2/2021

5 O C I E T Y

Welcoming PAIRS to CIRSE

MEETING

Get ready for the IR meeting of the year

ΕΟυς ΑΤΙΟΝ

CIRSE's yearround online education

news

WELCOME TO THE

SUMMIT SEPTEMBER 25-28 ONLINE

Cardiovascular and Interventional Radiological Society of Europe

Content

- **1** Lines from the President
- 2 New group member PAIRS
- 4 CIRSE SoP
- 6 CVIR
- 7 CIRT
- 8 CIRT-FR
- **10** CIEMAR
- 11 CIREL
- **12** IASIOS
- 14 CVIR Endovascular
- **18** ECIO review
- 20 ET review
- 22 Welcome to CIRSE 2021
- 27 The Award of Excellence
- 28 CIRSE's online education
- 32 EBIR

CIRSE Central Office | Neutorgasse 9, 1010 Vienna, AUSTRIA Tel: + 43 1 904 2003, Fax: + 43 1 904 2003 30, info@cirse.org, www.cirse.org

© All rights reserved by CIRSE – CARDIOVASCULAR AND INTERVENTIONAL RADIOLOGICAL SOCIETY OF EUROPE / 2021

Editorial Board: CIRSE Executive Committee | Managing Editor: Elizabeth Wenzel, CIRSE Office Graphics: LOOP.ENTERPRISES media, www.loop-enterprises.com

Disclaimer

IR News is designed to provide information on the activities, congresses and educational ventures of the Cardiovascular and Interventional Radiological Society of Europe (CIRSE). While the information in this publication is believed to be true, neither the Editorial Board nor the Editorial Team can accept any legal responsibility for any errors or omissions made. All contributors are responsible for ensuring that submitted articles are their own original work. Contributed articles do not necessarily reflect the views of the IR News or of CIRSE.

LINES FROM THE PRESIDENT

"In spite of a difficult year, the pace of IR advancements has not slowed down. We look forward to welcoming you to the CIRSE 2021 Summit!"

Dear colleagues,



We're more than halfway into 2021, and it has proved to be another challenging year. Nevertheless, our community has come together to ensure that communication, education and collaboration in interventional radiology have not slowed down. We have already hosted successful ECIO and ET meetings online this year, in addition to myriad webinars, CIRSE Academy courses and other online offerings.

As conditions and vaccination rates improve around the world, we look forward to being able to meet in person soon. At the same time, we have taken all the best aspects of our online congresses to date and are excited to welcome you online to the CIRSE 2021 Summit, a state-the-art platform that will ensure IRs from all corners of the globe will be able to access all the cuttingedge innovation, education, and latest research that the CIRSE congress has to offer.

Read on for a review of this year's meetings so far, as well as sneak peeks, interviews and information on what you can expect from the CIRSE 2021 Summit.

Updates from our community

CIRSE is delighted to welcome PAIRS, the Pan Arab Interventional Radiology Society, as its latest CIRSE group member. Read the interview on page two to gain some insight into IR practice, views and challenges throughout the Arab world.

We've also included an interview with Standards of Practice Committee Chairperson, Prof. Laura Crocetti. Flip to page four to learn about the recent updates and SOP topics! IASIOS, the International Accreditation System for Interventional Oncology, is now open for public enrolment. Offering IO facilities the opportunity to demonstrate their fulfilment of the CIRSE Standards of Quality Assurance in IO and endorsed by 26 national and international societies, IASIOS will greatly increase the awareness, development and quality of IO worldwide. Read more about IASIOS on page 12.

Unstoppable innovation - and education!

While COVID-19 has limited travel opportunities and in-person gatherings, it has also given educators a strong impetus to increase efforts in online education and ensuring that high-quality educational opportunities are available year-round. In light of this, CIRSE has increased their online activities; in the past year, a new online webinar series was established, featuring highly specialised and innovative topical courses. The European Trainee Forum also began broadcasting a webinar series aimed at helping trainees and students become more familiar with basic and intermediate topics in IR. Additionally, new topic packages and CIRSE Academy courses are in the works. Flip to page 28 for links to watch all content on demand and to see what's coming up next.

I hope you enjoy this edition of our newsletter and look forward to welcoming you to the CIRSE 2021 Summit in September!

Afshin Gangi CIRSE President

CIRSE GROUP MEMBERS

We spoke with PAIRS President Dr. Ayman Al Sibaie on the history of his society, the status of IR in the Arab world, and his hopes for the future.

Welcoming PAIRS, The Pan Arab Interventional Radiology Society

CIRSE: Could you tell us about the history of the Pan Arab Interventional Radiology Society?

Al Sibaie: PAIRS was established in 2006 and aims to spread knowledge about interventional radiology in the Arab world and region. PAIRS is a non-profit medical society dedicated to fostering research in interventional radiology by supporting education, training and scientific research.

PAIRS has actively grown its membership over the years, which has translated into greater influence and a more vital, engaged society for the IR community. We have active sections and committees that have led to bigger knowledge sharing initiatives and increased peer support.

The mission of PAIRS is to provide high-quality educational activities, self-directed learning modules and assessment tools pertinent to all aspects of interventional radiology, with the overall goal of advancing physician competence, enhancing practice performance, promoting patient safety and improving patient outcomes.

PAIRS believes it is the professional responsibility of interventional radiologists to pursue continuous learning and professional development throughout their careers in order to improve their knowledge, skills and performance.

CIRSE: PAIRS recently decided to become a CIRSE group member – how do you envision the two societies working together in the future?

Al Sibaie: We would like to take this opportunity again to thank CIRSE for welcoming PAIRS in their group membership programme. PAIRS is honoured to be part of CIRSE.

