
- 1201.2 Future perspectives in HCC treatment #2: cTACE outside intermediate stage  
*R. Kloeckner (Mainz/DE)*
- 1201.3 Future perspectives in lymphography for lymphatic hepatic leakages  
*C.M. Sommer (Heidelberg/DE)*

13:00-14:00, Room 112

**Terumo Interventional Systems**

**SY 1202 “Nightmares in the cath lab” – current controversies in complex lesion treatments in the lower limb**

*Moderator: K.R. Deloose (Dendermonde/BE)*

Introduction by the moderator

- 1202.1 Case report: challenges and solutions in BTK interventions  
*M. Palena (Abano Terme/IT)*
- 1202.2 Case report: SFA – what works and what doesn't  
*A.G. Schwandt (Münster/DE)*
- 1202.3 Case report: facing increasing complexities in FemPop procedures  
*M.E. Krokidis (Cambridge/UK)*

Conclusion

# INTERVENTION IN ALL DIMENSIONS

From access to closure. For radial and femoral.

Your preferred way: we offer a comprehensive portfolio spanning all dimensions of minimally invasive solutions from interventional cardiology to interventional oncology to peripheral procedures.



**PUSHING** BOUNDARIES

**TERUMO**  
INTERVENTIONAL  
SYSTEMS



# PUSHING BOUNDARIES

We strive for perfection in our craft,  
so that you can perfect yours.

15682680417111

[www.terumo-europe.com](http://www.terumo-europe.com)

  
**TERUMO**  
INTERVENTIONAL  
SYSTEMS

13:00-14:00, Auditorium 2

**Medtronic**

**SY 1203 Making an impact on peripheral vascular restenosis: treatment solutions for challenging lesions**

*Moderator: F. Fanelli (Florence/IT)*

Introduction by the moderator

- 1203.1 Let evidence guide your practice: safe, effective and durable treatment options using DCB  
*M. Brodmann (Graz/AT)*
- 1203.2 PAD patients at high risk for restenosis: clinical evidence and effective solutions  
*J.C. van den Berg (Lugano/CH)*
- 1203.3 The "other" high risk patient: utilisation of drug-coated balloons for AV access stenoses  
*A. Holden (Auckland/NZ)*

Closing remarks

14:30-14:50, Auditorium 2

**Medtronic**

**SY 1304 Challenges in thoracic aorta and new solutions**

- 1304.1 The new Navion thoracic stent graft: a solution for challenging cases and fragile aortas  
*T. Kratimenos (Athens/GR)*
- 1304.2 Application of heli-FX endoanchors in TAA: tips and tricks  
*H. Rousseau (Toulouse/FR)*

14:30-15:30, Room 116

**Canon**

**SY 1305 Interventional 4D CT imaging: current and future pathways**

*Moderator: B. Guiu (Montpellier/FR)*

- 1305.1 Expanding the boundaries of interventional oncology  
*F. Orsi (Milan/IT)*
- 1305.2 Better, faster, clearer: interventional radiology with Alphenix 4D CT  
*J. Garnon (Strasbourg/FR)*

16:15-16:35, Room 134

**Straub Medical AG**

**SY 1409 Treatment of IF-DVT: clinical, safety and value benefits with the Aspirex®S mechanical thrombectomy device**

*Moderator: M. Lichtenberg (Arnsberg/DE)*

- 1409.1 Value and safety benefits of mechanical thrombectomy with Aspirex®S over lysis in the treatment of iliofemoral DVT occlusions  
*M. Lichtenberg (Arnsberg/DE)*
- 1409.2 Iliofemoral DVT treatment after ATTRACT. Our experience using the Aspirex®S thrombectomy system  
*B. Freitas (Maceió/BR)*
- 1409.3 Recorded case: iliofemoral DVT treatment: tips and tricks  
*R. de Graaf (Friedrichshafen/DE)*

16:45-17:15, Room 134

**Cardionovum**

**SY 1410 Are all DCBs the same? The importance of coating stability**

*Moderators: R. Langhoff (Berlin/DE), A. Micari (Bergamo/IT)*

- 1410.1 Randomised controlled trials in AV fistula: what is new with the Aperto trial?  
What have we learnt so far?  
*J.C. van den Berg (Lugano/CH)*
- 1410.2 Real-life benefits from LegFlow treatment in very long femoropopliteal lesions:  
results from "REFLOW"  
*G.F. Torsello (Münster/DE)*
- 1410.3 Can a non-crystalline coating improve complex procedures? An emblematic  
BTK case  
*K.R. Deloose (Dendermonde/BE)*

17:30-17:50, Room 115

**Alvimedica**

**SY 1411 Thinking different for SFA lesions: the NiTiDES solution**

*Moderators: R. Langhoff (Berlin/DE), D. Scheinert (Leipzig/DE)*

- 1411.1 Today's DES role in SFA treatment  
*S. Müller-Hülsbeck (Flensburg/DE)*
- 1411.2 NiTiDES: the innovative approach for SFA lesions  
*A. Kahlberg (Milan/IT)*
- 1411.3 ILLUMINA study: 2 years results  
*D. Scheinert (Leipzig/DE)*
- 1411.4 From theory to practice  
*R. Langhoff (Berlin/DE)*

## Monday, September 9

07:50-08:20, Auditorium 2

**Medtronic**

### **SY 1601 Off-the-shelf solutions to deal with hostile necks: more options for tailored treatment**

*Moderator: V. Rimbau (Barcelona/ES)*

- 1601.1 APPROACH concept for complex aortic aneurysms  
*K.P. Donas (Münster/DE)*
- 1601.2 Hostile neck off-the-shelf solutions: when and how  
*V. Rimbau (Barcelona/ES)*
- 1601.3 Potential benefits of AAA sac regression on patients and healthcare systems  
*A. Reyes De Valdivia (Madrid/ES)*

08:00-08:20, Room 134

**Abbott Vascular**

### **SY 1602 Mimetic stents for safe and effective SFA treatment – optimal solution from simple to complex lesions**

*Moderator: M. Palena (Abano Terme/IT)*

Introduction by the moderator

- 1602.1 Long dissection occurred – what now?  
*L. Patrone (London/UK)*
- 1602.2 Calcified restenotic lesion – how do I treat?  
*A.L. Diederik (Nieuwegein/NL)*

Take home message

# Vascular Embolization: Improved delivery through better flow management

**Chairman:** Prof. Geert Maleux, UZ Leuven, Leuven – Belgium



**Monday,  
September 9<sup>th</sup>**



**11:30 - 12:30**



**Room 117**



**Barcelona,  
Spain**

♦ **Microspheres Embolization and Flow Dynamic:  
what do we know?**

Prof. Jafar Golzarian, University of Minnesota,  
Minneapolis – USA

♦ **Reduced non-target embolization & Better  
delivery with Sequire® innovative microcatheter**

Prof. Geert Maleux, UZ Leuven, Leuven – Belgium

♦ **Clinical applications of Sequire® control  
reflux microcatheter**

Prof. Florian Wolf, AKH, Vienna – Austria

♦ **Q&A and Conclusion**

By the Chairman

**Guerbet** |



11:30-12:30, Auditorium 2

**BTG**

**SY 1902 How to optimise your venous practice**

*Moderator: H. Jalaie (Aachen/DE)*

- 1902.1 Setting up a venous practice  
*G.J. O'Sullivan (Galway/IE)*
- 1902.2 Five year follow up for acute DVT patients treated with EKOS: experience from Aachen University Hospital  
*H. Jalaie (Aachen/DE)*
- 1902.3 Treatment of chronic DVT with EKOS: reproducing ACCESS PTS data in everyday clinical practice  
*M. Dumantepe (Istanbul/TR)*

Q&A

11:30-12:30, Room 117

**Guerbet**

**SY 1903 Vascular embolisation: improved delivery through better flow management**

*Moderator: G. Maleux (Leuven/BE)*

- 1903.1 Microspheres embolisation and flow dynamic: what do we know?  
*J. Golzarian (Minneapolis, MN/US)*
- 1903.2 Reduced non-target embolisation & better delivery with Sequire® innovative microcatheter  
*G. Maleux (Leuven/BE)*
- 1903.3. Clinical applications of Sequire® control reflux microcatheter  
*F. Wolf (Vienna/AT)*

# WELCOME TO BTG AT CIRSE 2019

We're excited to be here and have a great educational programme planned for the next four days. Our booth features a variety of product and therapy presentations with expert clinicians and technical specialists.

**Join the Education Theatre sessions on our booth featuring a wide range of hot and cool topics including:**

- SIRT segmentectomy & lobectomy
- SIRT personalised dosimetry
- Do all T1a RCC patients need surgery?
- Assessing the cost effectiveness of TheraSphere® in HCC
- RCC ablation: accuracy vs outcomes
- RCC critical structure management & complex cases for cryoablation
- DC Bead LUMI® utility
- Can we standardise the DEB-TACE procedure further?

**MONDAY, SEPTEMBER 9 | 11:30–12:30**

**Auditorium 2 | Satellite Symposium**

## How to Optimise Your Venous Practice

### Setting Up a Venous Practice

*Dr. Gerard J. O'Sullivan Galway University Hospital, Galway, Ireland*

### Five Year Follow Up for Acute DVT Patients Treated with EKOS: Experience from Aachen University Hospital

*Dr. Houman Jalaie Aachen-Maastricht University, Aachen, Germany*

### Treatment of Chronic DVT with EKOS: Reproducing ACCESS PTS Data in Everyday Clinical Practice

*Prof. Mert Dumantepe Acibadem University Hospital, Istanbul, Turkey*

**TheraSphere®**

**Simplicity<sup>90</sup>™**

**ICEfx™**

**DCBeadLUMI®**

Please visit [BTGplc.com](http://BTGplc.com) for product indications and important safety information. ICEfx is a trademark of Galil Medical Inc. Bead Block, DC Bead, DC BeadLUMI and Simplicity<sup>90</sup> are trademarks of Biocompatibles UK Ltd and DC Bead is a registered trademark in China, EU, Japan, Republic of Korea and US. TheraSphere® is manufactured for Biocompatibles UK Ltd. TheraSphere is a trademark of Theragenics, used under license by Biocompatibles UK Ltd. TheraSphere is a registered trademark in China, EU, Japan and Republic of Korea. EKOS and the EKOS logo are trademarks of EKOS Corporation.



**MONDAY, SEPTEMBER 9 | 13:00–14:00**

**Room #117 | Satellite Symposium**

## **New Evidence for Personalised Treatment, a Proven Concept for Better SIRT Outcomes**

**How Can We Implement Real World Data in Our Daily Clinical Practice?**

**Prof. Boris Guiu** *St-Eloi University Hospital, Montpellier, France*

**Clinical and Dosimetric Considerations for Y90: Recommendations  
from an International Multidisciplinary Working Group**

**Dr. Jon Bell** *The Christie NHS Foundation Trust, Manchester, UK*

**MAA Based Personalised Dosimetry with TheraSphere® for HCC:  
Interim Analysis of the Phase II DOSISPHERE Study**

**Prof. Etienne Garin** *Centre Eugene Marquis, Rennes, France*

**Multidisciplinary Panel Discussion – Case Studies**

**Prof. Daniel Seehofer** *University of Leipzig, Leipzig, Germany*

**Dr. María Varela** *Hospital Universitario Central de Asturias, Oviedo, Spain*

**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, SEPTEMBER 7 | PMT-HDT 1 | 09:30–11:00 & PMT-HDT 2 | 12:30–14:00**

**Peripheral Mechanical Thrombectomy**

*Coordinators: R. De Graaf Friedrichshafen, Germany D.K. Tsetis Iraklion, Greece*

**TUESDAY, SEPTEMBER 10 | EMT-HDT 5 | 09:30–11:00 & EMT-HDT 6 | 12:30–14:00**

**Embolisation: Materials and Tools, Particulate Agents**

*Coordinators: A.G. Rampoldi Milan, Italy S. Spiliopoulos Athens, Greece*

**TUESDAY, SEPTEMBER 10 | TA-HDT 6 | 12:30–14:00**

**Cryoablation, Laser Ablation and Irreversible Electroporation**

*Coordinators: A.H. Mahnken Marburg, Germany M.R. Meijerink Amsterdam, Netherlands*

**DCBead**

**BeadBlock**

**BTG** CROSSING  
DEVICES

**BTG Sentry**

**EKOS**

11:30-12:30, Auditorium 1

**Terumo Interventional Systems**

**SY 1904 Driving innovation to improve patient outcomes**

*Moderators: T. de Baère (Villejuif/FR), R. Iezzi (Rome/IT)*

Introduction

*R. Iezzi (Rome/IT)*

- 1904.1 Microwave: why it expands my options in thyroid ablation  
*H. Korkusuz (Frankfurt/DE)*
- 1904.2 Holmium SIRT: the first complete, innovative solution and promising combinations  
*M.G.E.H. Lam (Utrecht/NL)*
- 1904.3 Flow redistribution: the key to improve TACE outcomes in challenging lesions  
*P. Lucatelli (Rome/IT)*
- 1904.4 A glimpse into the future: the innovation never stops  
*T. de Baère (Villejuif/FR)*

13:00-14:00, Auditorium 2

**W.L. Gore & Associates GmbH**

**SY 2001 State of the art & innovative solutions in iliac artery pathologies and portal hypertension**

*Moderators: A. Holden (Auckland/NZ), R. Loffroy (Dijon/FR)*

Introduction by the chairman (part 1)

- 2001.1 Internal iliac artery preservation: the standard of care to sustain quality of life  
*M.A. Ruffino (Turin/IT)*
- 2001.2 Treatment approach for iliac occlusive disease: what is the best option?  
Experience and data  
*A. Massmann (Homburg/DE)*

Discussion and conclusion

Introduction by the chairman (part 2)

- 2001.3 Real life experience using controlled expansion TIPS and the GORE TIPS Set  
*R. Miraglia (Palermo/IT)*
- 2001.4 Improved clinical outcomes using the GORE® VIATORR® TIPS Endoprosthesis with Controlled Expansion: 1-year results  
*J. Trebicka (Frankfurt/DE)*

Discussion and conclusion

13:00-14:00, Room 117

**BTG**

**SY 2002 New evidence for personalised treatment, a proven concept for better SIRT outcomes**

*Moderator: B. Guiu (Montpellier/FR)*

- 2002.1 How can we implement real world data in our daily clinical practice?  
*B. Guiu (Montpellier/FR)*
- 2002.2 Clinical and dosimetric considerations for Y90: recommendations from an international multidisciplinary working group  
*J.K. Bell (Manchester/UK)*
- 2002.3 MAA based personalised dosimetry with TheraSphere for HCC: interim analysis of the phase II DOSISPHERE study  
*E. Garin (Rennes/FR)*
- 2002.4 Multidisciplinary panel discussion – case studies  
*D. Seehofer (Leipzig/DE), M. Varela (Oviedo/ES)*

Closing remarks

13:00-14:00, Room 116

**Straub Medical AG**

**SY 2003 A mechanical atherectomy PLUS thrombectomy hybrid device. Rotarex®S for treating complex lower limb occlusions: the evidence and the science behind it**

*Moderator: B. Freitas (Maceió/BR)*

- 2003.1 Rotarex®S mechanical atherectomy PLUS thrombectomy in chronic arterial de novo lesions: single center experience with 658 patients  
*B. Freitas (Maceió/BR)*
- 2003.2 Retrospective analysis of initial results of an atherectomy PLUS thrombectomy device in patients with acute, subacute and chronic lower limb artery occlusion  
*C. Wissgott (Heide/DE)*
- 2003.3 Atherectomy PLUS thrombectomy of chronically occluded popliteal artery  
*M. Bulvas (Prague/CZ)*
- 2003.4 Rotational atherothrombectomy as a first-line treatment in patients with acute lower limb ischaemia and immediately threatened extremity (IIB category) 212 patients  
*M. Bulvas (Prague/CZ)*
- 2003.5 A pilot study to determine vascular functions and patency through interventional atherectomy in peripheral artery disease (safety and efficacy of atherectomy on vascular functions – the SAVIOR trial): initial results  
*C. Rammos (Essen/DE)*

14:30-15:30, Room 117

**BD**

**SY 2104 Novel interventional technology for dialysis patients**

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

- 2104.1 Patient challenges and new KDOQI guidelines  
*C.E. Lok (Toronto, ON/CA)*
- 2104.2 Endo AVF, the evidence and patient benefits  
*D.K. Rajan (Toronto, ON/CA)*
- 2104.3 Endo AVF creation, the real-world experience  
*P.M. Kitrou (Patras/GR)*
- 2104.4 Innovative technologies for managing the patient life plan  
*B. Dolmatch (Palo Alto, CA/US)*

15:30-16:00, Auditorium 2

**Bentley**

**SY 2105 Clinical experience with next generation covered stents**

*Moderator: R.G. McWilliams (Liverpool/UK)*

- 2105.1 "My monsters" – how I get those cases done  
*M.A. Ruffino (Turin/IT)*
- 2105.2 Clinical experience with a BX covered stent in BEVAR  
*E. Verhoeven (Nuremberg/DE)*
- 2105.3 Enhanced performance of complex fenestrated stent grafts using novel BX covered stents  
*M.S. Hamady (London/UK)*

15:30-16:00, Room 134

**Cordis (Cardinal Health)**

**SY 2106 The complex CTO**

- 2106.1 Introduction to complex CTO  
*A. Diamantopoulos (London/UK)*
- 2106.2 Subintimal angioplasty. Find your way (out) back  
*A. Diamantopoulos (London/UK)*
- 2106.3 Tips & tricks: OUTBACK™ re-entry catheter  
*A. Diamantopoulos (London/UK)*

Q&A

16:15-16:35, Room 134

**AR Baltic Medical**

**SY 2209 ELUTAX “3” experiences in different territories**

*Moderator: A. Ruebben (Monaco/MC)*

- 2209.1 Low paclitaxel dose in DCB – single center experience  
*G. Isernia (Perugia/IT)*
- 2209.2 The need of drug coated balloons for ASIAN population with intra-cranial stenosis  
*S. Singh (Biratnagar/NP)*

## Tuesday, September 10

13:00-14:00, Room 116

**Siemens Healthineers**

**SY 2801 Expand your clinical capabilities: a novel angio suite uniquely combining versatility and specialisation**

*Moderators: F.C. Carnevale (São Paulo/BR), Z.J. Haskal (Charlottesville, VA/US)*

- 2801.1 Our new biplane angio suite – an all-rounder from head to toe  
*D. Vorwerk (Ingolstadt/DE)*
- 2801.2 My first experience with a novel biplane system in the interventional radiology department  
*F. Wolf (Vienna/AT)*
- 2801.3 A new approach to procedure guidance and image quality based dose regulation  
*B.C. Meyer (Hannover/DE)*



## Learning Centres at CIRSE 2019

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:

**Boston Scientific**

**Guerbet**

**Merit Medical**

**Philips**

**Straub**

**Terumo Interventional Systems**

Please note that CIRSE is not responsible for the information provided at the Learning Centres.