As both societies promote continuing education, PAIRS envisions a strong partnership and collaboration with CIRSE to educate patients and other medical professionals about interventional radiology and new high-tech, cutting-edge alternatives for patients. We also wish to educate interventional radiologists about updates in the specialty through collaboration on multiple educational and scientific activities.

We look forward to a fruitful exchange of knowledge and experiences through various scientific programmes and continuing medical education events. We hope that PAIRS and CIRSE can collaborate to increase patient awareness of interventional radiology and educate the public on the benefits of minimally invasive procedures. CIRSE has the largest online interventional radiology education portal, and this will be a great benefit to PAIRS members.

We hope that both societies will continue to foster and further develop the IR community.

CIRSE: In what ways does PAIRS collaborate with other societies on a global or regional level?

Al Sibaie: Over the past years, PAIRS has collaborated with other societies, participated in different annual meetings and provided substantial contributions to the field of interventional radiology through different scientific activities. As we adapt to the current situation, PAIRS continues to provide educational activities via a virtual platform. PAIRS has collaborated with different societies to host various online educational webinars that provide comprehensive programmes with highlevel scientific content and unique opportunities to continue exchanging ideas and experiences within the IR community.

CIRSE: From your IR perspective, what does multidisciplinary teamwork look like in the UAE? Is this something that differs greatly throughout the countries that PAIRS represents?

Al Sibaie: IR is a relatively new and fast-expanding field in the region. The complexity of many cases necessitates a multidisciplinary approach, of which IR has become an integral part. Surgeons and interventional radiologists collaborate in both pre- and post-operative settings, and the approach is more or less the same across all Arab "We hope that PAIRS and CIRSE can collaborate to increase patient awareness of interventional radiology and educate them on the benefits of minimally invasive procedures."



countries with some minor variations. IR has developed into a separate discipline that provides diagnostic services, primary treatments and follow-ups for several vascular and non-vascular conditions. As a result, many IR specialists in the region have already established their own independent practices.

CIRSE: How aware of IR is the general public throughout the Arab world? How does PAIRS get information to patients?

Al Sibaie: The knowledge and awareness about IR in general society are primitive, a fact which has been observed through screening studies conducted by a couple of centres from our region. The basic perception of most people is that radiology solely provides diagnostic services. One of PAIRS's main goals is to improve public awareness through utilising channels such as TV/radio interviews, community-based campaigns and of course, social media.

CIRSE: What are some challenges that IRs in your region face?

Al Sibaie: There are several notable ones:

Economic challenges: The PAIRS society embraces many developing countries with limited resources that lack the health care funds to provide proper IR practice setups and equipment. Additionally, a substantial number of patients have restrictions or no coverage of IR procedure costs from their insurance.

<u>IR practice availability:</u> There is a notably unequal distribution of IR services across individual countries. Most services are provided in big cities' tertiary care hospitals and there is a lack of IR services in rural areas.

Low visibility as a specialty: Compared to other specialities, IR still has a low profile, probably due its limited visibility to patients. This challenge has started to shrink in magnitude as IR specialists are actively participating in multidisciplinary teams and raising societal awareness.

CIRSE: Conversely, what do you feel that the rest of the world should learn from Arab IRs?

Al Sibaie: Most Arab IR specialists currently practising in the region have been trained abroad in Europe, the Americas, East Asia or Australia. The transition from their training sites back to their home countries entails a massive challenge in adapting to different cultures, backgrounds and healthcare systems, highlighting both the patience and flexibility of our Arab IRs. Furthermore, the key challenge encountered is the limited availability of materials used in IR procedures, whether in number, sizes or variety of materials. The high cost of IR procedures and constraints from insurance coverage have compelled Arab IRs to be creative in performing complex procedures successfully, even with the aforementioned limitations.

Distinctively, the United Arab Emirates is a home for more than 200 nationalities with considerable variations in cultural and healthcare backgrounds, all working in harmony towards providing optimal medical services to our patients.

CIRSE: What are your hopes for the future of IR?

Al Sibaie: I believe that the future of IR is very promising because many patients are becoming more aware and more educated on IR procedures. With the progress of technology and research, IR will be delivering highend, effective and cost-effective care to many patients. Interventional radiology will be a widely acknowledged area of medicine that provides many patients with the best possible outcome.



STANDARDS OF PRACTICE

We spoke to Prof. Laura Crocetti, Chairperson of the SoP Committee, to learn more about CIRSE's new SoP documents.

CIRSE's Standards of Practice documents



Designed to provide an invaluable reference for expert and novice practitioners alike, CIRSE's Standards of Practice (SoP) documents have played an important role in the society from its advent in the 1980s. However, the fast pace of medical developments mean that documents must continuously be improved to ensure they remain relevant for IR practice.

CIRSE: Looking through the list of CIRSE's SoP documents, it's clear that numerous changes have been made recently. Can you tell us what changes were made and why these were implemented?

Crocetti: Numerous structural changes were implemented to increase the uniformity of our documents and also make them more user-friendly. The scope of our SoP documents has also been streamlined to include only "how to" documents as opposed to "when and why" documents. Our authors are now asked to concentrate on the technical aspects of the procedure, such as how to prepare the patient, the equipment and the materials. Relevant clinical aspects are still derived from the best evidence in the literature and quoted in the document.

CIRSE: Which IR-related topics do you feel have arisen from the pandemic?

Crocetti: Unfortunately, we suddenly had to learn how to deal with unforeseen difficulties directly related to the pandemic. Angio-suite preparation became more challenging, in particular, as well as the management

of spontaneous bleeding in COVID-19 patients. It was a challenging time, but many interesting lessons have been learned, some of which may be covered in future SoP documents.