## Boston Scientific

Boston Scientific has developed a dedicated Meet the Expert programme in their Learning Centre Room on the following topics:

### **Downstaging the severity of the CLI lesions**

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

**Saturday, September 7, 13:00-14:00**

Learning objectives:

- Exchange with a leading expert the concept of vessel preparation prior adjunctive therapies
- What is the idea to downstage the severity of lesion and what are my tips and tricks to achieve optimal results

### **Fighting CLI in BTK arteries**

*R. Langhoff (Berlin/DE)*

**Saturday, September 7, 16:00-17:00**

Learning objectives:

- What are my current options while treating critical limb ischemia disease in below the knee anatomy?
- How important is a good guidewire?
- My practical tips and tricks for revascularisation techniques

### **Which embolics & why?**

*E. Kashef (London/UK), F. Wolf (Vienna/AT)*

**Sunday, September 8, 11:30-12:30**

Learning objectives:

- Case base discussions on identifying the most suitable embolic for the situation
- Explaining the rationale behind the choice of the embolic
- Exploring combinations to achieve optimal results

**Thrombus management with AngioJet™ Thrombectomy System – when and how?**

*M. Dumantepe (Istanbul/TR), R. O'Neill (Nottingham/UK)*

**Sunday, September 8, 14:00-15:00**

Learning objectives:

This session will benefit most to current AngioJet™ Thrombectomy System users interested in expanding thrombectomy practice to arterial and/or venous indication.

- Exchange with experts on best practices and benefits of using AngioJet in clot management in a daily practice
- Learn about patient selection criteria, importance of institutional protocol and procedural tips and tricks
- Discuss specific questions on improving procedural outcomes

**Optimising procedural outcomes in venous stenting**

*A.J. Wigham (Oxford/UK)*

**Monday, September 9, 13:00-14:00**

Learning objectives:

This session is aimed at physicians interested in venous stenting with VICI™ venous stent.

- Exchange with expert on patient selection – which patient is benefiting from venous stenting the most
- Learn about the stent sizing and best practices to improve long term procedural outcomes with VICI™ venous stent
- Discuss preferred imaging modalities and the role of IVUS in venous stenting
- Understand the importance of setting up a venous service

**Thrombus management with AngioJet™ Thrombectomy System – when and how?**

*M. Dumantepe (Istanbul/TR), R. O'Neill (Nottingham/UK)*

**Monday, September 9, 15:00-16:00**

Learning objectives:

This session will benefit most to current AngioJet™ Thrombectomy System users interested in expanding thrombectomy practice to arterial and/or venous indication.

- Exchange with experts on best practices and benefits of using AngioJet in clot management in a daily practice
- Learn about patient selection criteria, importance of institutional protocol and procedural tips and tricks
- Discuss specific questions on improving procedural outcomes

**Hands-on experience** will also be offered:

Expert guided simulation sessions offer a 30-minute hands-on experience using simulators while discussing with expert in the field delivering key knowledge and practical tips.

**UFE expert guided simulation training for qualified medical professionals only**

*E. Kashef (London/UK)*

**Tuesday, September 10, 13:30-14:00**

**Tuesday, September 10, 14:00-14:30**

Limited to 12 seats per 30 minutes sessions

Learning objective:

Learn the procedural components of a UFE procedure in a risk-free learner focused environment with expert in the field delivering key knowledge and practical tips.

**PAE expert guided simulation training for qualified medical professionals only**

*H. Rio Tinto (Lisbon/PT)*

**Tuesday, September 10, 15:00-15:30**

**Tuesday, September 10, 15:30-16:00**

Limited to 12 delegates per 30 minutes sessions

Learning objective:

Learn the procedural components of a PAE procedure in a risk-free learner focused environment with expert in the field delivering key knowledge and practical tips.

**Hands-On Simulator Training in PAE**

**Tuesday, September 10, 16:30-17:00**

Limited to 4 delegates

Learning objectives:

- Advance your embolisation skills and train on real clinical cases in a completely safe environment
- Learn procedural steps of PAE treatments

Online pre-registration to the above sessions is available via the CIRSE 2019/ Learning Centres webpage.

**Hands-On Workshop - Undergraduate Medical Students****Tuesday, September 10, 09:00-11:00**

The session will be broken down into 5 rotations enabling the undergraduate medical students to get hands-on with different products and when and how they are used. Besides handling the products, participants will have the opportunity to deploy coils and use the MENTICE simulator for UFE, PAE and HCC indications.  
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 and interventional oncology & embolisation fields.

To learn more about our EDUCARE program, please visit our booth.

All cited trademarks are the property of their respective owners. CAUTION: The law restricts these devices to sale by or on the order of a physician. Indications, contraindications, warnings and instructions for use can be found in the product labelling supplied with each device. Information for the use only in countries with applicable health authority product registrations. Indications, operating specifications and availability may vary by country. Check with local product representation and country-specific information for use for your country. This material is not approved for use or distribution in France.

©2019 Boston Scientific Corporation or its affiliates. All rights reserved.

## Guerbet

Interventional Imaging, is offering interactive programmes on novel devices designed to secure your embolization procedures.

Join Guerbet experts within our Innovation Labs for Interactive hands-on sessions:

**September 7 – September 10, 2019**

### **Learn more on cTACE mixture standardization using Vectorio®**

**Saturday, Sunday, Monday, Tuesday**

09:00-12:00

13:00-18:00

*P. Havard (Global Head of Marketing), A. Wei (Global Product Manager)*

Guerbet Innovation Lab – Vectorio®

### **Discover SeQure® Control Reflux microcatheter – Flow dynamics based technology**

**Saturday, Sunday, Monday, Tuesday**

09:00-12:00

13:00-18:00

*E. Manca (EMEA Applications Specialist), E.-M. Nam (Global Product Manager)*

Guerbet Innovation Lab – SeQure®

## Philips

### Saturday, September 7

09:00-10:30

**See clearly. Treat optimally: effective vessel preparation for better outcomes. (Focus on vessel prep – hands-on on all technologies)**

*M. Mende (Hoxter/DE)*

11:00-12:30

**Prostate Artery Embolization with XperCT**

*N.V. Costa (Lisbon/PT)*

### Sunday, September 8

09:00-10:30

**See clearly. Treat optimally: effective vessel preparation for better outcomes. (Focus on vessel prep – hands-on on all technologies)**

*M. Mende (Hoxter/DE)*

14:00-15:30

**Prostate Artery Embolization with XperCT**

*N.V. Costa (Lisbon/PT)*

16:00-17:30

**See clearly. Treat optimally: optimizing outcomes in deep venous stenting with IVUS guidance. (Focus on venous IVUS – hands-on on all technologies)**

*T. Khan (Manchester/UK)*

**Max. 10 participants per session**

## Monday, September 9

09:00-10:30

**See clearly. Treat optimally: effective vessel preparation for better outcomes. (Focus on vessel prep – hands-on on all technologies)**

*M. Mende (Hoxter/DE)*

11:00-12:00

**Interactive Perfusion Angiography case discussions**

*J.A. Reekers (Amsterdam/NL)*

### **Student session**

12:00-13:00

The future of functional vascular imaging

*J. A. Reekers (Amsterdam/NL)*

### **Student session**

14:00-15:30

TACE & SIRT procedures using CBCT and automatic feeder detection software

*G. Maleux (Leuven/BE)*

16:00-17:30

**See clearly. Treat optimally: optimizing outcomes in aortic procedures with IVUS guidance. (Focus on IVUS in aortic – hands-on on all technologies)**

*F. Fanelli (Florence/IT)*



**Tuesday, September 10****Student session**

10:00 – 11:15

The benefit of multimodality fusion and needle guidance software in percutaneous biopsy and ablation procedures

C. Floridi (*Milan/IT*)

11:30-13:00

**See clearly. Treat optimally: effective vessel preparation for better outcomes. (Focus on vessel prep – hands-on on all technologies)**

*M. Mende (Hoxter/DE)*

14:00-15:30

**See clearly. Treat optimally: optimizing outcomes in peripheral procedures with IVUS guidance. (Focus on IVUS in peripheral arteries – hands-on on all technologies)**

*F. Fanelli (Florence/IT)*

**Max. 10 participants per session**

## Merit Medical

You are invited to join us at our Learning Center 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 and more:

1. An overview of the Surfacar® 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.
2. Neurointerventions via Radial Access, Including Distal Radial.
3. 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.
4. ThinkPAE™ . Rationale, Evidence, and Techniques for Prostate Artery Embolisation.
5. EmboCube™: the only gelatin foam uniformly cut and preloaded into a syringe for faster preparation and accurate delivery.
6. An overview of the ClariVein® OC Infusion Catheter which allows infusion of physician-specified agents in the peripheral vasculature for endovascular occlusion of incompetent veins in patients with superficial venous reflux.

The complete and final programme will be available on CIRSE's website and congress app. There are limited spots available, please register at our booth.

Please visit [www.merit.com](http://www.merit.com) for product information, including instructions for use.

## Straub

### **Management of arterial and venous occlusive diseases with mechanical debulking**

Hands- on Workshop

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. 56.

[www.straubmedical.com](http://www.straubmedical.com)

## Terumo Interventional Systems

### Saturday, September 7

14:00-15:30

#### **Explore our access portfolio for peripheral interventions**

*J. Harding (Coventry/UK)*

### Sunday, September 8

09:30-10:30

#### **Radial First: Why, how to perform it safely and troubleshooting in Visceral and Oncology Interventions"**

*M. Guimaraes (Charleston, SC/US)*

Objectives: To learn the rationale for radial access and how to do.

11:00-12:00

#### **NaviCross 0.018" hands-on – Beyond a support catheter**

Objectives: Learn tips & tricks on the use of NaviCross 0.018" in lower limb interventions, featuring Glidewire Advantage and NaviCross 0.035"

14:00-15:00

#### **Optimising Referral Pathways for SIRT**

*M.G.E.H. Lam (Utrecht/NL), G.J. Munneke (London/UK), R. Sharma (London/UK)*

Objectives: A presentation and interactive discussion based workshop on how to improve dialogue with your referring physicians at your MDT on where SIRT is most beneficial for patients

15:30-16:30

#### **Thyroid Ablation: introducing Microwaves with TATO Ablation System**

*H. Korkusuz (Frankfurt am Main/DE)*

Objective: Introducing thyroid ablation technique and protocol with TATO Ablation system, case reports

**Monday, September 9**

09:30-10:30

**TACE optimisation with Microballoon Occlusafe***P. Lucatelli (Rome/IT), G. Verset (Brussels, BE)*

Objectives: To discover and discuss positive results from preliminary experience on challenging lesions & hands-on session to practice the use of Occlusafe

11:00-12:00

**Roadsaver cases review. The benefits of the dual layer micromesh carotid stent with braided design***A. Tomasello (Barcelona/ES)*

Objectives: Learn about the benefits of the Dual layer micromesh carotid stent and understand the rationale behind the stent size selection when using braided stents through case review.

14:00-15:00

**Discover our innovations in FEMPOP**

Objectives: Understand the specifications and clinical data of our new innovative products within the FemPop indication.

15:30-16:30

**Radial first: why, how to perform it safely and troubleshooting in visceral and oncology interventions***M. Guimaraes (Charleston, SC/US)*

Objectives: To learn the rationale for radial access and how to do.

**Tuesday, September 10**

09:30-10:30

**Efficacy and safety of HydroPearl microspheres in PAE***I. Insausti Gorbea (Pamplona/ES), A. Kovács (Bonn/DE)*

Objectives: Demonstrate the efficacy and safety of HydroPearl bland microspheres in PAE

14:00-15:00

**HoW Azur vascular plug and coils**

Objectives: First hands on experience with the new Azur vascular plug before the initialization of the B-tests in humans and the Azur coil family

# Interdisciplinary Endovascular Aortic Symposium

# IDEAS

2 0 1 9

September 8-10  
Barcelona / Spain



## Industry 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 Industry Training Village. Our friendly staff will be available throughout the day to assist with any questions about upcoming workshops and signing up.



Browse the Industry Training Village programme at  
[www.aorticideas.org](http://www.aorticideas.org)



**INNOVATION | EDUCATION | INTERVENTION**  
Cardiovascular and Interventional Radiological Society of Europe

## Industry Training Village



The Industry 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, two industry partners will provide exclusive hands-on workshops giving participants the chance to communicate with expert proctors on these devices:

### **Bentley**

**Monday, September 9, 08:30-10:00 | 10:00-11:30**

### **Medtronic**

**Monday, September 9, 14:00-18:00**

### **How to participate:**

You can register onsite at the table just outside of the Industry Training Village. Our friendly staff will be available from 1 hour before the start of the workshop. You will then be notified by the assistants regarding availability and receive a participant's badge for the workshop accordingly. All workshops are free of charge.

## Bentley

**Monday, September 9** 08:30-10:00 | 10:00-11:30

### **The CERAB technique – a tailor made solution for the treatment of aortoiliac occlusive disease**

*Coordinators: S. Abisi (London/UK), M.A. Ruffino (Turin/IT)*

#### **Learning goals:**

- Why covered stents in AIOD
- Procedure planning
- Step by step in CERAB
- Case discussion

#### **Practice:**

- Hands-on to create a CERAB
- Tips & tricks

## Medtronic

**Monday, September 9** 14:00-18:00

### **ChEVAR with the Endurant™ Stent Graft System**

*Coordinators: K.P. Donas (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. Prof. Donas will use case- and video-presentations as well as a high-fidelity simulator 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

*Kindly note: A valid congress registration is required to be able to attend sessions in the Industry Training Village.*



## 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
- Cordis (Cardinal Health)
- Teleflex Medical Europe Ltd.
- Terumo Interventional Systems

### Central lines and ports

- BD
- Medtronic
- Smiths Medical

### Embolisation: materials and tools – coils & plugs

- Abbott
- Cook Medical
- Medtronic
- Penumbra Europe GmbH
- Terumo Interventional Systems

### Embolisation: materials and tools – liquid agents

- BALT International
- GEM SRL
- Medtronic
- MicroVention

### Embolisation: materials and tools – particulate agents

- BTG
- Merit Medical
- Sirtex Medical Europe GmbH
- Terumo Interventional Systems

### Peripheral mechanical thrombectomy

- Argon Medical Devices
- BTG
- Penumbra Europe GmbH
- Straub Medical AG

### Stroke thrombectomy

- BALT International
- Medtronic
- Penumbra Europe GmbH
- Stryker Corporation
- Terumo (Microvention)

### Tumour ablation – MWA

- AngioDynamics
- ECO Microwave
- Endocare, Inc.
- H.S. Hospital Service SPA
- Johnson & Johnson Medical Devices Companies | Neuwave
- Terumo Interventional Systems

### Tumour ablation – RFA

- H.S. Hospital Service SPA
- Merit Medical
- Olympus
- RF Medical
- Terumo Interventional Systems

**Tumour ablation – Cryo- and laser ablation, IRE and electrochemotherapy**

- AngioDynamics
- BTG
- Clinical Laserthermia Systems AB
- Elesta S.r.l.
- Endocare, Inc.
- IceCure Medical Ltd
- IGEA

**Tumour ablation – Image guided navigation and targeting**

- Bracco
- Johnson & Johnson Medical Devices Companies | Neuwave
- Medtronic
- Philips

**Varicose veins**

- AngioDynamics
- Medtronic
- Merit Medical
- RF Medical

**Vertebral augmentation**

- IZI Medical
- Merit Medical
- Stryker
- Teleflex Medical Europe Ltd.

For detailed information on sessions, please refer to pages 32-38.

For further information about the industry partners, please refer to pages 192-251 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 AQAI Simulation Center.

For detailed information on the Safe Sedation Training sessions, please refer to pages 40-41.

## Simulation Training Sponsors

The Simulation Training sessions are kindly supported by:

- 3D Systems
- Abbott Vascular
- Asahi
- Bentley
- Boston Scientific
- Cook Medical
- Cordis (Cardinal Health)
- Mentice
- Merit Medical
- Microvention
- Optimed
- Penumbra
- Philips
- Stryker
- W.L. Gore & Associates

For detailed information on the Simulation Training sessions, please refer to pages 42-46.

For further information about the industry partners, please refer to pages 192-251 of the Technical Exhibitors Guide.

# CIRSE Radiation Protection

## **BURNING ISSUES IN RADIATION PROTECTION: CRITICAL DOSE LEVELS AND SUBSTANTIAL RADIATION DOSE**

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 with 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 the Radiation Safety Talks programme on the next page*).

### **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:



# Programme

	Time	Radiation Safety Talk	Speaker
SAT SEPT 7	12:45 – 13:00	Opening ceremony	W. Jaschke <i>(Innsbruck/AT)</i>
	13:00 – 13:15	Unintended exposures, substantial radiation dose and trigger levels	E. Vano <i>(Madrid/ES)</i>
	13:15 – 13:30	Development of modular protective glasses	D. Janssen <i>(Hilvarenbeek/NL)</i>
	13:30 – 13:45	Advantages of electronic occupational dosimetry and impact on dose reduction for professionals	G. Paulo <i>(Coimbra/PT)</i>
	13:45 – 14:00	Radiation doses to the eye lens and forehead of interventional radiologists	A. Ploussi <i>(Athens/GR)</i>
	14:00 – 14:15	Think Integrated – Dosimetry & Protection	M. Schmid <i>(Munich/DE)</i>
SUN SEPT 8	09:30 – 09:45	Radiation dose in prostatic artery embolization using CBCT and 3D-Roadmap	M. Katoh <i>(Krefeld/DE)</i>
	09:45 – 10:00	Radiation protection lead cap – go and get it or forget it?	R. Adamus <i>(Nuremberg/DE)</i>
	11:00 – 11:15	The role of artificial intelligence in radiation protection and interventional radiology	E. Efstathopoulos <i>(Athens/GR)</i>
	11:15 – 11:30	Image fusion/confusion: Best practices	L. Lönn <i>(Copenhagen/DK)</i>
	12:30 – 12:45	Computational dosimetry & pitfalls in personal dosimetry	M. Ginjaume <i>(Barcelona/ES)</i>
	12:45 – 13:00	Sterile Radiation Shielding During CINE and DSA imaging	E. Radtke <i>(Leawood, KS/US)</i>
	13:00 – 13:15	Difficulties for the practical implementation of the BSS European Directive	E. Vano <i>(Madrid/ES)</i>
	13:30 – 13:45	Taking the weight off clinicians' bodies while significantly improving their radiation protection	P. Reimer <i>(Karlsruhe/DE)</i>
	13:45 – 14:00	National and European Diagnostic Reference Levels for interventional procedures in Europe	G. Paulo <i>(Coimbra/PT)</i>
	14:00 – 14:15	„Visualise It!“ – Translational Radiation Protection during TIPS and Biliary Drainage Procedures	M. Freund/ M. Steurer <i>(Innsbruck/AT)</i>