CIRSE: CIRSE's SoPs are not only used by IR experts around the world, but also to support IR trainees in their learning. Which CIRSE SoPs do you feel are key for IR trainees?

Crocetti: All of them! SoP documents include all the information needed to perform a standard procedure. In this sense, they are a kind of "vade mecum" for IR trainees. Each step of the procedure is covered and the reference list is a valuable starting point for further study. IRs at any stage in their careers can benefit from these documents.

CIRSE: Which SoPs can we look forward to reading in the coming months?

Crocetti: The SoP Committee is really working hard and in the next few months documents on topics ranging from "Thermal Ablation of Bone Tumours" to "Bronchial Artery Embolisation" will be released. However, I would also like to encourage any experts who feel their topic of expertise is not covered by our current SoP documents to send a brief proposal to sop@cirse.org. Their proposal would then be assessed and might result in a new SoP if deemed appropriate. The creation of SoPs should really be a community effort, as it ensures they are relevant for the whole IR community.

Year	Document	Main author
2021	CIRSE Standards of Practice on Below-the-Knee Revascularisation	S. Spiliopoulos
2021	CIRSE Standards of Practice on Conducting Meetings on Morbidity and Mortality	JY. Chun
2021	CIRSE Standards of Practice on Peri-operative Anticoagulation Management During Interventional Radiology Procedures	M. Hadi/R. Uberoi

CIRSE has published three new SoP documents in the first half of 2021.



BeGraft peripheral

Peripheral Stent Graft System

Less trauma, faster procedures through low profile (6F compatibility up to Ø 8 mm)

Outstanding lesion access through exceptional flexibility

Predictable stent behaviour through low foreshortening & high radial force



www.bentley.global

CIRSE members have complimentary access to CVIR – don't miss this collection!

Special section dedicated to radiation protection



The June issue of CVIR features a special section dedicated to radiation protection, curated by Prof. Werner Jaschke (Medical University of Innsbruck, AT) and written by groups of experts on the topic.

This collection of articles on radiation protection endeavours to provide essential information on how to keep patients and operators safe from unnecessarily high doses of radiation. Interventional radiologists should be part of radiation safety teams, and through this special section our guest editors hope to equip them with a thorough understanding of radiation hazards and how to prevent them.

We hope you enjoy diving into this exciting topic!

CVIR Special Issue on Radiation Protection Werner Jaschke

The importance of radiation protection education and training for medical professionals of all specialties Agapi Ploussi, Elias Brountzos et al.

How to measure/calculate radiation dose in patients? Reinhard Loose et al.

Radiation dose of patients in fluoroscopically guided interventions – an update Graciano Paulo et al. High dose fluoroscopically guided procedures in patients: radiation management recommendations for interventionalists Madan Rehani et al.

Radiation exposure in paediatric interventional procedures Agapi Ploussi, Efstathios Efstathopoulos et al.

Challenges in Occupational Dosimetry for Interventional Radiologists Eliseo Vano et al.

Get protected! Recommendations for staff in IR. Gabriel Bartal et al.

Radiation and the Pregnant IR: Myth versus Fact Meredith Englander et al.

Read CVIR online

CIRSE members have complimentary access to CVIR. Simply log in with your myCIRSE credentials to access CVIR articles. Please note Chrome users are currently experiencing problems accessing CVIR. If you experience access problems, we recommend first trying another browser. If the problem persists, please send us an email at info@cvironline.org.

Follow CVIR for article updates:



SUBMIT YOUR RESEARCH TO CVIR!

www.cvironline.org



CIRSE CLINICAL REGISTRIES

CIRSE sponsored clinical research is in full swing, with its results being disseminated to interventional radiologists and the medical community at large.

CIRSE-sponsored research presented at CIRSE 2021, and more...!

As the analysis of the data from the CIRSE Registry for SIR-Spheres Therapy (CIRT) is ongoing, more and more abstracts on the topic are accepted by international medical congresses. Successful submissions to renowned congresses such as EASL's International Liver Congress (ILC), or ESMO's World Gastrointestinal Congress testify to the impact that CIRSE sponsored studies have on the international medical community. In fact, ILC chose the CIRT outcomes on hepatocellular carcinoma for its "Best of ILC" slide deck!

This year's CIRSE Summit will feature the presentation of the outcomes of several CIRSE research projects. The presentation by Prof. Frank Kolligs on CIRT will present the clinical outcome data of the large subset of patients with hepatocellular carcinoma (n=422), including multivariate analyses and dosimetry models.

Dr. Roberto lezzi will provide participants with an essential understanding of early response outcomes (RECIST 1.1) in patients with metastatic colorectal cancer treated with LifePearls, using the data from CIREL. Finally, data concerning the impact of the COVID-19 pandemic on the daily practice of interventional radiologists will be presented by Dr. Gregory Makris during the congress.

In addition to being present at international congresses, CIRSE is also hard at work publishing the first results of the subgroup analyses of the individual cohorts included in the CIRT study. Highly anticipated publications concerning the results of the hepatocellular carcinoma and intrahepatic cholangiocarcinoma cohorts are expected to be publicly available by the end of 2021. As some of the largest collections of data on the treatment of these indications with radioembolisation, these publications will surely be of importance to the medical community and will strengthen the position of IR as the fourth pillar of oncology.

Watch on demand from Sep. 21!