# Radiation Safety Talks in the Pavilion

	Time	Radiation Safety Talk	Speaker
<b>MON</b> SEPT 9	09:30 – 09:45	Radiation protection issues in transhepatic interventions	B. Gebauer <i>(Berlin/DE)</i>
	09:45 – 10:00	Dose management and quality enhancement capabilities of Digital Variance Angiography	J. Kiss <i>(Budapest/HU)</i>
	11:00 – 11:15	The benefits derived from the use of dose monitoring and management systems	G. Bartal <i>(Kfar-Saba/IL)</i>
	11:15 – 11:30	Image quality based dose regulation – how an innovative approach has changed my daily practice	B. Meyer <i>(Hannover/DE)</i>
	12:30 – 12:45	IAEA perspectives of radiation protection in fluoroscopically guided interventions	J. Vassileva <i>(Vienna/AT)</i>
	12:45 – 13:00	Peak Skin Dose as trigger level to implement dose optimization during embolisation procedures and support patient follow up	A. G. Rampoldi <i>(Milan/IT)</i>
	13:00 – 13:15	Radiation protection in percutaneous vertebral augmentation	K.E. Wilhelm <i>(Bonn/DE)</i>
	13:15 – 13:30	Using simulation to teach basic C-arm skills	Z. J. Haskal <i>(Charlottesville, VA/US)</i>
	13:30 – 13:45	IAEA eLearning tools: How to improve radiation protection of patients and staff	J. Vassileva <i>(Vienna/AT)</i>
	13:45 – 14:00	What you do affects your radiation exposure	F. Celén <i>(Billdal/SE)</i>
<b>TUE</b> SEPT 10	11:00 – 11:15	The value of Medical simulation in management of patient and staff exposure	G. Bartal <i>(Kfar-Saba/IL)</i>
	11:15 – 11:30	Stereotactic navigation enables highly accurate, CT-guided ablation without radiation exposure for clinicians	M. Peterhans <i>(Bern/CH)</i>
	13:00 – 13:15	Radiation exposure using radial vs. femoral vs. brachial access	E. Brountzos <i>(Athens/GR)</i>
	13:30 – 13:45	Online resources of ESR dealing with radiation protection (Eurosafte Imaging)	W. Jaschke <i>(Innsbruck/AT)</i>

## Technical Exhibition (Alphabetical List)

Official Name	Booth#
Abbott Vascular International	47
Adept Medical	46
Adria Srl	62
ALN Implants Chirurgiaux	64
Alvimedica	63
Andanza International	48
Andramed	61
AndraTec	5a
Angiodroid	50
AngioDynamics	9
AprioMed	84
APT Medical	85
AR Baltic Medical	42
Argon Medical Devices	59
Asahi Intecc	86
B.Braun Melsungen	68
Barty Medical	83
BD	55
Bentley Innomed	76
BiBB Instruments	81
Bioteque Corporation	31
Boston Scientific International	4
Bracco Imaging	70
BTG	5
Canon Medical Systems Europe	17
Canyon Medical	69
Cardionovum	2
Control / Distal / PMT / Transit	88
Cook Medical Europe	54
Cordis, a Cardinal Health Company	52
Deutsche Akademie für Mikrotherapie	35
ECO Microwave	82
Edizioni Minerva Medica	77
Elastrat	26
Elesta	91
Encapson	38
Endocare / Varian	98



<b>Official Name</b>	<b>Booth#</b>
Endovascular Today	34
Galt Medical	32
GEM	71
Getinge	8
Guerbet	53
H.S. Hospital Service	67
Hypvention	97
IGEA Clinical Biophysics	96
Imactis	16
InnoTherapy	87
Interventional News/CX2020	44
Invamed	36
Ivascular	45
IZI Medical	23
Johnson & Johnson Medical Devices Companies   Neuwave	15
KA Medical	95
KDL-INT Medical	29
LifeTech Scientific	93
medac	12
Medcomp	11
Medex Research	24a
Medicor Europe	27
Medtron	94
Medtronic International	57
Merit Medical	58
Mermaid Medical	1
MIM Software	28
Möller Medical	18
Noras MRI products	78
NUMA Engineering Services	80
OptiMed	14
Pajunk	49
Penumbra Europe	90
PharmaCept	39
Philips Medical Systems	3
Piolax Medical Devices	33
Praxis Medical Devices	24
QualiMed	7

<b>Official Name</b>	<b>Booth#</b>
Ra Medical Systems	22
RF Medical	20
Rontis	79
Shionogi Europe	72
ShockWave Medical	41
Siemens Healthcare	66
SIO	13
Sirtex Medical Europe	51
Sonar	30
STARmed	21
Straub Medical	56
Stryker	10
Surgnova Healthcare Technologies	75
Suzhou Leapmed Healthcare Corporation	60
Teleflex	73
Terumo Interventional Systems	6
Tokai Medical Products	37
Uresil	74
Veryan Medical	19
Vigeo	40
W.L. Gore & Associates	65
Wisepress	32a
Zhengjiang Zylox Medical	89
Ziehm Imaging	43
Z-Medica Corporation	25

## Technical Exhibition (Numerical List)

Official Name	Booth#
Mermaid Medical	1
Cardionovum	2
Philips Medical Systems	3
Boston Scientific International	4
BTG	5
AndraTec	5a
Terumo Interventional Systems	6
QualiMed	7
Getinge	8
AngioDynamics	9
Stryker	10
Medcomp	11
medac	12
SIO	13
OptiMed	14
Johnson & Johnson Medical Devices Companies I Neuwave	15
Imactis	16
Canon Medical Systems Europe	17
Möller Medical	18
Veryan Medical	19
RF Medical	20
STARmed	21
Ra Medical Systems	22
IZI Medical	23
Praxis Medical Devices	24
Medex Research	24a
Z-Medica Corporation	25
Elastrat	26
Medicor Europe	27
MIM Software	28
KDL-INT Medical	29
Sonar	30
Bioteque Corporation	31
Galt Medical	32
Wisepress	32a
Piolarx Medical Devices	33
Endovascular Today	34
Deutsche Akademie für Mikrotherapie	35

Official Name	Booth#
Invamed	36
Tokai Medical Products	37
Encapson	38
PharmaCept	39
Vigeo	40
ShockWave Medical	41
AR Baltic Medical	42
Ziehm Imaging	43
Interventional News/CX2020	44
Ivascular	45
Adept Medical	46
Abbott Vascular International	47
Andanza International	48
Pajunk	49
Angiodroid	50
Sirtex Medical Europe	51
Cordis, a Cardinal Health Company	52
Guerbet	53
Cook Medical Europe	54
BD	55
Straub Medical	56
Medtronic International	57
Merit Medical	58
Argon Medical Devices	59
Suzhou Leapmed Healthcare Corporation	60
Andramed	61
Adria Srl	62
Alvimedica	63
ALN Implants Chirurgiaux	64
W.L. Gore & Associates	65
Siemens Healthcare	66
H.S. Hospital Service	67
B.Braun Melsungen	68
Canyon Medical	69
Bracco Imaging	70
GEM	71
Shionogi Europe	72
Teleflex	73

Official Name	Booth#
Uresil	74
Surgnova Healthcare Technologies	75
Bentley Innomed	76
Edizioni Minerva Medica	77
Noras MRI products	78
Rontis	79
NUMA Engineering Services	80
BiBB Instruments	81
ECO Microwave	82
Barty Medical	83
AprioMed	84
APT Medical	85
Asahi Intecc	86
InnoTherapy	87
Control / Distal / PMT / Transit	88
Zhengjiang Zylox Medical	89
Penumbra Europe	90
Elesta	91
LifeTech Scientific	93
Medtron	94
KA Medical	95
IGEA Clinical Biophysics	96
Hyprevention	97
Endocare / Varian	98

## Technical Exhibitors Guide

### Abbott Vascular International BVBA

47

Park Lane  
Culliganlaan 2B  
1831 Diegem  
BELGIUM  
[www.abbott.com](http://www.abbott.com)



Abbott is a global healthcare leader that helps people live more fully at all stages of life. Our portfolio of life-changing technologies spans the spectrum of healthcare, with leading businesses and products in diagnostics, medical devices, nutritionals and branded generic medicines. Our 103,000 colleagues serve people in more than 160 countries.

### Adept Medical

46

6 McDonald Street  
Morningside  
1025 Auckland  
NEW ZEALAND  
[www.adeptmedical.com](http://www.adeptmedical.com)

Adept Medical has developed a range of table accessories to assist with Interventional Radiology, Cardiology and Neuro procedures. The innovative range of products have been designed and developed in conjunction with leading clinicians. The range of products have been engineered with both patient comfort and ease of use for clinicians in mind, with a quick and simple set-up. They offer ergonomic working platforms, patient and device positioning to gain vascular access, securing the patient to ensure sterility and managing their operational environment. High performance engineering plastics and carbon fibre composites have been selected, giving superior rigidity, strength and durability, which ensures that the products have a long life. As a result, the products have low radiolucency, are light-weight yet strong, and have excellent resistance to chemical attack associated with commonly used cleaning products. Adept Medical's table accessory products are ergonomic to use, reduce set-up time and offer procedural repeatability, whilst ensuring patient security and comfort. Adept Medical is a leading specialist injection moulding and carbon fibre composite manufacturer to the medical market, located in Auckland, New Zealand. With an ISO 13485 certified quality management system and clean room facilities, we offer products to the global healthcare industry through an independent network of medical and surgical distribution companies.

**Adria Srl**

**62**

Via Modena 46  
 40017 san Giovanni in Persiceto  
 ITALY  
[www.adriamedical.com](http://www.adriamedical.com)

Biopsy, Drainage and catheters, Vertebroplasty, Kyphoplasty;

**ALN Implants Chirurgicaux**

**64**

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 28 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**

**63**

Via Crescentino  
 13040 Saluggia  
 ITALY  
[www.alvimedica.com](http://www.alvimedica.com)

Alvimedica is a young, innovative company devoted to developing minimally-invasive technologies for medical professionals looking for the next level of innovation in the operating room. We provide an innovative endovascular and interventional cardiology product portfolio aim to cover the patients un-meet needs.

**Andanza International**

48

Zum Werrablick 4  
37276 Meinhard  
GERMANY  
[www.andanza.de](http://www.andanza.de)

Founded in 2005, Andanza International has evolved to an innovative manufacturer and for medical products, based in Germany. Our portfolio features our innovative „Premofix“ product line for compressive aftercare of femoral, radial and brachial interventions. Apart from that, we feature our closure device „Premoclose“ and several accessories. Our worldwide customers benefit from our global on-site service, innovativity, as well as from the experience of our professional staff.

**Andramed GmbH**

61

Schiesswieslenstrasse 18  
72766 Reutlingen  
GERMANY  
[www.andramed.com](http://www.andramed.com)

We are a family-owned and family operated-medical device company. We are located near Stuttgart in one of the most important high-tech areas of Southwest Germany. In cooperation with doctors, universities and partners we develop excellent innovative medical devices. Our high-level products are manufactured in-house using the excellent craftsmanship of our highly qualified, motivated staff. We distribute all our sophisticated first-class medical devices all over the world.

We are offering different kind of Retrieval Devices, great vessel stents, Valvulotomes and a big range of PTA Balloon Catheters in various sizes.



**AndraTec GmbH**

5a

Simmerner Strasse 70  
56075 Koblenz  
GERMANY  
[www.andratec.com](http://www.andratec.com)

AndraTec is highly innovative company located in Germany with a focus in the Interventional Cardio-Vascular field. AltoSa XL PTA Balloons, Optimus XL Stents, Exeter Snares, Pillar & Pillow Devices;

**Angiodroid s.r.l.**

50

Via Caselle 76  
40068 San Lazzaro di Savena  
ITALY  
[www.angiodroid.com](http://www.angiodroid.com)

The logo for Angiodroid, featuring the word "angiodroid" in a stylized, lowercase, sans-serif font. The letters are white with a dark outline, giving it a 3D or metallic appearance.

Angiodroid S.r.l. is an Italian innovative company that projects and trades solutions for the medical market. Angiodroid The CO2 Injector is our main product. It is a carbon dioxide (CO2) 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 CO2 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 CO2 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**

Haaksbergweg 75  
1101 BR Amsterdam Z-O  
THE NETHERLANDS  
[www.angiodynamics.com](http://www.angiodynamics.com)



9

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, vascular access products, angiographic products and accessories, angioplasty products, drainage products, thrombolytic products and venous products. Stop by AngioDynamics booth to find out more about our NanoKnife, Irreversible Electroporation (IRE), Solero Microwave Tissue Ablation (MTA), BioSentry tract sealant, BioFlo PICCs, ports and the AngioVac Cannula & Circuit System.

**AprioMed AB**

Virdings Allé 28  
75450 Uppsala  
SWEDEN  
[www.apriomed.com](http://www.apriomed.com)

84

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 Inc.****85**

Room 804, the Integrated building, Qinghua Information Center, Keyuan Road, Nanshan District  
518057 Shenzhen, Guangdong  
CHINA  
[www.aptmmed.com](http://www.aptmmed.com)

APT Medical Inc. is a leading developer, manufacturer and vendor of advanced interventional medical devices for electrophysiology, cardiology and radiology. APT has a strong R&D and manufacturing ability with innovative ideas in Microcatheter, Hydrophilic Angiographic Catheter, Hemostasis Introducer, and so on. APT established 5 branch offices in China to provide fast and convenient service to clinical. Now APT's products are CFDA, CE, CMDCAS, MFDS approved and widely sold to more than 50 countries/regions like Germany, Netherlands, Spain, Canada, Korea etc.

**AR Baltic Medical****42**

P.Luksio g. 5B  
08221 Vilnius  
LITHUANIA  
[www.arbalticmedical.com](http://www.arbalticmedical.com)

AR Baltic Medical is engaged in the development and manufacturing of catheters and stents. The company is specialized 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 and in Budapest, Hungary. 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**

Av. Mon Repos 14  
1005 Lausanne  
SWITZERLAND  
[www.argonmedical.com](http://www.argonmedical.com)

59



Argon Medical Devices welcomes you to booth 59 at Cirse19. 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 and oncology. 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 59 for presentations and hands-on sessions of our complete range of products. We are looking forward to your visit!

**Supporting IRs in training at CIRSE 2019!**

In order to encourage the participation of young IRs in the Annual Congress, CIRSE initiated a dedicated support programme for interventional radiologists in training.

The *IR Trainee Support Programme* allows CIRSE Junior Members who submitted an abstract for CIRSE 2019 as first or presenting author to attend the congress free of charge.

More than 160 IRs-in-training successfully applied for this programme and will benefit from this initiative. Argon Medical Devices is a proud supporter of the *IR Trainee Support Programme*.



**Asahi Intecc Co., Ltd. Europe**

86

Strawinskylaan 527  
WTC Tower B 5F  
1077 XX Amsterdam  
THE NETHERLANDS  
[www.asahi-intecc.co.jp/en](http://www.asahi-intecc.co.jp/en)

Asahi Intecc is a Japanese company established in 1976, developing and supplying high-quality medical products for catheter treatment (guide wires, guiding catheters and balloon catheters) using an integrated in-house production system that covers everything from the selection and treatment of raw materials to the manufacturing of final products. Asahi Intecc's leading products are currently for the cardiovascular system area, but treatment areas are expanding to encompass other areas such as peripheral vascular (lower-limb), abdominal and cerebrovascular areas.

**B.Braun Melsungen AG**

68

Sieversufer 8  
12359 Berlin  
GERMANY  
[www.bbraun.com/en/products-and-therapies/  
interventional-vascular-diagnostics-and-therapy.html](http://www.bbraun.com/en/products-and-therapies/interventional-vascular-diagnostics-and-therapy.html)



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.

**Barty Medical**

83

South 2F, Building 2-1, NO.20 street, ETDZ  
310018 Hangzhou, Zhejiang  
CHINA  
[www.bartymedical.com](http://www.bartymedical.com)

Barty Medical is engaged to vascular intervention. Our products include: paclitaxel-eluting balloon, introducer sheath, diagnostic catheter, guide catheter, HP PTA& PTA balloon catheter.



# BeGraft

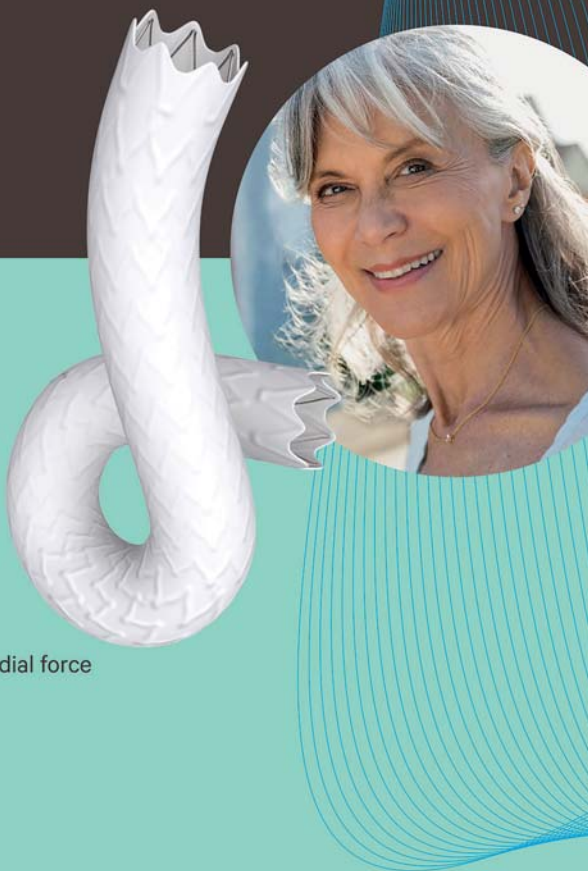
## peripheral

Peripheral Stent Graft System

**Less trauma, faster procedures**  
through low profile  
(6F compatibility up to  $\varnothing$  8 mm)

**Outstanding lesion access**  
through exceptional flexibility

**Predictable stent behaviour**  
through low foreshortening & high radial force



**BD**

Forest House, Tilgate Forest Business Park  
Brighton Road  
RH11 9BP Crawley  
UNITED KINGDOM  
[www.bd.com](http://www.bd.com)

55



BD is one of the largest global medical technology companies and is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. In 2017, BD welcomed C.R. Bard into the BD family and through this collaboration is accelerating the delivery of innovative technologies, world-class clinical education, and disease awareness programs that are helping to transform the standard of patient care.

**Bentley Innomed GmbH**

Lotzenäcker 25  
72379 Hechingen  
Baden-Württemberg  
GERMANY  
[www.bentley.global](http://www.bentley.global)

76

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.

**BIBB Instruments**

Medicon Village  
22381 Lund  
SWEDEN  
[www.bibbinstruments.com](http://www.bibbinstruments.com)

81

BiBB Instruments AB, is a Swedish medical device company that develops and markets biopsy instruments under the brand name EndoDrill®, enabling earlier and more accurate cancer diagnosis compared to conventional biopsy instruments. BiBB develops a range of proprietary biopsy instruments for both flexible endoscopy and core needle sampling. EndoDrill® Core Needle, a unique core needle instrument for increased sampling control and accuracy, has recently been launched. The company is based in Medicon Village in Lund, Sweden, and was founded by Dr. Charles Walther, a cancer researcher at Lund University and a senior physician in surgical pathology and clinical cytology at Skåne University Hospital in Lund, Sweden.

**Bioteque Corporation**

31

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-2460 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.

**Boston Scientific International SA**

4

Europe Headquarters

Parc d'Affaires Val Saint Quentin

Bâtiment H 2 Rue René Caudron

78960 Voisins-le-Bretonneux

FRANCE

[www.bostonscientific.com/en-EU/home](http://www.bostonscientific.com/en-EU/home)

**Boston  
Scientific**  
Advancing science for life™

Boston Scientific transforms lives through innovative medical solutions that improve the health of patients around the world. As a global medical technology leader for 40 years, 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**

70

Via E. Folli 50  
 20134 Milan  
 ITALY  
[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) and Nuclear Medicine through radioactive tracers. The diagnostic imaging portfolio is completed by several medical devices and advanced administration systems for contrast imaging products in the fields of radiology. The Company operates in over 100 markets worldwide, either directly or indirectly, through subsidiaries, joint ventures, licenses and distribution partnership agreements. To learn more about Bracco Imaging, visit [www.braccoimaging.com](http://www.braccoimaging.com)

**BTG**

5

Lakeview, Riverside Way  
 Watchmoor Park  
 GU15 3YL Camberley, Surrey  
 UNITED KINGDOM  
[www.btgplc.com](http://www.btgplc.com)



BTG is a global healthcare company focused on Interventional Medicine. Our mission is to provide imaginative new ways to treat disease; making a real difference for patients, and a valuable contribution to healthcare. Today we have a growing portfolio of products that advance the treatment of cancer and vascular conditions. We strive to develop ground breaking technologies, administered using minimally-invasive, image-guided therapies. Modern medicine is evolving and at BTG we believe intelligent science is the way forward. For more information visit [BTGplc.com](http://BTGplc.com), or @BTGIO and @BTGVascular on Twitter

**Canon Medical Systems Europe B.V.**

17

Zilverstraat 1  
2718 RP Zoetermeer  
THE NETHERLANDS  
[eu.medical.canon](http://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.

**Canyon Medical Inc.**

69

Bldg 3, Phase 2 Accelerator, No. 11 Yaogu Ave.  
Jiangbei New Area  
210032 Nanjing  
CHINA  
[www.canyonmedical.com.cn](http://www.canyonmedical.com.cn)

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. Canyon Medical is specialized in Microwave Ablation for over 20 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. In 2015, Canyon Medical joined the family of Micro-Tech. In virtue of Micro-Tech's international platform and management philosophy, Canyon Medical is advancing towards a greater international stage at a higher level. 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. Email: [sales@canyonmedical.com.cn](mailto:sales@canyonmedical.com.cn).

**Cardionovum GmbH****2**

Am Bonner Bogen 2  
53227 Bonn  
GERMANY  
[www.cardionovum.com](http://www.cardionovum.com)

Cardionovum GmbH is a leading company in innovative coronary and peripheral drug coating technologies improving clinical outcomes and quality of life. LEGFLOW RX/OTW® is our paclitaxel releasing peripheral balloon dilatation catheter for the safest SFA & BTK revascularization therapy. APERTO OTW®, the paclitaxel releasing hemodialysis shunt balloon dilatation catheter protects AV fistulas and shunt grafts from early restenosis. For the prevention and successful dilatation of intimal hyperplasia. RESTORE DEB® drug coated balloon and XLIMUS® drug eluting stent are the latest coronary innovations with highest patient safety guarantee.

**Control/ Distal/ PMT/ Transit****88**

2757 s 300 w, Suite F  
UT-84115 Salt Lake City  
UNITED STATES OF AMERICA  
[www.xoscore.com](http://www.xoscore.com)

Transit's XO Score Sheath is a low-profile, one-piece metal alloy "shell" that converts standard off-the-shelf PTA balloons into scoring vessel prep and infusion systems. The proprietary Roto-strut design accommodates multiple balloon diameters and lengths to deliver controlled, predictable, circumferential scoring for effective dilatation. Control's ASPIRE Mechanical Thrombectomy Systems deliver new speed, power, force, and volume. FDA cleared ASPIREs are sold alone and/or in a kit with catheters. Distal's Pilot: optimized device for bone access & tissue resection. PowrSyringe provides high quality images potentially using less contrast & reducing radiation. AirTight Control Syringe with Slip-Ring Technology, provides easy connection and disconnection with enhanced connection integrity and improved patient safety.

**Cook Medical Europe Ltd.**

54

O'Halloran Road  
National Technology Park  
V94N8X2 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**

52

Third Floor, Red Oak North, South  
Country Business Park, Leopardstown  
D18X5K7 Dublin  
IRELAND  
[www.cardinalhealth.co.uk](http://www.cardinalhealth.co.uk)



Cordis, a Cardinal Health company, is a worldwide leader in marketing innovative solutions and devices for cardiovascular disease management. Cordis is committed to deliver the right combination of solutions, products, services and evidence to treat millions of patients who suffer from vascular disease.

**Deutsche Akademie für Mikrotherapie e.V.**

35

Leipziger Strasse 44  
39120 Leipzig  
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**

82

10th Floor, Block 2, Binjiang Plaza  
No. 305, Jiangdong North Road  
210036 Nanjing  
CHINA  
[www.ecomicrowave.com](http://www.ecomicrowave.com)

Since 2000, ECO Medical has been a leading medical device manufacturer in China that specializes in microwave ablation, high frequency, and physical therapy products. Our mission is to deliver the most advanced technology and solutions to those who are in need all over the world. ECO microwave ablation system is intended for the ablation of soft tissues during open, percutaneous or laparoscopic procedure with image guidance. Please visit [www.ecomicrowave.com](http://www.ecomicrowave.com) for more information.

**Edizioni Minerva Medica**

77

C.so Bramante 83-85  
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 Current Contents/Clinical Medicine, EMBASE, PubMed/MEDLINE, Science Citation Index Expanded (SciSearch), Scopus and has an Impact Factor.

**Elastrat Sàrl**

26

43, av. de Châtelaine  
1203 Genève  
SWITZERLAND  
[www.elastrat.com](http://www.elastrat.com)

Elastrat Sàrl. is a worldwide leader in the development and realization of anatomical human vascular phantoms. Based in Geneva Switzerland, our flow models contain various pathologies as aneurysms, stenoses and loops. We manufacture Head, Thoracic, Heart, Abdominal and peripheral models. You will find Elastrat at booth 26. The models work with a small pump in a closed water circuit and are appropriate for education, Hands-On trainings, R&D purposes to enhance new intervention technologies, product development and procedure improvements. As they are transparent to light they are suitable for use with video and photographic monitoring. Elastrat's phantoms offer quality hands-on training experience. We also supply custom-made phantoms of patient's specific pathologies with STL files received from clients. All our models train in a most realistic medical environment. Elastrat's in-vitro models are compatible with all imaging technologies such as angiographies with contrast liquid, CI, IRM and, provided the appropriate circulating fluid is used, trans-cranial Doppler techniques. Elastrat maintains close working relationship with renowned medical centers as the GRAC (Groupe de Recherches en Anatomie Clinique) University of Geneva and HUG Geneva Hospitals.

**Elesta S.r.l.**

Via Baldanzese 17  
50041 Calenzano  
Firenze  
ITALY  
[www.elesta-echolaser.com/?lang=en](http://www.elesta-echolaser.com/?lang=en)

91

We develop innovative hi-tech therapeutic applications for interventional medicine. Our main product is EchoLaser: the first and unique integrated Laser-Ultrasound system that allows for the diagnosis and micro-invasive treatment of benign and malignant tumours. EchoLaser uses the laser radiation transmitted by independent sources (up to 4) through extremely thin optical fibres (0,3 mm) inserted percutaneously under a proprietary ultrasound guiding system (which includes a planning and simulation software). EchoLaser Therapy can induce a cytoreduction process on benign lesions (e.g.: BPH, thyroid nodules, etc.) or destroy cancerous tissue of malignant lesions (e.g.: metastatic lymph nodes, liver, prostate and kidney cancer, etc.). No general anesthesia is generally required. Procedures can be performed in an outpatient regimen, with consequent faster recovery after treatment. We want to play an important role in the new frontier of Precision Medicine, which is more than genomics and bespoke pharmacological treatment, but includes more accurate imaging and non-surgical treatments (e.g. ablation). Core EchoLaser ThermoTherapy applications are: ModiLite - lesions of the neck, such as benign thyroid nodules and metastatic lymph nodes. SoracteLite - urinary system disorders like Benign Prostatic Hyperplasia (BPH), low-risk localized Prostate Cancer (PCa) and Kidney Cancer. PBLite - primary and secondary malignant liver cancers

**Encapson BV**

Institutenweg 25a  
7521PH Enschede  
THE NETHERLANDS  
[www.encapson.com](http://www.encapson.com)

38

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 Inc., a Varian Company**

98

9825 Spectrum Dr. Bldg. 2  
TX-78717 Austin  
UNITED STATES OF AMERICA  
[www.endocare.com](http://www.endocare.com)  
[www.varian.com](http://www.varian.com)

Varian's interventional oncology business offers a spectrum of ablation and embolics solutions encompassing cryoablation, microwave ablation, and embolic microspheres. The company's Velocity™ RapidSphere software offers image-guided voxel-based dosimetry for radioembolization using Y90 Selective Internal Radiation Therapy (SIRT). Varian has also long been the world's leading manufacturer of medical devices and software for treating cancer and other medical conditions with radiotherapy, radiosurgery, and proton therapy, and brachytherapy. Varian is uniquely positioned to develop innovations in interventional oncology with a wider range of cancer care solutions delivered through Varian's proven global platform. Varian employs approximately 7,000 people at sites around the world. For more information, visit [www.varian.com](http://www.varian.com) and follow @VarianMedSys on Twitter.

**Endovascular Today**

34

1008 Upper Gulph Road  
PA-19087 Wayne  
UNITED STATES OF AMERICA  
[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 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.



**Galt Medical Corp.**

2220 Merritt Drive  
TX-75041 Garland  
UNITED STATES OF AMERICA  
[www.galtmedical.com](http://www.galtmedical.com)

32

Galt Medical Corp. has been a leading provider of vascular and interventional medical devices for almost 30 years, developing and manufacturing a range of products for interventional procedures. Galt offers a wide range of products, including private label products for medical device OEMs and Galt branded products to clinicians worldwide through a network of distributors. Our facilities are located in Texas, Massachusetts, Costa Rica, and now, Ireland. Galt products are used for a range of Interventional Radiology, Interventional Cardiology, Vascular Surgery, and IV Therapy procedures. Galt is pleased to announce the recent acquisitions of Arrotek and Concert Medical. Arrotek is a product design and development services business focused on minimally invasive medical devices that are an excellent complement to Galt's vascular access product line. Concert Medical has over 30 years' experience designing, developing and manufacturing interventional guidewires for the world's largest medical device companies. The Concert Medical engineering team will support your Interventional Guidewire new product development, new process development, equipment design & build and manufacturing needs. We have the ability to provide a full range of device delivery solutions from initial access, to the final placement of novel therapeutic devices. For additional information, please visit [www.galtmedical.com](http://www.galtmedical.com).

**GEM S.r.l.**

71

Via dei Campi, 2  
LU-55049 Viareggio  
ITALY  
[www.gemitaly.it/en](http://www.gemitaly.it/en)

GEM S.r.l., Italian company established in 1994 produces (under Glubran brand) and distributes all over the world Glubran 2, synthetic sealant for Surgical and embolic agent for Endovascular use and Glubran Tiss for skin application. The company also produces and distributes devices to apply Glubran 2 in different ways: Dispensing Tips; Catheters for Laparoscopy; Drop Control Devices; Nebulizers; 1 ml Luer lock syringes and Vascular Closure Devices specific for femoral accesses.

All Glubran products are CE marked. Glubran 2 is an embolising agent used in interventional radiology and neuroradiology. The definitive solution for: AVM, Trauma, Bleedings, Tumors, Varicocele, Portal Vein, Type II endoleaks; Glubran 2 is a medical device Class III CE marked for internal, endovascular and external use. Glubran 2 is a synthetic biodegradable n-butyl-cyanoacrylate basis glue, modified by the addition of MS, a monomer synthesized by GEM.

Glubran 2 is ready for use, with high adhesive, sealing and haemostatic properties. Once it is polymerised, creates an efficient antiseptic barrier against the most diffused infective or pathogenic agents during surgical intervention.

**Getinge**

8

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**

BP 57400  
95943 Roissy CDG Cedex  
FRANCE

[www.guerbet.com/en/our-products/  
interventional-imaging/interventional-radiology-ir.html](http://www.guerbet.com/en/our-products/interventional-imaging/interventional-radiology-ir.html)

53



Guerbet is a pioneer with more than 90 years' experience in the field of contrast agents and a world leader in medical imaging. 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. Guerbet allocates 8% of its revenue to R&D and relies on over 200 employees in various work sites in France, Israel and the United States, making of the company a significant investor in research and innovation. Guerbet (GBT) is listed on Euronext Paris (segment B – mid caps) and generated €790 million in sales in 2018. For more information on Guerbet, please visit [www.guerbet.com](http://www.guerbet.com)

**Supporting IRs in training at CIRSE 2019!**

In order to encourage the participation of young IRs in the Annual Congress, CIRSE initiated a dedicated support programme for interventional radiologists in training.

The *IR Trainee Support Programme* allows CIRSE Junior Members who submitted an abstract for CIRSE 2019 as first or presenting author to attend the congress free of charge.

More than 160 IRs-in-training successfully applied for this programme and will benefit from this initiative. Guerbet is a proud supporter of the *IR Trainee Support Programme*.



**H.S. Hospital Service S.p.A.**

67

Via Zosimo, 13

00178 Roma

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 67!

**Hyprevention**

97

PTIB - Hopital X. Arnozan

Avenue du Haut-Leveque

33600 Pessac

FRANCE

[www.hyprevention.com](http://www.hyprevention.com)

Hyprevention's products aim at reinforcing bone sites, weakened by osteoporosis or metastasis such as the proximal femur - Y-STRUT - or vertebra - V-STRUT. These two implants in polymer, implanted by minimally invasive surgery, are part of the STRUTPLASTY technique developed by Hyprevention. Visit us for more information!

**IGEA S.p.A. Clinical Biophysics**

96

Via Parmenide 10/a  
41012 Carpi  
ITALY  
[www.igeamedical.com](http://www.igeamedical.com)

IGEA works to improve patient's Quality of Life developing and producing, from own original projects, innovative, effective and safe therapeutic systems for clinical practice. IGEA develops biophysical treatments in two main areas: Orthopaedics - to improve bone healing and joint preservation, Oncology - to treat cancer. The Cliniporator® is the most advanced electroporation technology for Electrochemotherapy of tumour nodules located to the skin, subcutaneous tissues, parenchyma and bone.

**Imactis**

16

20 Rue du Tour de l Eau  
38400 Saint Martin d Heres  
FRANCE  
[www.imactis.com](http://www.imactis.com)

Specialized in computer assisted interventional radiology Guidance, assistance and 3D navigation to reach the target organ or lesion, with improved accuracy and speed, and with reduced radiation, have been consistently identified as key unmet needs worldwide in percutaneous interventional radiology. Founded in 2009 in the French Alps, Imactis created CT-Navigation, a unique solution which addresses these needs, in an intuitive and efficient way, with minimal set up time and a short learning curve.



Vascular & Endovascular  
Consensus Update

21–24 APRIL 2020  
TUESDAY–FRIDAY  
OLYMPIA LONDON • UNITED KINGDOM



See you next year!  
[WWW.CXSYMPOSIUM.COM](http://WWW.CXSYMPOSIUM.COM)



EDUCATION INNOVATION EVIDENCE

**InnoTherapy Inc.****87**

25, Seonyu-ro 13-gil, Yeongdeungpo-gu  
07282 Seoul  
KOREA, REPUBLIC OF  
[www.innotherapy.com](http://www.innotherapy.com)

InnoTherapy Inc. has been developing a series of innovative biopolymer & medical devices in the surgical sealant field with its “bio-inspired” technology since 2010, and is currently listed on KOSDAQ. Product Information: InnoSEAL, launched in 2016, InnoSEAL has been marketed with Korean MFDS approval, US FDA 510(k) clearance, and Japanese PMDA registration. Currently under Class III CE Marking review and expected to be launched in the expanded global market in 2019. InnoSEAL Plus in Completion of Pivotal Trial. Exploratory study confirmed its safety and efficacy, and 96 patients pivotal study was completed in Oct. 2018.

**Interventional News/CX2020****44**

BIBA Medical Ltd  
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).

**Invamed Saglik Ilac A.S.**

Anadolu OSB 30 Ağustos Caddesi  
No:13 Sincan  
06909 Ankara  
TURKEY  
[www.invamed.net](http://www.invamed.net)

As Invamed Company from Turkey, 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. RD'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 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), Haemorrhoid Glue Treatment
- Vascular Access: Vascular Closure Device, Micro Catheter (Coronary/Neuro), Introducer Set, Guidewires, Guiding Catheters



**iVascular, S.L.U.**

45

Camí de Can Ubach, 11  
(Pol. Ind. Les Fallulles)  
08620 Sant Vicenç dels Horts, Barcelona  
SPAIN  
[www.ivascular.global](http://www.ivascular.global)

iVascular S.L.U is a fast-growing company based in Barcelona that has developed exclusive technologies in a vertically integrated project to innovate and produce coronary and endovascular devices from basic raw materials to the final device or implant, including DCB, DES, nitinol stents, CoCr Bare Metal Stents, thrombus extractors and angioplasty balloons.

**IZI Medical**

23

5 Easter Ct # J  
MD-21117 Owings Mills  
UNITED STATES OF AMERICA  
[www.izimed.com](http://www.izimed.com)

IZI Medical Products, LLC develops minimally invasive diagnostic and therapeutic spine solutions, radiology and radiation therapy products, and image-guided surgery products 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. Our radiology and radiation therapy products include patient immobilization thermoplastic masks and associated warmer, radiopaque markers, multi-modality markers, and soft tissue fiducial markers. The image-guided surgery product line includes passive reflected markers for navigation systems, disposable passive array probes and dynamic reference frame, pedicle access needles, navigated biopsy needles. As a leading innovator, manufacturer, and distributor of quality medical devices, we ensure that all our products reduce procedural time and enhance precision.

**Johnson & Johnson Medical Devices Companies | Neuwave****15**

3529 Anderson St  
 WI-53704 Madison  
 UNITED STATES OF AMERICA  
[www.neuwave.com](http://www.neuwave.com)



About the Johnson & Johnson Medical Devices Companies: The Johnson & Johnson Medical Devices Companies have been working to make surgery better for more than a century. With substantial breadth and depth in surgical and orthopedic technologies and interventional solutions, we aspire to improve and enhance medical care for people worldwide. Together, we are working to shape the future of health through differentiated products and services.

About Neuwave Ethicon: The NEUWAVE™ Microwave Ablation System, now a part of the Ethicon™ 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™ 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™ software, offering the only integrated in-procedure confirmation to help confirm probe placement and evaluate the technical success of your procedure.

**KA Medical****95**

2890 Centre Pointe Drive  
 MN-55113 Roseville  
 UNITED STATES OF AMERICA  
[www.ka-medical.com](http://www.ka-medical.com)

KA Medical was founded by Kurt Amplatz, MD to continue his legacy of developing innovative solutions to advance patient treatments in the areas of interventional radiology and cardiology.

KA Medical's first product is the Dr. Amplatz Micro Plug. This product recently received FDA 510(k) clearance and CE Mark approval and is indicated for arterial embolization in the peripheral vasculature.

The Dr. Amplatz Micro Plug, available in sizes 3, 4, 5 & 6 mm, allows physicians to effectively occlude blood vessels in the peripheral vasculature. The product includes a Micro Plug Device, a 2.9F Microcatheter, a flexible Delivery Wire, a Loader and accessories that provide for controlled delivery with the ability to reposition and recapture the Micro Plug Device prior to release. The company is based in Minneapolis, Minnesota, USA.