FP 100 Free papers

- FP-28 The impact of COVID-19 on IR practice: results from a global survey. *G. Makris (London/GB)*
- FP-80 Real-world outcomes of patients treated with transarterial radioembolization for hepatocellular carcinoma: results from CIRT, a large European prospective multi-centre observational study. F. Kolligs (Berlin/DE)

Tuesday, Sep 28, 2021, 10:00-11:00 CEST

- FP 2202 First@CIRSE: New Frontiers
 - 2202.2 First tumour response results from the prospective multicentre observational study CIREL on irinotecan-eluting transarterial chemoembolisation in colorectal cancer liver metastases *R. lezzi (Rome/IT)*



CIRSE CLINICAL REGISTRY

After four years of data collection, the CIRT-FR results required by the French National Health Authority for reimbursement evaluation of SIR-Spheres in France have just been submitted.

First insights into TARE application in France



The CIRSE registry on primary and secondary liver tumours treated with TARE, CIRT-FR, conducted to evaluate the renewal of reimbursement of SIR-Spheres in France, recently submitted the data to the French National Health Authorities for reimbursement evaluation.

Sneak peek at the first CIRT-FR results

Although follow-up inclusion is still ongoing and will continue until August 2022, data on the 332 patients enrolled in CIRT-FR is looking promising:



With one more year of follow-up to go, the median overall survival for HCC, ICC and mCRC is currently 19, 19.5 and 10.5 monthts respectively.

80% of the patients were treated withpalliative intent.

35% of the pateints had no AEs. 78% of the graded AE were mild.

Prof. Romaric Loffroy, principal investigator at CHU de Dijon and member of the CIRT-FR Steering Committee, gave us a few more insights.

CIRSE: What are your hopes for the final 13 months of CIRT-FR data collection?

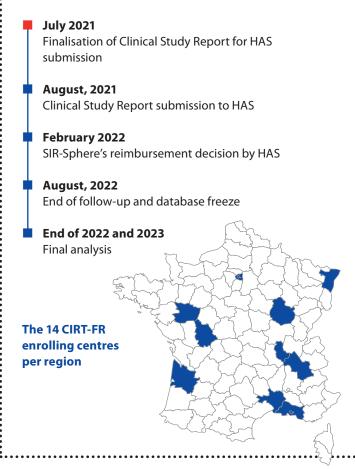
Loffroy: First of all, I hope that data entry by participating centres will be well conducted until the end of the study in order to get all follow-up information required. Secondly, the final data set should be able to give us information about mid-term follow-up regarding delayed AEs, QoL, tumour response and survival. Hopefully, the question of the long-term efficacy of SIR-Spheres therapy in real-life conditions, according to the type of tumour, should be resolved.

CIRSE: Which message would you like to convey to all CIRT-FR staff members?

Loffroy: I would like to thank very much physicians from all French centres involved in the collection of data for

CIRT-FR. I think we can be very proud of this registry and first publication in CVIR, even if a lot of work is still needed to improve data quality in the next 13 months. Last, I would like to thank very much the CIRSE staff for their impressive work in helping each of us in the smooth running of the collection of data. Their help is essential.

CIRT-FR TIMELINE



If you would like to receive further information on CIRT-FR, please contact:

María Urdániz +43 1 904 2003 52 urdaniz@cirse.org



ICOVE BX ePTFE covered stent

Designed to cover all needs

.High flexibility

To arrive and treat the most angled arteries

Enhanced visibility

Unique stent with radiopaque markers to facilitate the implantation

Smallest profiles ·

6F introducer compatibility up to 8mm*

CoverTech

Proprietary technology to encapsulate the stent into an inner and outer ePTFE layer



in y www.ivascular.global

*6F up to 8x17 mm and 7F from 8x27mm up to 10 mm.

CIRSE CLINICAL REGISTRY

CIEMAR – read about the experience of four principal investigators

CIEMAR passes the 250 patient mark

CIEMAR is CIRSE'S latest prospective, multi-centre observational study that aims to observe the real-life use of MWA treatment for colorectal liver metastases in Europe. The study is CIRSE's most ambitious yet, currently enrolling from 32 sites across Europe, and recently collected its 200th patient.

Four of CIEMAR's top recruiting investigators recently shared their thoughts about the registry in the course of the MIO Live 2021 and ECIO 2021 congresses. We wanted to share their experiences to give you an idea of how the study is succesfully observing and, in some cases, already supporting everyday clinical practice.

What do the primary investigators think about CIEMAR?



Prof. Franco Orsi Istituto Europeo di Oncologia, Milan, Italy

"CIEMAR is a great opportunity for the Interventional Oncology community to state the real clinical value of MWA for CRLM. Real-life data from a large European cohort is still missing and CIEMAR will close this gap."



Dr. Lorenzo Monfardini Fondazione Poliambulanza Istituto Ospedaliero, Brescia, Italy

"I am able to adapt how I perform my metastatic cases to the situation – in a trial I would probably not be able to do this and would have to adhere to a strict protocol or not be able to include the patient in the study. However, in CIEMAR they can still be included."



Prof. Dimitrios Filippiadis University General Hospital Attikon, Athens, Greece

"At my hospital, the CIEMAR study has made a difference in how my colleagues view and value interventional oncology practice in the tumour board. As a result, colleagues are more confident in ablative techniques and I have received more ablative cases, also in other indications."



Prof. Thomas Albrecht *Vivantes Klinikum Neukölln, Berlin, Germany*

"The CIEMAR registry collects data on patients that usually cannot be found in randomised controlled trials. Recently I performed a very complicated and unusual case which I could still enter in the study. This will make sure CIEMAR results truly reflect real clinical practice and true effectiveness of the technology."

Patients enrolled to date: 220 | Number of enrolling centres: 23 | Active nations to date: 10 | Number of initiated sites: 32

CIEMAR

If you are interested in participating in CIEMAR or would like to receive further information on the research project, please contact: Daniela Schweiger CIRSE Office | +43 1 904 2003 54 ciemar@cirse.org or visit clinicaltrials.gov (ID: NCT03775980) CIREL is ready to present whole-cohort data!

CIREL to present early response data of irinotecan-eluting TACE in CRLM



One year after the end of patient enrolment, CIREL, the CIRSE Registry for LifePearl Microspheres, has collected data from 152 patients with colorectal cancer liver metastases treated with irinotecan-TACE and is ready to present a first insight into whole-cohort data.

CIREL presentation at CIRSE 2021

CIREL will be part of the new session type, **FIRST@CIRSE** – **New frontiers,** and Dr. Roberto lezzi will present whole-cohort results for baseline, safety and treatment intention alongside early response data of irinotecan-TACE for CRLM.

Technical considerations, safety and toxicity publication

The next CIREL publication will be a multi-centre analysis of technical considerations, periprocedural medications, safety and toxicity.

CIREL will strive to generate confident response and survival data and continue to collect follow-up data until 65% of active patients are deceased.

CIREL AT A GLANCE

Primary objective

Collect real-life data on the use of irinotecan-eluting TACE in CRLM and improve the understanding of the clinical application of locoregional treatments in CRLM.

Secondary objectives

Assess treatment outcomes for quality of life, safety and toxicity, early tumour response and survival.

Enrolled patients

152 patients from 11 different countries and 20 different sites.

End of follow-up inclusion Once 65% of active patients are deceased.

We talked to Dr. Pierleone Lucatelli, CIREL investigator and co-author of the next CIREL publication, about CIREL's potential to contribute to the IR community and the challenges on the way.

CIRSE: What was your motivation to enrol in CIREL and contribute to publications, and what are the biggest challenges for projects like CIREL?

Lucatelli: Since CIREL is a multi-centre registry collecting real-life data, I strongly believe that the results will help to improve our understanding of the locoregional treatment and will serve as evidence for the IR community and oncological clinical practice guidelines. However, while collecting data from different centres and indications is a major strength of registries like CIREL, analysing such inhomogeneous data is where I see the biggest challenge.

CIRSE: How is your IR department set up?

Lucatelli: I work at Azienda Ospedaliera Universitaria Policlinico Umberto I, Sapienza University of Rome, a tertiary referral centre for oncology and gastroenterology patients. We offer 24/7 IR services and my activities mainly focus on interventional oncology.

CIRSE: Can you tell us about the decision process of treating CRLM patients with irinotecan-eluting chemoembolisation and enrolling patients for CIREL?

Lucatelli: The treatment plan for all our patients was decided during multidisciplinary tumour board meetings where indications were shared and discussed. During those meetings, interventional radiologists presented the advantages of combining locoregional treatment with systemic treatment and proposed to perform irinotecan-TACE.

If you would like to receive further information on the research project, please contact:

Bleranda Zeka | CIRSE Office +43 1 904 2003 98 zeka@cirse.org or visit clinicaltrials.gov IASIOS offers IO facilities the opportunity to demonstrate their fulfilment of the CIRSE Standards of Quality Assurance in interventional oncology.

IASIOS – Raising the bar for IO care

The first accreditation system for interventional oncology services has officially opened enrolment to the public! A fully digital system, tested and optimised over the past two years, stands ready for facilities that are eager to showcase their commitment to providing high-quality care to cancer patients, as well as to continually improving and expanding their services.

The International Accreditation System for Interventional Oncology (IASIOS) offers IO facilities the opportunity to demonstrate their fulfilment of the CIRSE Standards of Quality Assurance in IO. The standards have been very well received and have been endorsed by 26 national and international societies, including the European Cancer Organisation (ECO). We believe that formal endorsement of the standards has greatly enhanced their credibility and wider adoption. These standards of QA were used as a blueprint and set the foundation for developing an accreditation system that can be used to standardise the level of care for IO services on a global scale.



With the continued growth and recognition of IO as a vital part of modern cancer care, facilities providing IO therapies must follow appropriate guidelines if the relevant treatments are to be used safely and appropriately. IASIOS will greatly increase the awareness of IO treatments and facilities, accelerate its development, and encourage the adoption of quality standards for interventional oncology. These objectives are of particular importance now, during the worldwide backlog of cancer procedures and care. It is likewise essential for patient safety and satisfaction that IOs have the ability and means to officially prove their value and expertise, and that they are recognised not as technicians, but rather as primary clinical providers to patients and hospital administrators. In order to achieve exactly that, IASIOS is designed to help developing oncology facilities plan and improve their services in a way that ultimately benefits the patient. Acquiring the IASIOS seals enables hospitals to certify their commitment to optimising patient care with quantifiable benchmarks.



Who is involved in IASIOS?

The concept for IASIOS was brought to life by the IASIOS Steering Board, consisting of Prof. Andreas Adam, Prof. Afshin Gangi and Prof. Lizbeth Kenny and the processes were further refined and fine-tuned during a pilot phase by the IASIOS Committee, chaired by Prof. Jean Palussière and including Prof. Miltos Krokidis, Prof. Laura Crocetti and Prof. Dimitrios Fillipiadis. So far, 17 distinguished IOs from around the world have volunteered to sit on the IASIOS Council, a good indicator of the continued growth and momentum of IASIOS.

IASIOS would not have been possible without the group of pioneering facilities from nine different countries that joined the pilot phase, who have been pivotal in the development of this unique and far-reaching accreditation programme in the field of IO. Despite the unprecedented circumstances, their dedication and commitment has led to a 75% completion rate to date among the pilot hospitals. IASIOS is currently running a limited launch offer for hospitals enrolling before the end of 2021.