**KDL-INT Medical**

29

No. 925, Jinyuan Yi Road  
201803 Shanghai  
CHINA  
[www.kdl-interv.com](http://www.kdl-interv.com)

Shanghai Kindly Medical Instruments Co., Ltd (hereinafter referred to as, 'The company') was established in 2006, and it focuses on R&D, Production and Global Trade in High-Tech intervention products. Since our establishment, the company integrated quickly kinds of resources including mold design, mold processing, injection, assembling, packaging, sterilization and so on. The company has strong ability for scientific research and development of high-tech medical products with independent intellectual property. With obtaining ISO9001, ISO 13485, CE certificates and FDA approval, The company has extended its business to the United States, Europe, South America, the Middle East, South Africa, India and other 40 countries and regions. Now we have become one of the most popular professional manufacturer in high-tech medical products in China, products including: Cardiovascular Intervention Accessories: Inflation Device, Manifolds, Angiography Syringe, Seldinger Needle, Introducer Set, Y connector Kit, Pressure Bandage, Guidewire, High Pressure Line, Pressure Transducer. Catheter: Vascular MircoCatheter, Neural MircoCatheter, Peripheral MircoCatheter, Angiography Catheter, Guiding Catheter, Supporting Catheter, Biliary Ston Extraction Balloon Cathether, Embolectomy Catheter; Guidewires: MircoGuidewires, Neural MircoGuidewires, Hydrophilic Guidewires; Non-Vascular Stent: Biodegradable Sinus Stent, Biodegradable Biliary Stent and others; Orthopedic Intervention: PVP Kit, Spine Tool Kit, ECTR Disposable Kit.

**LifeTech Scientific**

93

Floor 1-5 Cybio Electronic Building  
Langshan 2nd Street  
North Area of High-tech Park, Nanshan District  
518057 Shenzhen  
CHINA  
[www.lifetechmed.com/en/](http://www.lifetechmed.com/en/)

LifeTech Scientific Corporation (Stock Code: 1302.HK) is the leading supplier of minimally invasive interventional medical devices to treat cardiovascular diseases. The company specializes in R&D, manufacture and sales, and its high-quality, innovative, proprietary products are extensively marketed in more than 100 countries by over 100 distributors. At present, the company is the world second largest supplier (and the largest among BRIC countries) of occluders to treat congenital heart diseases and the second largest supplier of aortic repair device in Asia Pacific.

**medac GmbH**

Theaterstrasse 6  
22880 Wedel  
GERMANY  
[www.medac.de](http://www.medac.de)

12

medac Gesellschaft für klinische Spezialpräparate mbH: medac is a privately held, global pharmaceutical company with a growing pharmaceutical and diagnostics business. Established 1970 in Northern Germany, medac is specialised in the treatment of oncological, haematological, urological and autoimmune diseases as well as in the development of diagnostic devices.

Besides an already established product portfolio, medac is dedicated to the refining of existing and the development of new therapeutic products providing patients with leading-edge individualised treatments. Further information about the company and its products can be found online at [www.medac.de](http://www.medac.de)

**Medcomp**

1499 Delp Drive  
PA-19438 Harleysville  
UNITED STATES OF AMERICA  
[www.medcompnet.com](http://www.medcompnet.com)

11

Medcomp is a major supplier of Venous Access Systems. This year Medcomp is proud to introduce you to the next generation of ECG PICC placement with the C3 Wave. The C3 Wave is an easy-to-use, app-based wireless ECG system designed to free up clinicians' hands by removing excess wires and allowing more focus on patient care. As well as showcasing our new C3 Wave Medcomp will also be exhibiting: Hemodialysis Catheters, cuffed and uncuffed. This will include 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****24a**

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 Europe AG****27**

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 Medicor 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 Medicor offer only the best for your imaging!

**Medtron AG**

94

Hauptstrasse 255  
66128 Saarbruecken  
GERMANY  
[www.medtron.com](http://www.medtron.com)

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 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 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. Our goal is to combine improved diagnostics, patient-friendliness and cost effectiveness. To facilitate the optimization of the examination techniques, we run development projects involving all renowned manufacturers of radiological imaging systems and devices. Medtron offers a wide range of device-specific and high-quality consumables for its injectors. Medtron AG – Essential for contrast.

**Medtronic International**

57

Rte de Molliau 31  
1131 Tolochenaz  
SWITZERLAND  
[www.medtronic.com](http://www.medtronic.com)

**Medtronic**

Making healthcare better is our priority, and we believe medical technology can play an even greater role in improving people's lives. With challenges facing families and healthcare systems — such as rising costs, aging populations, and the burden of chronic disease — we are using the power of technology to take healthcare Further, Together. Innovation and collaboration are central to who we are. Since the late 1940s, we have been working with others to alleviate pain, restore health, and extend life. Today, we are a medical technology leader, employing more than 84,000 people worldwide, and offering therapies and solutions that enable greater efficiency, access, and value – for healthcare systems, providers, and the people they serve. Learn more at [Medtronic.com](http://Medtronic.com).

**Merit Medical**

58

Amerikalaan 42  
6199 AE Maastricht  
THE NETHERLANDS  
www.merit.com



Founded in 1987, Merit Medical Systems, Inc. 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. Starting with the world’s most studied spherical embolic – Embosphere® Microspheres – Merit Medical has built a comprehensive embolotherapy suite of products, including tools to deliver your embolics right to the target. We also offer a diverse, integrated portfolio of products that support radial procedures from preparation to close and support physicians with training programs and practice support tools. Our focus on interventional spine continues to increase, with tools for various spine treatments including spinal ablation and vertebroplasty. Merit’s 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. With a global work force and cutting-edge manufacturing facilities equipped with the most-advanced technology, Merit Medical constantly delivers quality products that are backed by excellent customer service and professional expertise. Please visit [www.merit.com](http://www.merit.com) for product information, including instructions for use. Our team will be happy to meet you at booth # 58 and Learning Centre for hands-on sessions and to present our new products. We look forward to seeing you at CIRSE 2019.

**Mermaid Medical A/S**

1

Frydensbergvej 25  
3660 Stenløse  
DENMARK  
www.mermaidmedical.com



The Mermaid Medical Group is an international medical device company focused on interventional radiology, vascular surgery and Breast Medicine. In keeping with our commitment to excellence, Mermaid Medical is dedicated to providing physicians with the best patient care solutions. Our products are offered in a wide variety of sizes to meet your clinical needs. Products: D-Clot Mechanical Thrombectomy system for peripheral and hemodialysis applications, Angel Catheter system including a combined vena cava filter and central venous catheter, M•Drain™ All Purpose Drainage Catheters in locking and non-locking configurations, Nephrostomy, Biliary and Centsis Drainage Catheters, M•Drain® Percutaneous Introducer Systems, Amplatz Guidewires, Access Needles, M•Fixx™ Catheter Securement Device, M-Biopsy Semi-Automatic Biopsy Instruments.

**MIM Software Inc.**

28

25800 Science Park Dr  
Suite #180  
OH-44122 Cleveland  
UNITED STATES OF AMERICA  
[www.mimsoftware.com](http://www.mimsoftware.com)

MIM Software Inc. offers a comprehensive suite of applications that support Radiology and Nuclear Medicine's important role in the patient care pathway. MIM Software products emphasize the importance of quantitation, collaboration, and data management in order to provide physicians with the necessary information needed to generate confident clinical guidance and to inform effective treatments. MIM SurePlan™ LiverY90 provides timesaving tools for liver and tumor segmentation, deformable registration, and post-treatment dosimetry using Y90-PET and Bremsstrahlung SPECT. Use it alone, or integrate SurePlan LiverY90 into the larger MIM ecosystem and take advantage of a comprehensive, vendor-neutral platform for Nuclear Medicine processing and review. MIM SurePlan LiverY90 allows you to read PET/CT, PET/MR, SPECT/CT, and planar Nuclear Medicine images from any major manufacturer - all in one system.

**Möller Medical GmbH**

18

Wasserkuppenstrasse 29-31  
36043 Fulda  
GERMANY  
[www.moeller-medical.com](http://www.moeller-medical.com)

Möller Medical is a German medical device manufacturer who belongs to medimondi group. medimondi group is part of Centrotec Sustainable AG and covers all corporate activities concerning medical devices and engineering plastics. Möller Medical manufactures components and highly sensible medical devices. Our product portfolio consist of own brands (interventional radiology, urology, neurosurgery, aesthetics, blood banks) and OEM business (human cannulae, nano-coatings, HPLC hardware, peristaltic pumps). Our product line BiopC is based upon decades of experience in developing and manufacturing all kinds of cannulae and needles for human medicine as well as in the field of intensive care. 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 60 years ago. This guideline directly influenced the development of the BiopC product range and will remain a determining factor to continuous developments of the product portfolio.



**Noras MRI products GmbH**

78

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. Our development and production is taking place mainly in Germany. The final assembly and inspection is done manually by skilled employees, which provides an extra quality advantage.

**Numa**

80

Block 1 Quayside Business Park  
A91 DP8R Dundalk, Louth  
IRELAND  
[www.smart-mict.de](http://www.smart-mict.de)

Image-guided Minimally Invasive Cancer Treatments (MICTs) form a rapidly growing field of alternatives to full surgical resection, allowing an interventionalist to perform highly targeted treatments. Prediction of the precise ablation boundary is crucial to ensure both complete tumour destruction and the protection of sensitive structures. To assist radiologists in the training and planning for these interventions, a web-based planning and simulation software tool has been developed through a European Commission FP7 programme. The GoSmart software provides a unified web environment, enabling interventionalists to upload patient scans, identify important structures and simulate a range of key MICTs. It is highly extensible, with an interface for manufacturers, researchers and medical technicians to incorporate new equipment, treatment protocols and theoretical models. An introduction to the software can be found at the attached web address.

**Optimed**

14

Ferdinand-Porsche-Strasse 11  
76275 Ettlingen  
GERMANY  
[www.opti-med.de](http://www.opti-med.de)

optimed, based in Ettlingen/Germany, was founded in 1995. The company is engaged in the research and development, production and global distribution of medical products for minimal invasive therapy. Optimed employs more than 100 people in its administration center and 2 production sites in Ettlingen near Karlsruhe. As optimed continuously invests in the research, development and production of the products of tomorrow, we are the ideal partner for innovative medical practitioners working in the field of minimal invasive therapy, specifically in Interventional radiology, Vascular interventions, Urology, Gastroenterology, Orthopedics / traumatology.

**Pajunk GmbH**

49

Karl-Hall Strasse 1  
78187 Geisingen  
GERMANY  
[www.pajunk.com](http://www.pajunk.com)

PAJUNK® - Pioneering medical technology. More than 50 years Pajunk stands for innovative medical technology, made in Germany. The Pajunk Group is an internationally operating and owner-managed company with its headquarters in Geisingen, Baden-Württemberg and sales offices in Atlanta and Newcastle. Pajunk is a leading medical technology manufacturer in the areas of regional anesthesia, neurology, pain management, minimally invasive surgery, and biopsy. Pajunk's portfolio includes cannulas and systems for punch biopsy, aspiration and puncture cannulas for core, fine needle aspiration biopsy and bone biopsy as well as ultrasound guided central line access. Come and try out our products at our booth.

**Penumbra Europe GmbH**

90

Am Borsigturm 44  
13507 Berlin  
GERMANY  
[www.penumbrainc.com](http://www.penumbrainc.com)

Penumbra 

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.

**PharmaCept GmbH**

39

Bessemerstrasse 82  
12103 Berlin  
GERMANY  
[www.pharmacept.com](http://www.pharmacept.com)



PharmaCept stands for the 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 Systems Nederland B.V.**

3

Amstelplein 2, Breitner Center  
P.O. Box 77900  
1070 MX Amsterdam  
THE NETHERLANDS  
[www.philips.com](http://www.philips.com)

The Philips logo, consisting of the word 'PHILIPS' in a bold, blue, sans-serif font.

Philips is a health technology company focused on improving people's lives through meaningful innovation across the health continuum – from healthy living and prevention to diagnosis, treatment and home care. Applying advanced technologies and deep clinical and consumer insights, Philips partners with customers to deliver integrated solutions that address the Quadruple Aim: improved patient experience, better health outcomes, improved staff experience, and lower cost of care.

**Piolax Medical Devices, Inc.****33**

2F 3-18-20 Shin-Yokohama Kohoku-ku  
2220033 Yokohama  
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 including OEM supply.

**Praxis Medical Devices****24**

500 N Willow Ave  
STE 101  
FL-33606 Tampa  
UNITED STATES OF AMERICA  
[www.praxismedicaldevices.com](http://www.praxismedicaldevices.com)

CytoCore: An oscillating FNA biopsy device.

**QualiMed****7**

Boschstrasse 16  
21423 Winsen/Luhe  
GERMANY  
[www.qualimed.de](http://www.qualimed.de)

QualiMed is a recognized worldwide leader in the design, development and selling of medical devices, with over 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.**

22

2070 Las Palmas Dr  
CA-92011 Carlsbad  
UNITED STATES OF AMERICA  
[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.

**RF Medical Co., Ltd.**

20

#502,503,505,506,507,511,  
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 50 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**

79

Bahnhofstrasse 7  
6300 Zug  
SWITZERLAND  
[www.rontis.com](http://www.rontis.com)

Rontis AG, a Swiss-based international company consists of four (4) divisions: Medical Devices, Pharmaceutical, Consumer Healthcare and Healthcare (dialysis) Services. Our three E.U.-based factories serve also as an R&D platform for medical devices like PTCA and PTA balloons, guidewires and stents systems, as well as pharmaceuticals for customers worldwide; also provides OEM / private label services for international customers. Rontis is selling its products in 40+ countries worldwide and is also a full-service OEM Contract Manufacturer of medical devices. For medical devices (endovascular products), among others, we produce ([www.rontismedical.com](http://www.rontismedical.com)): PTCA: Abrax™, Sirolimus DES with a biodegradable polymer, Leader® Plus, CoCr BMS, InRo® semi-compliant balloon with RBP up to 21atm, Europa Ultra™ semi-compliant balloon, Europa Ultra NC™, balloon, Europa Ultra CTO™ balloon (Rx & OTW, starting from 1.00mm), Lotus II™ & Lotus XP™ coronary and peripheral wires, also for CTOs & BTK applications. PTA: Zeus® CC (CoCr) stent system (up to 80mm), Zeus® SX (Nitinol) self - expanding stent, Cronus® Advanced / Cronus® NV (non-vascular) balloons, Cronus® HP, 0.035" OTW balloon (RBP: up to 32atm) - FDA approved for a special project in U.S. market, Triton® Plus, 0.018" Rx balloon, Triton® BTK 0.014" (Rx & OTW) below-the-knee balloon (up to 210mm).

**Shionogi Europe**

72

33 Kingsway  
WC2B 6UF London  
UNITED KINGDOM  
[www.shionogi.eu](http://www.shionogi.eu)

From our beginnings over 140 years ago in Osaka, Japan, Shionogi & Co. Ltd. has built a strong heritage in research-based medicine, matched by world-class market access and patient insight capabilities. Shionogi Europe was launched in 2012 and is committed to applying our patient-first approach in everything we do across the region. Our research-led organisation is defined by a distinct openness and close partnership approach to discovering and developing medicines addressing unmet medical needs. Our development approach goes hand in hand with the collaborative drug discovery process that lies at the heart of Shionogi and our people.

**Shockwave Medical**

41

5403 Betsy Ross Drive  
CA-95054 Santa Clara  
UNITED STATES OF AMERICA  
[www.ShockwaveIVL.com](http://www.ShockwaveIVL.com)

Shockwave Medical is a company focused on developing and commercializing products intended to transform the way calcified cardiovascular disease is treated. We aim to establish a new standard of care for medical device treatment of atherosclerotic cardiovascular disease through our differentiated and proprietary local delivery of sonic pressure waves for the treatment of calcified plaque, which we refer to as 'Intravascular Lithotripsy.' For more information, visit [www.shockwavemedical.com](http://www.shockwavemedical.com).

**Siemens Healthcare GmbH**

66

Karlheinz-Kaske-Strasse 5  
91052 Erlangen  
GERMANY  
[www.siemens-healthineers.com](http://www.siemens-healthineers.com)



Siemens Healthineers enables healthcare providers worldwide to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery, improving patient experience and digitalizing healthcare. A leader in medical technology, Siemens Healthineers is constantly innovating its portfolio of products and services in its core areas of diagnostic and therapeutic imaging and in laboratory diagnostics and molecular medicine. Siemens Healthineers is also actively developing its digital health services and enterprise services. In fiscal 2018, which ended on September 30, 2018, Siemens Healthineers generated revenue of €13.4 billion and adjusted profit of €2.3 billion and has about 50,000 employees worldwide. Further information is available at [www.siemens-healthineers.com](http://www.siemens-healthineers.com)

**SIO**

13

2025 M St NW Suite #800  
20036 Washington, DC  
UNITED STATES OF AMERICA  
[www.sio-central.org](http://www.sio-central.org)

Established by WCIO, the Society of Interventional Oncology (SIO) serves as the only membership-based organization dedicated to the emerging field of Interventional Oncology. SIO works to further promote the mission to advance Interventional Oncology (IO) as the fourth pillar of cancer therapy alongside medical, surgical, and radiation oncology worldwide. Members receive discounted registration to SIO's Annual Scientific Meeting and opportunities to apply for exclusive research grants and earn free CME online at IO University. Become a member today and join us at SIO2020 taking place in New Orleans, LA from January 31-February 3, 2020. Visit [www.sio-central.org](http://www.sio-central.org) for the latest news and society updates.

**Sirtex Medical Europe GmbH**

51

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 92,000 doses SIR-Spheres microspheres have been supplied to treat patients in over 1,230 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. Further information please visit [www.sirtex.com](http://www.sirtex.com).



**Sonar**

30

15 Bd Grawitz  
13016 Marseille  
FRANCE  
www.sonar-broadcast.com

Created by Incathlab, Sonar is a turnkey solution to record, edit and broadcast videos of medical interventions in your own network or all around the world. The system includes: A full audiovisual system - High quality videos, Smooth communication, Powerfull server; Easy to use digital tools - Professional & customizable design, Simplified tool to edit your videos, Share your work locally or worldwide.

**STARmed Co. Ltd.**

21

#B-14th floor Daebang Triplaon 158  
Haneulmaeulro, Ilsandong gu  
10355 Goyang  
KOREA, REPUBLIC OF  
www.starmed4u.com

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.

**Straub Medical AG**

56

Straubstrasse 12  
7323 Wangs  
SWITZERLAND  
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.

# Back to **shape**

For 35 years, osteoporotic vertebral compression fracture (VCF) treatment has focused primarily on pain management. Traditional fracture treatments did not seek to address reduction, fixation and restoration due to the limits of the instrumentation. The SpineJack® system gives you the tools to take control of the procedure, and is designed to help restore vertebral body height and help protect your patients from adjacent level fractures.



## **SpineJack mechanical vertebral augmentation system**

The products depicted are CE marked in accordance with applicable EU Regulations and Directives. Stryker or its affiliated entities own, use, or have applied for the following trademarks or service marks: SpineJack and Stryker. All other trademarks are trademarks of their respective owners or holders. The absence of a product, feature, or service name, or logo from this list does not constitute a waiver of Stryker's trademark or other intellectual property rights concerning that name or logo.