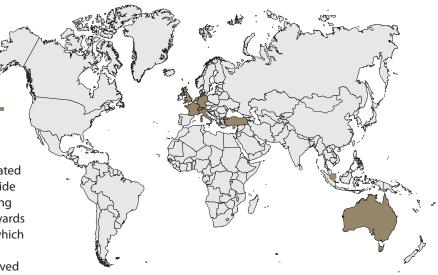
How can you get involved?

The IASIOS administration is carried out by a dedicated team in Vienna, Austria. They will be happy to provide information and help to facilities that are considering joining or are already in the process of working towards accreditation. At this time, all facilities worldwide which offer IO services can apply for IASIOS accreditation, regardless of size or location. Accreditation is achieved by following these steps:

 Go to the IASIOS website at www.iasios.org and register your hospital. You will receive an invoice for the enrolment fee, which will open up the online application forms and additional supporting documents. Congratulations, you are now an IASIOS Enrolled Centre and will be featured on the website!

Are you uncertain about how to get approval from your administration to enrol in IASIOS or receive funding? Let the IASIOS team help! We have prepared a PowerPoint presentation that you can use to support your case listing the benefits of getting accredited (for the patient, the hospital and ultimately IO as a medical field), and will provide marketing materials to your hospital to increase public recognition and their reputation for providing the highest quality IO services, which will, in turn, attract more patients.

- 2. Get help! We recommend putting together a team to work together on the application with you. Our pilot hospitals found it beneficial to have at least three members on their team, and particularly advantageous to collaborate with the quality assurance department at their hospital.
- Go through the Standards of Quality Assurance in Interventional Oncology and identify which requirements you will need to meet. Only the "core requirements" as listed on the IASIOS website are needed to receive IASIOS Accredited Centre status. You will also have access to an easy-to-use checklist for required evidence in your personal login area.



4. There is no time restriction for transitioning from Enrolled Centre to Accredited Centre. The main goal of IASIOS is to provide IO facilities with the framework and guidelines to demonstrate and/or improve the quality of their service. Some centres will require more time than others to implement new written policies or make adjustments to processes and that is perfectly fine! When you are ready, you can submit your online application form through the system where it will be reviewed by two independent assessors. When any comments and questions have been answered to their satisfaction, you will be granted the IASIOS Accredited Centre seal. Now, you can celebrate your achievement and spread the word! The IASIOS team will be happy to help you market your new accreditation.

Centres that enrol in the IASIOS system become part of a greater worldwide community of top IO centres and can utilise the support provided by the IASIOS office and optional consultancy while they are in the process of improving their IO service lines and preparing their IASIOS application.

IASIOS is currently running a limited launch offer, where the annual membership fee for the first year is waived in addition to a discounted second year – this offer is only available for centres that enrol before before the end of 2021, so get your centre involved today!

For more information, visit www.iasios.org

We spoke to Prof. Warren Clements and Assistant Professor Dr. Christof M. Sommer on their recent papers, their thoughts on open access, and their experiences publishing in CVIR endovascular.

A Q&A with CVIR Endovascular authors

CIRSE: Can you tell us about your paper that was published in CVIR Endovascular?

Clements: The manuscript titled "SPLEnic salvage and complications after splenic artery EmbolizatioN for blunt abdomINal trauma: the SPLEEN-IN study" was a 10-year retrospective study assessing splenic salvage after splenic artery embolisation for blunt trauma from our level 1 trauma centre in Melbourne, Australia. Even though the median injury was AAST grade IV, of the 232 patients in the study only seven patients required splenectomy (3%). The results show that embolisation, known to be a low-cost and low-morbidity procedure, is also a very effective treatment for acute blunt trauma in stable patients.

Sommer: Our team was able to publish a paper in the field of Lipiodol based lymphangiography in CVIR Endovascular. The focus of the work is on the great importance of CT imaging during and after lymphangiography; identification and definition of lymphatic pathology, and furthermore planning of specific second-line lymphatic interventions (e.g., thoracic duct sclerotherapy) in case Lipiodol based lymphangiography alone remains clinically ineffective. Detailed figures, illustrations, and a review of the literature are provided in the paper.

CIRSE: Do you think there are currently enough easily accessible interventional radiology publication possibilities for case reports, short communications, technical notes etc.?

Clements: IR is and has always been a rapidly evolving area of medicine, and this is one of the many reasons I was attracted to the specialty. Communicating new ways to treat diseases with either lower cost or lower morbidity is important. Many of the more established journals don't necessarily offer the same volume of publication opportunities for technical notes or smaller case reports/ series. Small commentaries are also important tools to discuss rapidly changing issues in IR.

Open access journals such as CVIR Endovascular offer a great platform to communicate these types of papers where physical publication space is less of an issue than

for traditional subscription print journals. At the moment, I don't think there are enough IR-specific journals that offer this. However, I see that this is a rapidly evolving area which has grown enormously over the last five years and may continue to grow.

Sommer: New formats for communicating medical and strategic content are very welcome. I am thinking, for example, of structured video lessons that help to disseminate topics in interventional radiology in a standardised and clear manner. A kind of practical version of the "CIRSE Standards of Practice" may be appreciated by different users. This could also include discussion of the pros and cons of various medical devices, with the goal of product optimisation for improved patient care. For medical journals in particular, I see a great opportunity in interactive .pdf files that allow interested parties to delve into complex issues in an entertaining but highly professional way. The strategy has already been successfully established in the HeiCuMed (Heidelberg Curriculum Medicinale) study programme, which provides students with excellent qualifications for later employment in medical health care as well as in medical research and teaching.

CIRSE: What is your experience with open access? Was your paper in CVIR Endovascular your first open access publication? How did you find the editorial handling experience?

Clements: Open access is a great way to provide information for all scientists and clinicians to access, without restrictions. This is especially important for low and middle-income countries, or for clinicians outside of metropolitan teaching hospitals who may not have a university affiliation or a library which has subscribed to a range of common journals.

This was my second publication in CVIR Endovascular and on both occasions, I had an excellent experience with the journal. The manuscript was sent for peer review without delay, and the responses including the editor's comments were returned well ahead of timeframes from many other journals I have published in. In addition, revisions were addressed rapidly by the journal and progressed to production quickly. "Open access is a great way to provide information for all scientists and clinicians to access without restrictions."

The only difficulty with this model comes from my research group's physical location in Australia, where open access has yet to take off as a universally accepted publication standard. As such, funding for open access does currently limit my ability to use this model of publication more frequently. I hope that this will change in my country as open access continues to grow.

Sommer: The publication of open access papers is now a reality and fills a gap in the landscape of medical knowledge transfer. In part because medical institutions/ authors retain copyright, our team has published a significant number of papers as open access papers. In the case of CVIR Endovascular, the editorial experience has been ideal and we have not been able to detect any difference from traditional journals. However, we have also had negative experiences with other open access journals, e.g., black-box experiences, unrealistic publication costs, unserious reviewer comments, low-quality .pdf, etc.

CIRSE: Impact factor is still an important scientific parameter in many institutions, although other parameters like citation index are becoming more important. How is this in your institution and what is your opinion about this?

Clements: My academic affiliation is with Monash University and cumulative impact factor remains an important factor for academic recognition. At this stage, newer metrics are not openly used by the university.



However, my personal opinion is that newer metrics such as article access counts and Altmetric scores can give a different view on how manuscripts are perceived, particularly in the early stages after their release. Higher scores for these metrics often reflect an interesting or highly relevant topic which may not receive citations for many months or years. It will be interesting to see whether higher scores will eventually correlate with a high number of citations.

Sommer: Compensation by faculty for the publishing clinic is based on a variety of criteria, including impact factor points. Personal bonuses for staff may also be linked to the number of impact factor points accumulated. However, there is also a significant role for journals with low impact factors, for example, if they have a certain tradition or history, or a high reputation within the professional subcommunity. At the Ruperto Carola, the medical faculty requires a relevant number of non-open-access papers for certain qualifications, e.g., for habilitation, because the influence of funding is to be controlled.

CIRSE: Young scientists find it more and more difficult to get their first papers published. Do you think that CVIR Endovascular can play a role in alleviating the situation?

Clements: I believe that there are a number of ways that young clinician-researches can strengthen their academic career. Certainly, there is much that needs to be done at a

Cancerworld

www.cancerworld.net

>

Iocal level with mentoring, normalising academia, journals clubs and practising good evidence-based medicine. At a societal level there are also many resources that CIRSE can and do provide to its junior IRs to ensure that they have access to workshops and question-and-answer sessions.

However, CIVR endovascular has also shown that research can be published without having limitations on physical print journal space, and that good quality research can always be accepted. In addition, initiatives such as the reviewer forum are a great way for journals to integrate promising researchers into the editorial process at an early stage.

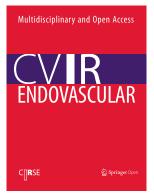
I also strongly believe that being a reviewer makes you a better writer, and that having a constructive and analytical mindset will lead to a more thorough and non-biased style for authors. As such, I applaud CVIR Endovascular for encouraging all IRs regardless of their seniority to review for the journal, and being open to discuss this at many CIRSE events.

Sommer: Because the technical standards for a publication in CVIR Endovascular are so high, young scientists can gain important experience with a submission. A judiciously conducted peer review is the right tool to improve the scientific content for all readers. As soon as the IR community judges publications in a scientific journal to be poor, the publication medium will in any case be judged to be ineffective and will sooner or later become irrelevant for professionals.

CIRSE: Would you consider submitting your scientific work to CVIR Endovascular again and if so, why?

Clements: I absolutely would consider publishing in CVIR Endovascular again and there are a couple of reasons for this. First, the open peer review policy means that reviews are timely and constructive. By having the reviewer's name printed, I believe that it is less likely that a biased or negative review will occur, which is better for authors. Secondly, the process with the journal and publisher was extremely quick. At many other journals I have waited many months before hearing back from a first submission and this is often repeated in the revisions. It is in my experience not uncommon for an article to be put into press 12 months after the first submission. With CVIR Endovascular, the reviews were quick and the revisions were accepted promptly. Not only this, but the article was put into publication rapidly and the results were shared online very quickly. As an author, a swift process is refreshing and is a strong reason to return and submit again. Finally, editorial responses were timely and staff at the journal were very helpful with my queries.

Sommer: Of course! Not only because we have had good experiences with the publication process, but because we see CVIR Endovascular as a complementary journal to CVIR. CVIR will keep its place for blockbuster publications in interventional radiology and vascular medicine, but doesn't provide this important stage for the softer formats such as "personal opinion", "developing strategy", or "Pictorial Review".



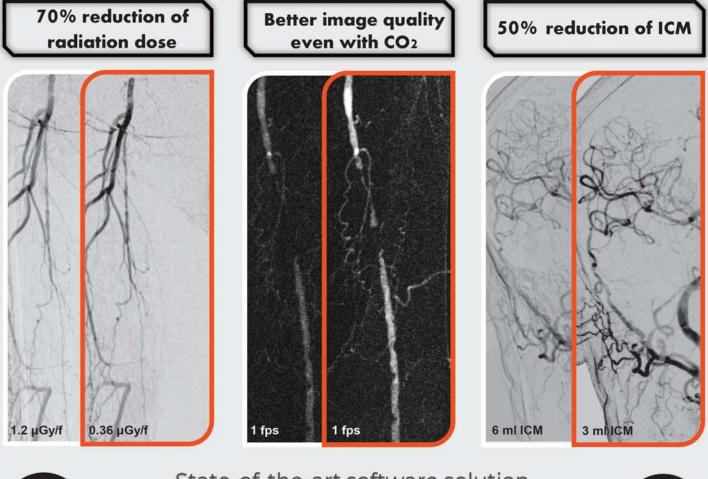
Interested in publishing your work in CVIR Endovascular? Visit cvirendovascular.org for more information.