The information presented is intended to demonstrate the breadth of Stryker product offerings. Stryker does not endorse or support the unapproved uses of its products. A physician must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that physicians be trained in the use of any particular product before using it in surgery. A physician must always refer to the package insert, product label and/or instructions for use before using any Stryker product. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

Bone cement: Complications are rare. Serious adverse events, some with fatal outcome, associated with the use of bone cements for vertebroplasty, kyphoplasty and sacroplasty include myocardial infarction, cardiac arrest, cerebrovascular accident, pulmonary embolism and cardiac embolism. Although it is rare, some adverse events have been known to occur up to one year post-operatively. Additional risks exist with the use of bone cement. Please see the IFU for a complete list of potential risks.

**Stryker**

10

8, Rue de Vidailhan  
 Hills Plaza - Bât. B - 1er Etage  
 31130 Balma  
 FRANCE  
[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. We provide the most advanced medical technology for interventional spine procedures. 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**

75

5F. Airmaster Mansion  
 No.22, Hongjunying Road  
 Chaoyang District  
 100012 Beijing  
 CHINA  
[www.surgnova.com](http://www.surgnova.com)

Surgnova is specialized in R&D of minimally invasive surgical devices. We are committed to providing reliable and efficient medical solutions for physicians and patients globally. Product Pipeline 1 - Interventional Oncology: 1. Dophi™ M150E MW Ablation System: Dual Independent Output Channels, Up To 150W, Patented Anti-Phase Technology, Integrated Best-in-class Pump In Generator. 2. Dophi™ R150E Radio Frequency Ablation System: Three-electrode Ablation Synchrony, 17G&19G Electrodes For Various Ablation Needs, Smart Impedance Monitoring Algorithm. 3. NanoCure™ Electroporation System: Portable IRE System with Integrated ECG Module, Tissue Temperature Monitoring, Built-in Intelligent Algorithm Across Tissues Product Pipeline 2 - Power-based Energy Device: 1. SoniCure™ Ultrasonic Scalpel System: Superior Dissection Speed, Solid Hemostasis Capability, Less Thermal Damage, Smart Tissue Sensing Technology. 2. Ultrasonic Surgical&Electrosurgical System: Ultrasonic Surgical and Electrosurgical Modes Combined System, Multiple Instruments Available, Smart Tissue Sensing Technology. 3. Powered Stapler: Intuitive Single-hand Operation, Powered Articulation, Jaw Open/Close, And Firing, Articulation Joint Can Rotate Indefinitely. Product Pipeline 3 - Endoscopic System: DeepEye™ 2D and 3D Video Laparoscope Systems: Full HD Imaging, Fog-proof Function, Image Enhance Algorithm, Integrated Design.




## The old way isn't always the better way.

### Discover the benefits of powered access for bone biopsies

Manual biopsy needles may be the original approach, but today there's a powered solution that is raising the standard for biopsies: The Arrow OnControl Powered Bone Access System for bone marrow and bone lesion biopsies. As compared to manual needles, it has been shown to deliver consistently larger, high-quality core specimens.<sup>1-3</sup> It could be the key to bone biopsies that are less painful,<sup>2,5</sup> provide more usable area for diagnosis,<sup>1,2</sup> and may result in improved patient compliance with ongoing testing.<sup>2,4</sup> All while providing clinicians with precise control and the ability to access hard-to-reach lesions.<sup>2,5,7</sup>



To learn more, meet with us at our booth during CIRSE 

To place an order, contact Customer Service at [orders.intl@teleflex.com](mailto:orders.intl@teleflex.com)

#### References:

1. Miller LJ, Philbeck TE, Montez DF, et al. Powered bone marrow biopsy procedures produce larger core specimens, with less pain, in less time than with standard manual devices. *Hematol Rep.* 2011;3(e8):22-5. doi:10.4081/hr.2011.e8. Research sponsored by Teleflex Incorporated. Philbeck TE and Montez DF are employees of Teleflex Incorporated.
2. Swords RT, Anguita J, Higgins RA, et al. A prospective randomized study of a rotary powered device (OnControl) for bone marrow aspiration and biopsy. *J Clin Pathol.* 2011;64(9):809-13. Research sponsored by Teleflex Incorporated.
3. Wallace AN, Pacheco RA, et al. Fluoroscopy-guided intervertebral disc biopsy with a coaxial drill system. *Skeletal Radiol.* 2016;45:273-278. doi: 10.1007/s00256-015-2273-7.
4. Reed LJ, Raghupathy R, Strakhan M, et al. The OnControl bone marrow biopsy technique is superior to the standard manual technique for hematologists-in-training: a prospective, randomized comparison. *Hematol Rep.* 2011;3(e21). doi:10.4081/hr.2011.e21. Research sponsored by Teleflex Incorporated.
5. Berenson JR, Yellin O, Blumenstein B, et al. Using a powered bone marrow biopsy system results in shorter procedures, causes less residual pain to adult patients, and yields larger specimens. *Diagnostic Pathology.* 2011;6:23. Research sponsored by Teleflex Incorporated.
6. Garcia G, Miller LJ, Philbeck TE, Bolleter S, Montez DF. Tactile feedback allows accurate insertion of a powered bone access device for vertebroplasty and bone marrow sampling procedures. *J Vasc and Interv Radiol.* 2011;22(3):S86. Research sponsored by Teleflex Incorporated. Philbeck TE and Montez DF are employees of Teleflex Incorporated. Dr. Garcia was formerly a paid consultant of Teleflex Incorporated. Simulated model study results may not be indicative of clinical performance.
7. Symington K, Martinez F, Miller LJ, Philbeck TE. Examination of 64 consecutive specimens obtained using a powered biopsy device. *J Vasc and Interv Radiol.* 2014;25(3s):S196. Research sponsored by Teleflex Incorporated. Philbeck TE is an employee of Teleflex Incorporated.

Teleflex, the Teleflex logo, Arrow, and OnControl are trademarks or registered trademarks of Teleflex Incorporated or its affiliates, in the U.S. and/or other countries. Revised: 03/2019. © 2019 Teleflex Incorporated. All rights reserved. MCI-2019-0376-EN.

**Suzhou Leapmed Healthcare Corporation****60**

38# North Guandu Road, Wuzhong District Suzhou City  
NO.2& NO.3 Building  
21500 Suzhou  
Jiangsu  
CHINA  
[www.leapmed.com](http://www.leapmed.com)

Leapmed, a professional manufactory for ultrasound biopsy kits supplier, was founded in 1994. Since 2011, Leapmed founded first R&D team to develop biopsy kits, which is the 1st team specialized in the biopsy kits development field in China. After years of development, the 1st Chinese metal biopsy kits manufacturing certification was issued by CFDA in 2012, by 2015, Leapmed developed over 250 biopsy kits models, and was certified by CE, and ISO 13485. By year 2017, Leapmed launched its new generation of biopsy to China and all over the world. Leapmed's team has developed biopsy kits for GE, Philips, Siemens, Esaote, Medison, Toshiba, Hitachi, Aloka and other famous transducers, covering applications for abdominal, superficial, cardiac, endo and 3D. Leapmed can also customize biopsy guides with different angle or shape for clinical doctors. Leapmed's vision is: Becoming the leading biopsy kits supplier in precision medical imaging.

**Teleflex****73**

IDA Business & Technology Park Dublin Road  
N37 EC90 Athlone, Co Westmeath  
IRELAND  
[www.teleflex.com](http://www.teleflex.com)

Innovations to Simplify Interventions. As the interventional cornerstone of Teleflex, we offer a growing portfolio of specialty-focused solutions to support interventionalists around the globe. Our products are known for their innovative ability to simplify complex procedures and common clinical challenges. Teleflex is a global provider of medical technologies designed to improve the health and quality of people's lives. We apply purpose driven innovation – a relentless pursuit of identifying unmet clinical needs – to benefit patients and healthcare providers.

## Terumo Interventional Systems

Interleuvenlaan 40

3001 Leuven

BELGIUM

[www.terumo-europe.com](http://www.terumo-europe.com)

6



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. Peripheral Intervention: 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 product range is covering solutions for Carotid Artery Stenting as well as for Below The Knee and FemoroPopliteal procedures; Interventional Oncology: In Interventional Oncology, Terumo Interventional Systems develops innovative products for interventional radiologists focused on disease-based solutions in liver cancer and non-tumor settings. Rising to the challenge of creating innovative treatments for patients, we bring you a complete range of interventional oncology products that focus on: Access, Loco-regional treatments ranging from ablation, TACE and SIRT, Endovascular embolization. As a pioneer in interventional oncology, Terumo Interventional Systems is committed to bringing you cutting-edge technology to support your loco regional patient needs. We are committed to supporting our comprehensive product portfolio by a well-trained field force and solid clinical evidence.

**Tokai Medical Products, Inc.**

37

1485 Sarayashiki, Taraga-cho  
486-0808 Kasugai-city  
JAPAN  
[www.tokaimedpro.co.jp/en](http://www.tokaimedpro.co.jp/en)

Tokai Medical Products, Japanese medical device manufacturer was founded by 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 2.7 Fr high flow to 1.7 Fr ultra selective. All are compatible with micro particles, coils and DMSO. For more information, please visit [www.tokaimedpro.co.jp/en](http://www.tokaimedpro.co.jp/en)

**Uresil, LLC**

74

5418 Touhy Ave.  
IL-60077 Skokie  
UNITED STATES OF AMERICA  
[www.Uresil.com](http://www.Uresil.com)

UreSil is a global provider of innovative devices and services for the specialized field of interventional radiology. Our ongoing commitment is to produce cost-effective products, maintain superior quality, and serve the needs of the patient and the medical community. UreSil offers a variety of drainage catheters and drainage accessories.

**Veryan Medical Limited**

19

Unit 15, City Business Centre  
Brighton Road  
RH13 5BB Horsham  
UNITED KINGDOM  
[www.veryanmed.com](http://www.veryanmed.com)

Veryan Medical has developed BioMimics 3D®, a self-expanding, nitinol SFA/prox popliteal stent which imparts a natural, 3D curvature to the artery, to generate swirling flow, increase wall shear and reduce intimal hyperplasia. In the Mimics randomised study BioMimics 3D, the Swirling Flow® Stent, achieved significantly better performance than straight control stents; it is the ideal alternative to drug elution. Veryan is an Otsuka Medical Devices company.

**Vigeo s.r.l. (Headquarter)**

40

Via dell'Alpino 2  
46031 Bagnolo San Vito  
ITALY  
[www.vigeosrl.it](http://www.vigeosrl.it)

Vigeo is a private and independently owned company founded in 2005 and headquartered in Mantova, Italy. Vigeo is a global manufacturer of Biopsy devices for Interventional Radiology, Interventional Urology, Breast Care and Oncology. The product portfolio offers a broad and innovative range of minimally invasive disposable instruments in the following areas : Mama interventions ( wire & clip marking ), Soft tissue and bone marrow biopsy, Cyst drainage. Vigeo's brand is recognized for best-in-class products that improve patient outcomes via percutaneous, image-guided procedures. Vigeo serves its global customers through a direct sales organization and through long-standing relationships with medical device distributors, strategic partners and OEMs. Vigeo is the exclusive distributor for several world-leading producers of medical devices, too.

**W. L. Gore & Associates GmbH**

65

Hermann-Oberth-Strasse 22  
85640 Putzbrunn  
GERMANY  
[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. Founded in 1958, Gore has built a reputation for solving complex technical challenges in the most demanding environments — from revolutionizing the outerwear industry with GORE-TEX® fabric to creating medical devices that improve and save lives to enabling new levels of performance in the aerospace, pharmaceutical and mobile electronics markets, among other industries. 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 Ltd****32a**

15 Lyon Road  
Merton  
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.

**Zhengjiang Zylox Medical Device Co., Ltd****89**

Floor 2, Building 1, No. 18 Keji Avenue  
311121 Hangzhou  
Zhejiang  
CHINA  
[www.zyloxmedical.com](http://www.zyloxmedical.com)

Zylox Medical Device Co.,Ltd was founded in Hangzhou, China, in 2012 by a group of highly skillful and experienced returnees from the US and Europe. Since its inception, Zylox has developed an increasingly rich product pipeline of interventional and implantable peripheral vascular devices such as PTA balloons, DCB, SFA stent, drug-eluting stent, and other vascular accessories. Zylox strives to continuously innovate and provide patients with superior quality medical devices.



# Shaping your business success

Daily clinical work means a wide variety of demands and challenges. We help you meet your needs by offering a solution tailored for your individual set-up.

## Ziehm Vision RFD Hybrid Edition<sup>1</sup>

- **Extend your cardiovascular surgical capabilities** with a powerful 25 kW mobile C-arm
- **Take your OR to the next level** with a mobile hybrid solution
- **Plug in and start your hybrid procedure** with zero room preparation
- **Reduce exposure significantly** with the next-generation SmartDose<sup>2</sup>

[www.ziehm.com/RFDHE](http://www.ziehm.com/RFDHE)



Endovascular aneurysm repair (EVAR)

<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. <sup>2</sup> The SmartDose Concept includes a variety of hardware and software features. Due to regulatory reasons, the availability of each feature may vary. Please contact your local Ziehm Imaging sales representative for detailed information.

ALWAYS  
AHEAD



ziehm imaging

**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".

**Z-Medica**

25

4 Fairfield Blvd  
CT-06492 Wallingford  
UNITED STATES OF AMERICA  
[www.z-medica.com/Z-Medica](http://www.z-medica.com/Z-Medica)

Z-Medica develops, manufactures and markets innovative hemostatic agents to support a broad range of markets including healthcare, military, first responders and consumers, around the world.

QuikClot is a proprietary technology, which consists of a non-woven material impregnated with kaolin. Kaolin activates Factor XII on the intrinsic pathway, which in turn accelerates the clotting cascade leading to faster bleeding control.

QuikClot allows for: quicker and safer ambulation post coronary diagnostic and PCI via the femoral approach, shorter compression times reduce the total time of the procedure and may lessen discomfort for patients, shorter procedure times allow the hospital to move patients through the system faster and add more procedures onto the daily schedule; QuikClot is ready to go right out of the package and simple to use. Product uses the same placement techniques as standard gauze.

QuikClot is used for controlling bleeding and tract oozing.

## Technical Exhibition RPP (Alphabetical List)

Official Name	Booth# (RPP Area)
3D Systems Symbionix	7
Biotronik	10
Bracco	3
CAScination	6
DRGEM Corporation	5
EuroSafe Imaging	11
Kinepict Health	9
Mavig	14
MDT X-Ray	1
Mentice	8
Radpad Worldwide	12
RaySafe & Landauer	4
Siemens Healthcare	2
Tecres	13

**Technical Exhibition RPP** (Numerical List)

<b>Official Name</b>	<b>Booth# (RPP Area)</b>
MDT X-Ray	1
Siemens Healthcare	2
Bracco	3
RaySafe & Landauer	4
DRGEM Corporation	5
CAScination	6
3D Systems Symbionix	7
Mentice	8
Kinepict Health	9
Biotronik	10
EuroSafe Imaging	11
Radpad Worldwide	12
Tecres	13
Mavig	14

**3D Systems Symbionix**

7

5381 South Alkire Circle  
CO-80127 Littleton  
UNITED STATES OF AMERICA  
[www.symbionix.com](http://www.symbionix.com)

Experience a hands-on demo of the Symbionix ANGIO Mentor endovascular training simulator 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. Don't miss the new iCase endovascular simulation case editor that enables unlimited, independent case creation. It provides program directors as well as training managers the opportunity to create new clinical training scenarios and simulation cases using a simple and short procedural flow. Also, the ever-expanding library of modules include 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).

**Biotronik AG**

10

Ackerstrasse 6  
8180 Buelach  
SWITZERLAND  
[www.biotronik.com](http://www.biotronik.com)



Biotronik is a leading medical device company that has been developing trusted and innovative cardiovascular and endovascular solutions for more than 50 years. Driven by a purpose to perfectly match technology with the human body, Biotronik innovations deliver care that saves and improves the lives of millions diagnosed with heart and blood vessel diseases every year. Biotronik is headquartered in Berlin, Germany, and represented in over 100 countries.

**Bracco****3**

Via E. Folli 50  
20134 Milan  
ITALY

[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) and Nuclear Medicine through radioactive tracers. The diagnostic imaging portfolio is completed by several medical devices and advanced administration systems for contrast imaging products in the fields of radiology.

The Company operates in over 100 markets worldwide, either directly or indirectly, through subsidiaries, joint ventures, licenses and distribution partnership agreements. To learn more about Bracco Imaging, visit [www.braccoimaging.com](http://www.braccoimaging.com)

**CAScination****6**

Steigerhubelstrasse 3  
3008 Bern  
SWITZERLAND  
[www.cascination.com](http://www.cascination.com)

CAScination AG is a highly innovative Swiss company established as a global leader in stereotactic navigation and image fusion, offering products that enable safer and more effective minimally invasive treatments. The company's product portfolio includes commercially available solutions for open and laparoscopic liver surgery and CT-guided percutaneous interventions in soft tissue organs. With extensive clinical experience of more than 1000 procedures performed, CAScination's technologies have proven they can safely expand indications for minimally invasive surgery in several applications, while enabling significant savings in time and resources for the hospital. Collaborating closely with leading clinicians and institutions, CAScination is also supporting important research to generate further evidence on how its products can improve patient outcomes. In addition, the company's growing development pipeline integrates augmented reality, navigation and robotic technologies setting the standards for the next generation of minimally invasive surgical applications.

**DRGEM Corporation**

5

7F, E-B/D Gwangmyeong Techno-Park, 60 Haan-ro  
14322 Gwangmyeong-si  
Gyeonggi-do  
KOREA, REPUBLIC OF  
[www.drgem.co.kr](http://www.drgem.co.kr)

Main Business: - X-ray Generator, Radiography System, DR System, Vet DR  
DRGEM Corporation is one of the world's leading manufacturers of diagnostic radiography systems, specializing in high frequency x-ray generators, conventional radiography systems, and digital radiography systems.

**EuroSafe Imaging**

11

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. EuroSafe Imaging has celebrated its 5<sup>th</sup> anniversary this year. Visit the EuroSafe Imaging booth (No. RPP 11) to learn about our activities and support us by becoming a EuroSafe Imaging Star.



**Kinepict Health Kft**

9

Kelta köz 5.  
2092 Budakeszi  
HUNGARY  
[www.kinepict.com](http://www.kinepict.com)

Kinetic imaging consists of data acquisition and analysis obtained from X-ray image series. The new digital variance angiography (DVA) represents contrast medium motion inside the patient. Kinetic imaging can visualize blood vessel structures by detecting the movement of the iodinated or CO<sub>2</sub> contrast medium bolus. The advanced statistical data analysis yields better image quality than DSA. Replacing DSA with kinetic imaging obtains better image quality, reduced contrast agent amount or X-ray dose. Our ongoing clinical neuroangiology and lower limb studies indicate that the quality reserve provided by our technology can be effectively converted to significant contrast media (50%) and X-ray dose reduction. This brings significant economical and health benefits – less adverse events, reduced radiation risk - to the medical staff and patients.

**Mavig GmbH**

14

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 suspensions 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. Mavig is market leader in its business fields. Our product quality and service “Made in Germany” is acknowledged worldwide. Mavig also offers VivaScope®, the first Confocal Laser Scanning Microscope for in-vivo, real-time examination of human skin.

**MDT X-Ray B.V.**

1

Bukkumweg 26  
CT-5081 Hilvarenbeek  
THE NETHERLANDS  
[www.mdtxray.com](http://www.mdtxray.com)

The most innovative Personal X-Ray protection manufacturer in Europe. From X-Ray aprons Thyroid shields and personal X-ray protective glasses; all made in Europe.

**Mentice****8**

Odinsgatan 10  
41103 Gothenburg  
SWEDEN  
[www.mentice.com](http://www.mentice.com)

Mentice is the world leader in virtual reality-based performance solutions for endovascular therapies. Our solutions help healthcare professionals with skills acquisition, continuous professional development and pre-procedural planning – leading to improved productivity and outcomes. Mentice solutions are scientifically validated and have been specifically developed for healthcare providers and the medical industry. Neurovascular, cardiovascular and peripheral interventions are just some of the clinical areas covered by our solutions. Learn more about the features and benefits of Mentice solutions at: [www.mentice.com](http://www.mentice.com).

**RaySafe & Landauer****4**

Uggleådalavägen 29  
42740 Billdal  
SWEDEN  
[www.raysafe.com](http://www.raysafe.com)

RaySafe and Landauer focus on measuring and reducing radiation exposure for healthcare professionals. 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.

<http://raysafe.com/Home/Products/Staff/RaySafe%20i3>

Come by the booth to see the New i3i. The RaySafe Real-time Dosimetry System just got better. Landauer dosimetry service: Landauer is the world leader in passive dosimetry.

Over 2 million workers trust Landauer for their radiation protection. The solutions provided by Landauer meet your dosimetry requirements in accordance with radiation protection regulations. LANDAUER INLIGHT® – Personal dosimetry. Landauer offers a complete range of services including for body, ring and lens of eye dosimetry monitoring. LANDAUER VISION® - Discrete and multi-support lens of eye dosimetry Ergonomic, compact and flexible, VISION measures Hp(3) photon dose to the lens from 0.1 mSv to 10 Sv.

Your workers are being monitored precisely with the highest comfort.

[www.landauer-fr.com/en/home](http://www.landauer-fr.com/en/home)

**Siemens Healthcare GmbH**

2

Karlheinz-Kaske-Strasse 5  
91052 Erlangen  
GERMANY  
[www.siemens-healthineers.com](http://www.siemens-healthineers.com)



Siemens Healthineers enables healthcare providers worldwide to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery, improving patient experience and digitalizing healthcare. A leader in medical technology, Siemens Healthineers is constantly innovating its portfolio of products and services in its core areas of diagnostic and therapeutic imaging and in laboratory diagnostics and molecular medicine. Siemens Healthineers is also actively developing its digital health services and enterprise services. In fiscal 2018, which ended on September 30, 2018, Siemens Healthineers generated revenue of €13.4 billion and adjusted profit of €2.3 billion and has about 50,000 employees worldwide. Further information is available at [www.siemens-healthineers.com](http://www.siemens-healthineers.com).

**Tecres SpA**

13

Via A. Doria 6  
37066 Sommacampagna  
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.

**Worldwide Innovations & Tech., Inc.**

12

14740 W. 101st Terrace  
KS-66215 Leawood  
UNITED STATES OF AMERICA  
[www.radpad.com](http://www.radpad.com)

Manufacturer of RADPAD® Shields, Worldwide Innovations & Technologies, Inc. is committed to developing and producing quality products providing medical personnel and patients with protection from the deadly and debilitating effects of radiation. Our products have been independently tested, studied, and proven effective in reducing radiation exposure and are ISO 13485 certified confirming and enhancing our commitment to quality products and customer service.

RADPAD® products are lead free and can be sterilized as necessary. They are completely disposable and create no environmental issues. Further, RADPAD® products allow medical facilities to comply with the ALARA (As Low As Reasonably Achievable) standard of the radiation protection industry. 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 35 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.



**European Board of  
Interventional Radiology**



## **Apply Now**

and boost your career in IR

The EBIR is a globally recognised certification designed to give practising interventional radiologists the opportunity to certify their expertise and build their career from early on.


### **Upcoming examinations:**

- **March – ECR 2020**
  - **September – CIRSE 2020**
- 

**Submit your application online at**  
**[www.cirse.org/ebir](http://www.cirse.org/ebir)**



Cardiovascular and Interventional Radiological Society of Europe



## Societies (Alphabetical List)

Official Name	Booth#
BSIR	S20
CIRSE 2020	S12
CIRSE Academy	S2
CIRSE Clinical Research	S24
CIRSE Library	S1
CVIR	S22
CVIR Endovascular	S23
DeGIR/ÖGIR/IROS/SSVIR	S16
EBIR	S3
ECIO 2020	S13
ESIR	S10
ESR	S19
ET 2020	S14
GSIR	S18
HSIR	S17
IASIOS	S21
ICCIR 2020	S11
IESIR	S15
ISVIR	S6
SERVEI	S9
SIDI	S8
SIR	92
SNRIR	S5
SOBRICE	S7
TSIR	S4

**Societies** (Numerical List)

<b>Official Name</b>	<b>Booth#</b>
CIRSE Library	S1
CIRSE Academy	S2
EBIR	S3
TSIR	S4
SNRIR	S5
ISVIR	S6
SOBRICE	S7
SIDI	S8
SERVEI	S9
ESIR	S10
ICCIR 2020	S11
CIRSE 2020	S12
ECIO 2020	S13
ET 2020	S14
IESIR	S15
DeGIR/ÖGIR/IROS/SSVIR	S16
HSIR	S17
GSIR	S18
ESR	S19
BSIR	S20
IASIOS	S21
CVIR	S22
CVIR Endovascular	S23
CIRSE Clinical Research	S24
SIR	92

**BSIR – British Society of Interventional Radiology****S20**

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 2020****S12**

As the largest 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 2020 from September 12-16 in Munich, Germany for another year of science, education and innovation. Visit our booth or learn more on our website at [cirse.org](http://cirse.org).

**CIRSE Academy****S2**

The CIRSE Academy aims to provide comprehensive knowledge on IR procedures through online courses based on the European Curriculum and Syllabus for IR. These courses, all peer-reviewed by experts, include theory, example cases and teaching videos. Currently, 26 courses are available on oncology, embolisation, arterial, venous, aortic, neurointervention and non-vascular interventions. All CIRSE Academy courses are CME-certified, and CIRSE members are eligible for a reduced fee. For more information, please visit [cirse.org/academy](http://cirse.org/academy)



**CIRSE Clinical Research****S24**

Research is a key building stone of any medical specialty, and the fast pace of change within interventional radiology makes it doubly so. Since 2013, CIRSE has been gradually redefining its role within IR research by developing an in-house research infrastructure tailored to high-quality observational studies. With grants by our industry partners and guidance from scientific steering committees, the CIRSE Clinical Research Department has successfully designed and conducted observational studies in post-market as well as national reimbursement settings.

Together with our clinical research operations and projects, the requirements on our infrastructure have grown too, and we are steadily developing our services to be able to even better meet the demands for high-quality data collection in the IR community. Stop by our CIRSE Clinical Research Booth in the entrance hall, visit [cirse.org/research](http://cirse.org/research), or contact [research@cirse.org](mailto:research@cirse.org) for more information about our services and our network of partners.

**CIRSE Library****S1**

CIRSE proudly offers an online resource for congress recordings: the CIRSE Library. A wealth of IR knowledge in one convenient location, the Library features lectures and posters from current and previous congresses, with more than 8,000 available titles. Watch HD quality webcasts, browse a wide-ranging collection of educational topic packages, find related content and view selected lectures to prepare for the EBIR examination. Members enjoy year-round access, and non-members have a range of access options. Find out more and discover the most extensive online educational tool in interventional radiology at [library.cirse.org](http://library.cirse.org)!

**CVIR – CardioVascular and Interventional Radiology****S22**

CardioVascular and Interventional Radiology (CVIR) is an official journal of CIRSE. Founded in 1978 by Professors Herbert L. Abrams and Eberhard Zeitler, CVIR is the longest-running journal covering a broad field of topics in vascular and interventional radiology. CVIR enjoys a vast international readership, and in addition to its association with CIRSE, CVIR is also an official organ of various IR societies representing over 20 countries. [www.cvironline.org](http://www.cvironline.org)

**CVIR Endovascular****S23**

CVIR Endovascular is CIRSE's online-only, open-access journal focusing on endovascular therapies and research beneficial for daily IR practice. It features an open peer-review model and is intended for all specialists working in the field of endovascular treatment. The journal operates on article-processing charges, and more than 600 institutions worldwide support their affiliated authors to publish open access by paying some or all publication costs.

Applications for waivers or discounts on article-processing charges can be completed during manuscript submission.

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

**DeGIR – German Society of Interventional Radiology****S16**

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 1,500 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 180,000 interventions, documented by over 294 institutes in 2019 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 the EBIR, which is divided into six different modules including vascular recanalisation 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).

**EBIR****S3**

The European Board of Interventional Radiology (EBIR) is a voluntary supplemental examination designed to evaluate interventional radiologists on the clinical and technical knowledge necessary to safely and effectively carry out treatments for patients. Through taking this examination, IRs can certify their expertise and demonstrate their ongoing commitment to pursuing a career in IR. The EBIR is held three times every year, twice in Europe and once in Australasia. For more information, please visit [cirse.org/ebir](http://cirse.org/ebir).

**ECIO 2020****S13**

The European Conference on Interventional Oncology (ECIO) provides a comprehensive forum for experts to share and learn about important innovations, keeping experts up to date on IO's latest research and developments. 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. The 11th annual European Conference on Interventional Oncology will take place from April 26-29, 2020 in Nice. Abstract submission will open on September 16. To find out more, visit our booth or [ecio.org](http://ecio.org).

**ESIR Courses****S10**

Year after year, the ESIR Clinical Procedure Training courses continue to provide premier education to IR professionals, helping participants stay up to date on the latest developments in the field. Since 2006, ESIR has offered 91 first-rate, practice-oriented courses in over 23 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 upcoming course, Reliability in Percutaneous Tumour Ablation, will be held in Innsbruck, Austria from December 12-13, 2019. Visit [cirse.org/esir](http://cirse.org/esir) to learn more and stay tuned for information on 2020 courses.

**ESR – European Society of Radiology****S19**

Am Gestade 1  
Vienna 1010  
Austria  
[myESR.org](http://myESR.org)

The European Society of Radiology (ESR) represents more than 113,000 members worldwide and annually hosts the European Congress of Radiology (ECR) in Vienna, Austria. The ECR is one of the largest medical congresses in the world, attracting more than 30,000 congress participants. With 300 companies exhibiting, its exhibition is also one of the largest medical exhibitions in Europe. Visit our booth to learn more about ECR and our education and training offers.

**ET Meets GEST 2020****S14**

The first ET – the European Conference on Embolotherapy – took place in Valencia this June with a programme covering the entire spectrum of established and new embolotherapies. Bringing more than 800 medical experts together to engage in 120 lectures and a cutting-edge technical exhibition, the congress exceeded expectations across the board, pushing embolotherapy education into high gear. The second European Conference on Embolotherapy – ET meets GEST 2020 – will build on the success of its first year, challenging the IR community to take embolotherapy even further. ET meets GEST 2020 will take place from June 24-27 in Vienna at the state-of-the-art Messe Wien Exhibition and Congress Centre. Stay tuned for updates and visit [etconference.org](http://etconference.org) for more information.

**GSIR – Greek Society of Interventional Radiology****S18**

20 Papadiamantopoulou str  
11528 Athens  
Greece  
[www.epemvatiki.gr](http://www.epemvatiki.gr)

The Greek Society of Interventional Radiology was founded in 1989 by Greek Radiologists who applied the techniques of interventional radiology to the daily clinical practice. It collaborates closely with the Cardiovascular and Interventional Radiological Society of Europe (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 specialisation, training centres and recognised interventional radiologists.

**HSIR – Hungarian Society of Interventional Radiology****S17**

[info@macirt.hu](mailto:info@macirt.hu)  
[www.macirt.hu](http://www.macirt.hu)

Founded in 1998, HSIR (Hungarian Society of Interventional Radiology) is an educational and scientific society with 90 members dedicated to raising and maintaining the standards of the medical practice of interventional radiology. The mission of our society is to advance and represent the profession of interventional radiology, serve the professional needs of its members, promote patient safety, and improve patient outcomes. The HSIR collaborates with other national and international societies/organisations for better clinical practice. Official journal of the society: *Interventional Medicine and Applied Science (IMAS)*

**IASIOS****S21**

The International Accreditation System for Interventional Oncology Services (IASIOS) offers a unique opportunity to achieve a seal of quality and recognition for its interventional oncology services performed according to the CIRSE Standards of Quality in IO. The goal of IASIOS is to certify better patient care, support quantifiable benchmarks and encourage development of IO. By enrolling in this programme, IO facilities can prove their compliance with the CIRSE IO Standards and their commitment to providing high quality care to cancer patients. For more information, visit [iasios.org](http://iasios.org).

**ICCIR 2020 –****S11****International Congress on Complications in Interventional Radiology**

The ICCIR is a unique event offering doctors with diverse experience levels a discreet forum to explore the difficult but necessary subject of procedural complications. To encourage frank discussion, the faculty is carefully selected to discuss a selection of hand-picked case reports and overall participation is limited. ICCIR has quickly established itself as the main complications meeting in Europe, and attracts a very diverse but dedicated group. The last congress brought near 300 participants together to discuss more 50 cases. The next congress, ICCIR 2020, will again take place in Poertschach, Austria from June 4-6. For more information, visit [iccir.eu](http://iccir.eu).

**IESIR – Italian-European Society of Interventional Radiology****S15**

Founded in 2015, the Italian-European Society of Interventional Radiology (IESIR) is an independent and autonomous society, whose main objective is to develop and promote the clinical practice of the interventional radiologists in Italy and in Europe. IESIR actively supports scientific activities, represents the interests of Italian IRs, actively contributes to the creation of guidelines and reports, and strengthens connections of the European IR community. To find out more, visit [iesir.org](http://iesir.org).

**IROS 2020 – Interventionell Radiologisches Olbert Symposium****S16**

Neutorgasse 9  
1010 Vienna  
Austria  
[www.irosonline.org](http://www.irosonline.org)

IROS 2020 is the joint annual meeting of the Austrian, German and Swiss Societies of Interventional Radiology. Next year, the meeting will take place in Salzburg, Austria, from January 16-18. 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).

**ISVIR – Indian Society of Vascular and Interventional Radiology****S6**

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 knowledge in field of IR. ISVIR was formed in Trivandrum in November, 1997. The objectives of the society include providing a common platform for discussions, formulating guidelines for performing and documenting IR procedures, creating opportunities for certified training programmes in IR, evolving guidelines for medico-legal aspects of the practice, creating public awareness, and helping the fledgling subspecialty with turf battles. The society has more than 700 members at present with approximately 100 student members. 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 IR worldwide.

**ÖGIR – Austrian Society of Interventional Radiology****S16**

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 the 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).

**SERVEI – Spanish Society of Vascular and Interventional Radiology****S9**

C/ Alcalá, 135 1  
28009 Madrid  
Spain  
[www.servei.org](http://www.servei.org)

The Spanish Society of Vascular and Interventional Radiology (SERVEI) is a non-profit medical and scientific association, founded in 1987, with the aim of promoting training, development, research, knowledge sharing and the diffusion of Vascular and Interventional Radiology (RVI). SERVEI celebrates a National Congress with biannual periodicity and multiple courses and training and research days. At the moment SERVEI has around 400 active members.

**SIDI – Sociedad Iberoamericana de Intervencionismo****S8**

<https://intervencionismosidi.org/>  
[info@intervencionismosidi.org](mailto:info@intervencionismosidi.org)

SIDI is a medical-scientific non-profit organisation with a significant track record aiming to foster interventional radiology activities. Nowadays it is comprised of more than 200 members, mainly or exclusively focused on image-guided minimally invasive procedures. Our society was created in 1994 and at the present time has members from 15 Spanish-speaking countries in Latin America, Spain and Portugal. Additionally, the scope of action is extended to other countries in Europe and the USA.

The most significant projects that SIDI performs according to its goals are as follow:

- Call for student grants and IR fellowship programmes
- Organisation of scientific meetings, seminars and other activities
- Publication of the quarterly medical-scientific Journal Intervencionismo

**SIR – Society of Interventional Radiology**

92

3975 Fair Ridge Drive  
Suite 400 North  
Fairfax, Virginia 22033  
United States  
[www.sirweb.org](http://www.sirweb.org)

The Society of Interventional Radiology is a nonprofit, professional medical society representing more than 8,000 practicing interventional radiology physicians, trainees, students, scientists and clinical associates, dedicated to improving patient care through the limitless potential of image-guided therapies. 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. Visit [sirweb.org](http://sirweb.org). SIR Foundation is a scientific foundation dedicated to fostering research and education in interventional radiology for the purposes of advancing scientific knowledge, increasing the number of skilled investigators in interventional radiology and developing innovative therapies that lead to improved patient care and quality of life. Visit [sirfoundation.org](http://sirfoundation.org).

**SNRIR – Romanian Society of Neuroradiology and Interventional Radiology**

55

Str. Splaiul Independentei nr. 169, Et.1, Corp A1, Sector 5  
Bucharest  
Romania  
[contact@snrir.ro](mailto:contact@snrir.ro)  
<https://snrir.ro/>

The Romanian Neuroradiology and Interventional Radiology Society (SNRIR) is a non-profit, educational and scientific association that aims to improve patient care by supporting teaching, science, research and clinical practice in the field of interventional radiology.

Interventional radiology is at the cutting edge of modern medicine, providing maximum benefit to the patient through minimally invasive techniques. SNRIR supports this innovative field by providing the best educational and scientific resources possible. SNRIR's mission is to provide continuous education and training for its members as well as other physicians and scientists with implications and personal interests active in interventional radiology and to promote the exchange of ideas and information to further define the role, the mission of interventional radiology as a subspecialty of radiology. SNRIR aims to improve ethical, technical and material conditions in interventional radiology to improve patient care.



**SOBRICE –****S7****Sociedade Brasileira de Radiologia Intervencionista e Cirurgia Endovascular**

Av. Paulista, 37 – 7° andar – conj. 71

01311-902 – Sao Paulo/SP

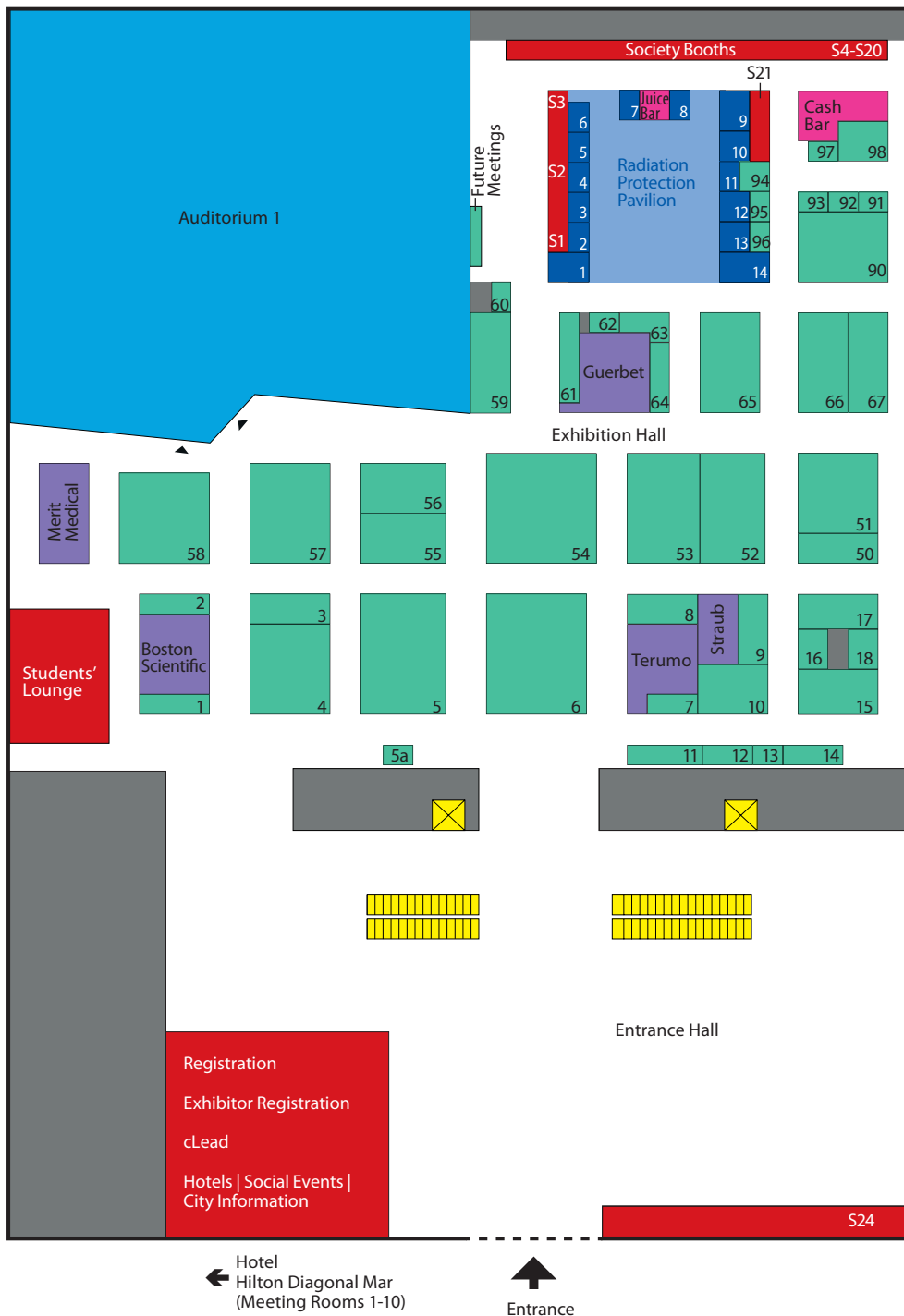
Brazil

[www.sobrice.org.br](http://www.sobrice.org.br)

The Brazilian Society of Interventional Radiology and Endovascular Surgery (SOBRICE) is a non-profit, educational and scientific national association dedicated to improve patient care through minimally invasive image-guided interventions. SOBRICE was founded in 1997 and since the beginning aims to support education, research and clinical practice in the field of interventional radiology through scientific meetings, publications and media activity. The society also provides a board examination for its members, in order to certify their qualification in the specialty. Furthermore, SOBRICE collaborates with other scientific national and international societies in order to achieve shared goals of interest to interventional radiology.

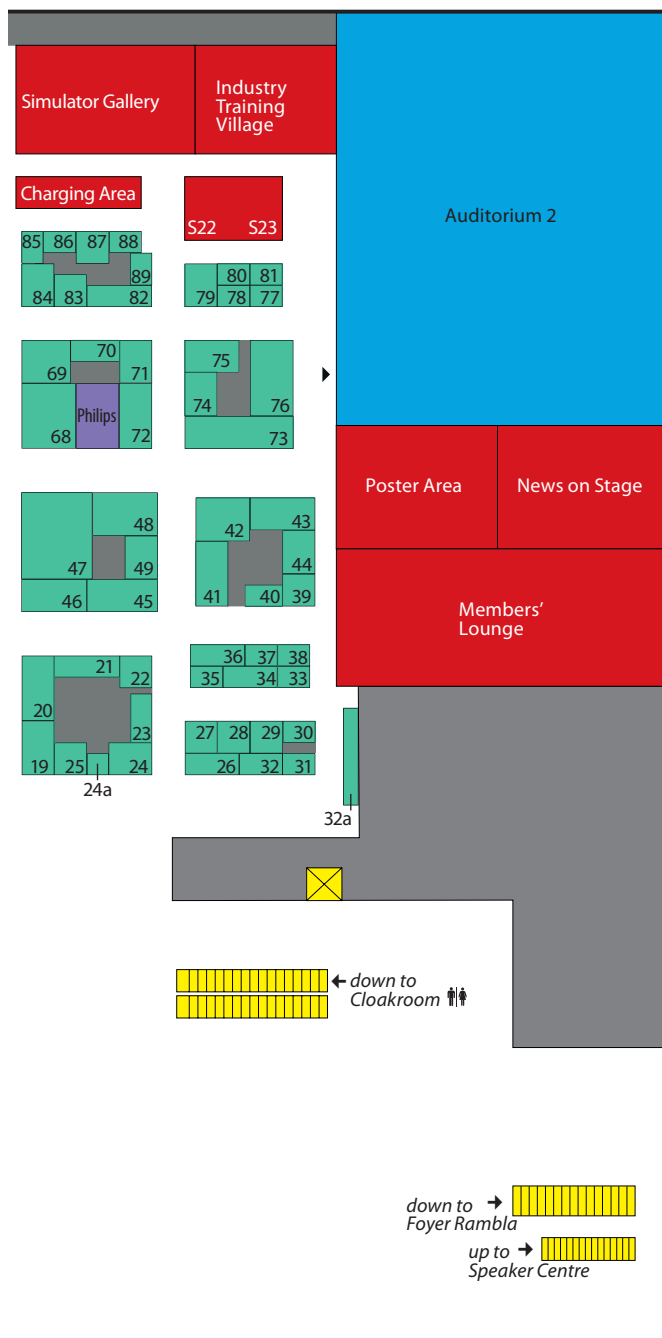
**TSIR – Turkish Society of Interventional Radiology****S4**[tgrd@tgrd.org.tr](mailto:tgrd@tgrd.org.tr)[www.tgrd.org.tr](http://www.tgrd.org.tr)

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 government-recognised subspecialty of radiology in Turkey. For interventional radiology, the routine residency programme 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 the Turkish Society of Interventional Radiology is to contribute to the education and training of radiologists who are occupied with all kind of interventional process and to pursue research and development in this field. Our 15<sup>th</sup> Annual Scientific Meeting will be held as Joint Meeting with EVIS 2020 in Susesi Convention Center-Antalya-Turkey, on March 6-10, 2020. A lot of attendees including interventional radiology doctors, technicians, nurses and industry members are expected to participate to this meeting.



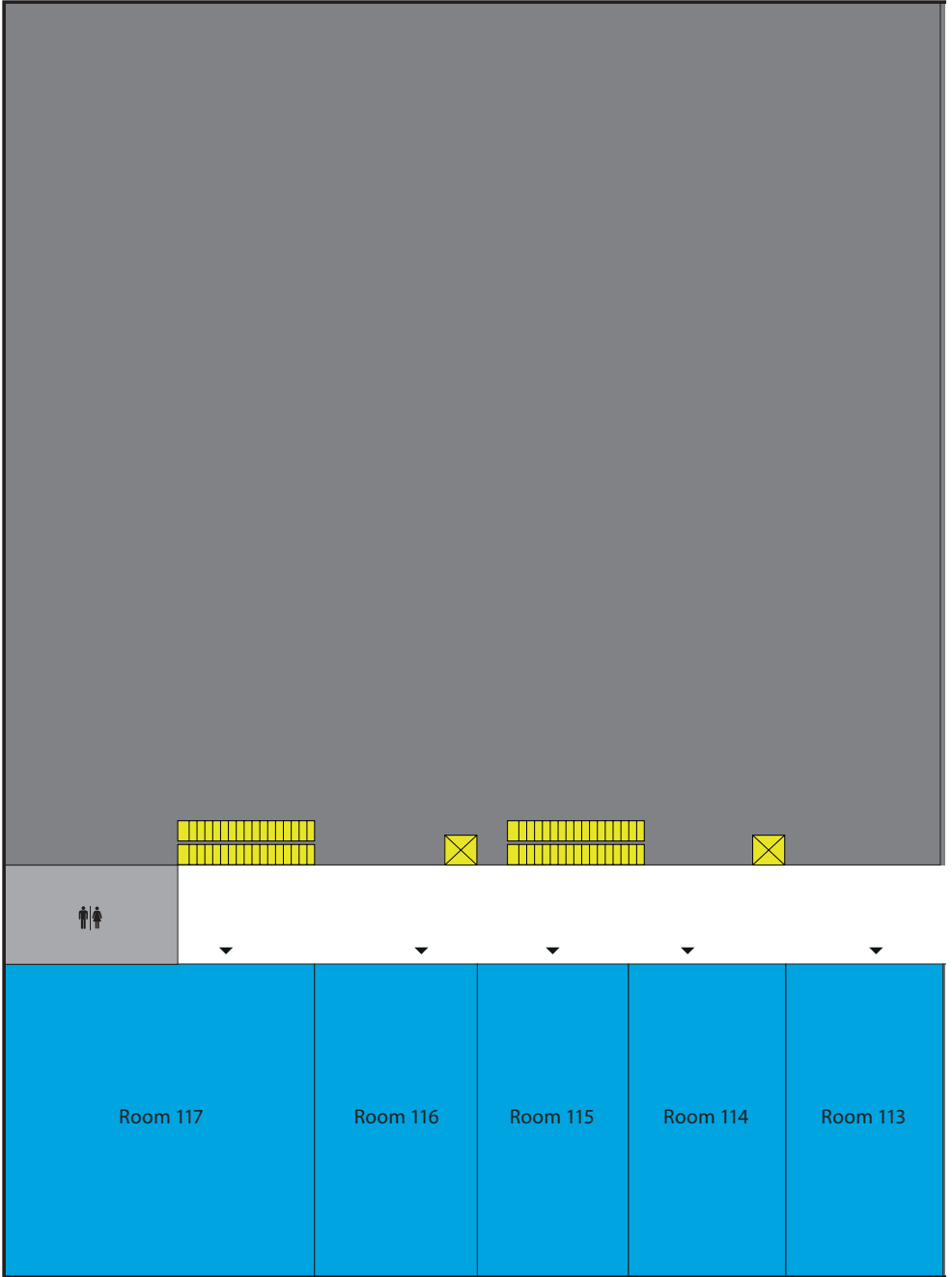
## Entrance Level

- Lecture Room
- Learning Centre
- Radiation Protection Pavilion
- Technical Exhibition



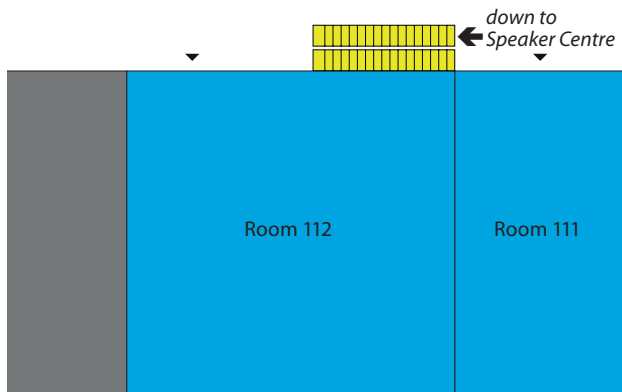
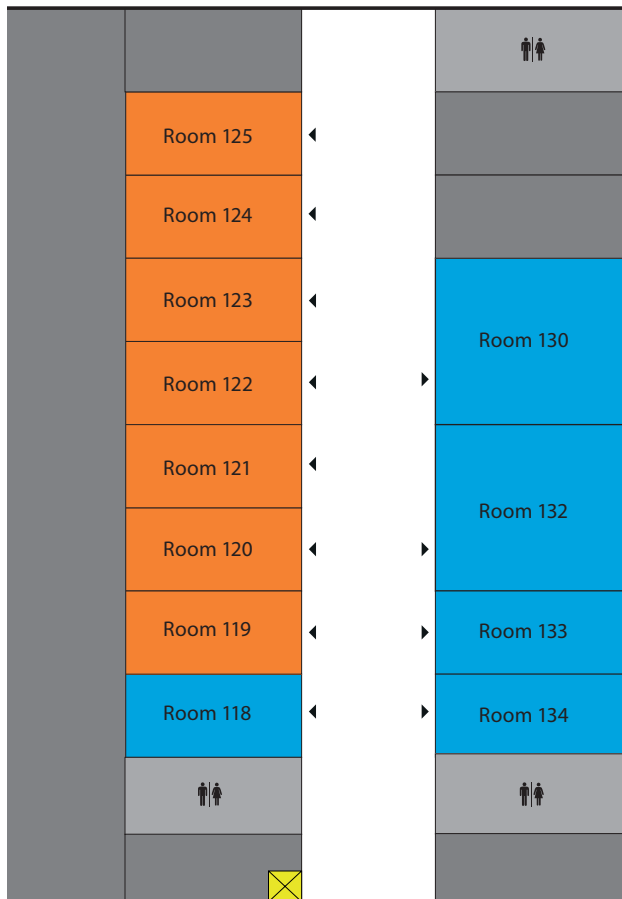
Hotels  
AC Barcelona Forum  
Barcelona Princess  
Diagonal Zero





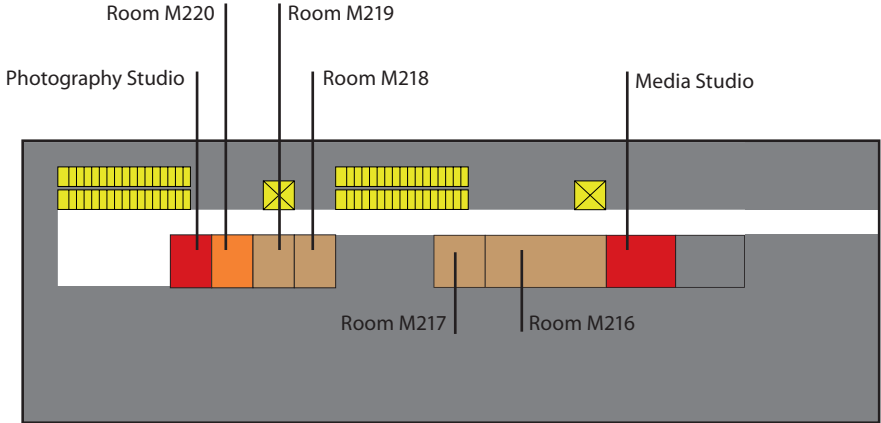
### First Floor

- Lecture Room / Hands-on Device Training Room
- Meeting Room



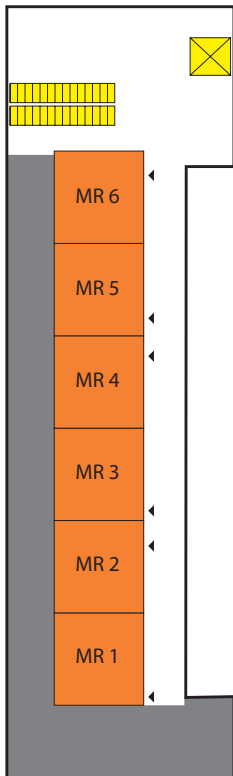
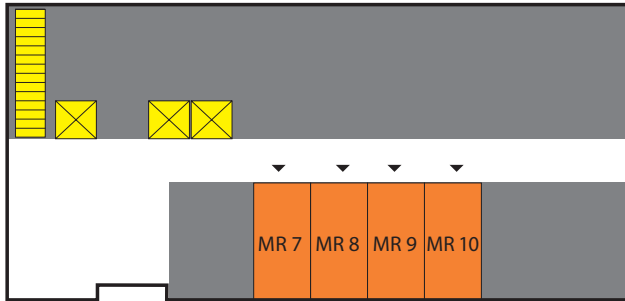
## Mezzanine 2

■ Meeting Room



# Hotel Hilton Diagonal Mar – First Floor

■ Meeting Room



# Imprint

## **CIRSE Central Office**

Neutorgasse 9  
1010 Vienna, Austria

Phone: +43 1 904 2003

Fax: +43 1 904 2003 30

Email: [info@cirse.org](mailto:info@cirse.org)

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

## **The CIRSE 2019 Pocket Guide**

In case of any enquiries or comments,  
please contact us at **[info@cirse.org](mailto:info@cirse.org)**

© Cardiovascular and  
Interventional Radiological Society of Europe / 2019

GraphX by LOOP. ENTERPRISES media  
[www.loop-enterprises.com](http://www.loop-enterprises.com)







# Want to learn more?

Peer to peer, shoulder to shoulder,  
doctors teaching doctors.

64+  
PHYSICIAN  
PROCTORS

12  
COUNTRIES

170+  
COURSES  
PER YEAR

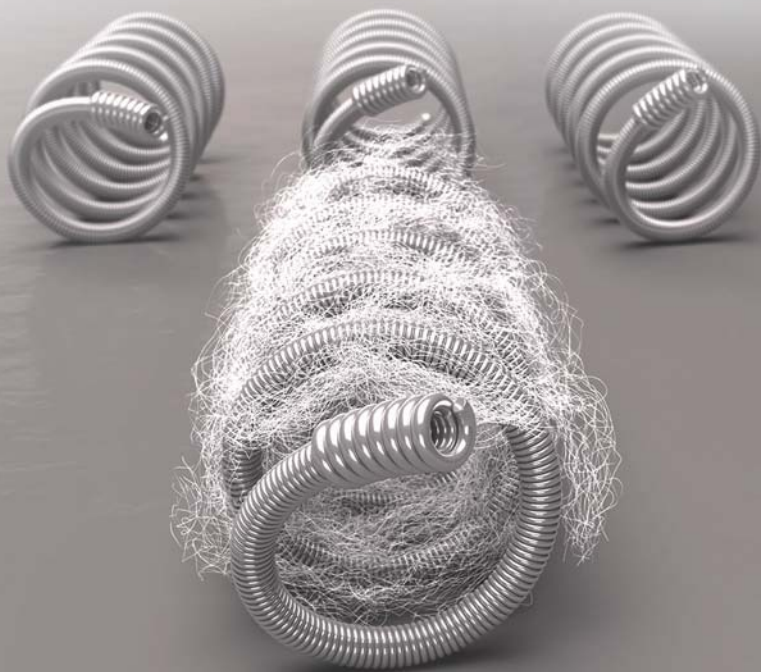
To register for a course, visit  
[cookmedical.eu/CIRSE19](http://cookmedical.eu/CIRSE19)



**Vista**® | Education  
and Training

# Boost occlusive capacity with fiber

Polymer fibers allow significantly fewer embolization coils to achieve acute occlusion of arteries than bare metal coils.<sup>1</sup>



Visit [cookmedical.eu/FiberStudy](http://cookmedical.eu/FiberStudy)  
Learn about the impact of fiber from  
peer-reviewed, statistically significant  
in-vivo data.



1. Trerotola SO, Pressler GA, Premanandan C. Nylon fibered versus non-fibered embolization coils: comparison in a swine model. *J Vasc Interv Radiol.* 2019;30(6):949-955.