A specialised news source in the interventional field

Increase diagnostic insight & Kinepict

Kinepict Medical Imaging Tool: X-Safe

MAKE X-RAY ANGIOGRAPHY SAFER AND MORE POWERFUL





State-of-the-art software solution

Validated in clinical environment: over 2.500 patients and 30.000 images CE MAR

kinepict@kinepict.com

www.kinepict.com

+36 31 782 4019

The European Conference on Interventional Oncology took place online from April 10-13.

ECIO 2021 in review

Interventional oncology continues to gain momentum in the world of cancer care – a momentum that has not stopped even in the face of a global pandemic. In order to ensure that vital continuing education in interventional oncology could be easily accessible during a challenging time, ECIO 2021 was held online. This gave medical professionals around the globe the chance to attend from anywhere in the world without worry towards local and global travel restrictions.

ECIO 2021 provided the same high-quality sessions and platform for research as in pre-pandemic times, thanks to the diligent work of the ECIO Scientific Programme Committee and a dedicated and adaptable faculty. Topics ranged from clinical subjects and well-established therapies all the way to experimental approaches and recent study results.

The world's biggest IO meeting

Taking place online, ECIO 2021 offered a number of advantages. It reached a larger audience than ever and attracted a record number of physicians from neighbouring specialities who, through the Collaborating Cancer Initiative, were able to attend free of charge to learn more about what their IR tumour board colleagues bring to the table.

All told, more than 2,100 users hailing from 97 different countries came together online to share their knowledge,

experience and research results over the course of four days of live, interactive programming. A central landing page allowed users to keep up with everything ECIO had to offer while also serving as a portal to all programme and industry activities.

The fourth pillar of cancer care

All currently available therapies for colorectal cancer and interventional treatments for metastatic CRC were examined. Treatment of renal and adrenal disease was focused on basic courses as well as clinical focus sessions.

Of particular interest for future-minded IOs, a dedicated AI in IO session scrutinised how artificial intelligence can help in diagnostics and response prediction, as well as many other aspects of robotics and AI systems.





ECIO

Immuno-oncology, one of interventional oncology's hottest topics, was also prominently featured, with a "What's new" session that explored various aspects of this promising field, such as the latest generation of drugs, oncolytic viruses, and many more.



An added focus on technology innovations complemented the scientific programme, with all major manufacturers hosting industry symposia presenting the latest data on the devices and materials interventional oncologists use every day. All sessions and industry symposia featured plenty of time for interactive discussion between lecturers and viewers, who were encouraged to submit their questions and contribute to the debate.

Watch all ECIO 2021 content on demand!

ECIO 2021 featured 141 presentations, 11 satellite symposia and 134 posters – all of which are available on demand via the CIRSE Library.

See you in Vienna!

Next year's ECIO will take place April 24-27 in Vienna, Austria. The Scientific Programme Committee is already hard at work putting together a dynamic programme while looking forward to the opportunity to meet together in person at last!





The European Conference on Embolotherapy took place online from June 17-19, attracting interventional experts from more than 100 countries!

Looking back on ET 2021

ET 2021 not only successfully disseminated scientific knowledge and innovations to an audience of prepandemic times, but surpassed it, reaching more than 1,200 uniquely logged in visitors via its state-of-the-art online platform.

125 educational presentations

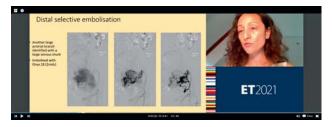
The ET 2021 programme was jam-packed with lectures, case presentations and discussions which provided important knowledge and insights into the evergrowing field of embolotherapy. The 34 live sessions were facilitated by renowned faculty, exploring both fundamental and controversial topics. Participants watched more than 2,800 hours of live programming and were able to actively participate in sessions by engaging and asking questions across the three live congress days.



Brian Funaki (Chicago, IL/US) discussed results and complications during the special topic session on BRTO/PRTO.



This group of renowned interventional oncology experts discussed promising future developments for using TARE in cancer treatment in and outside the liver.



Leto Mailli (London/GB) guided participants through a case of uterine AVM during the case remedy session on UAE for cases other than fibroids.



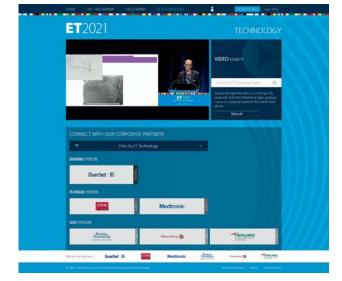
Expert faculty discussed the clinical presentation and treatment options for haemorrhoids during this especially interesting special topic session.

Exploring all that's new in technology

ET 2021 exhibitors hosted various presentations and webinars throughout the conference, which were made exclusively available to attendees. Reinventing the virtual exhibition space, the unique technology innovation platform featured a technology search tool, ensuring users could find products and companies that met their unique needs and requirements.

The ET technology features will remain online until August 31 and are free to access with the ET Technology Pass. In addition, the seven satellite symposia presented can be viewed free of charge by all interested parties. Be sure to check them out to stay up-to-date on the latest in embolotherapy tools and devices.





Guerbet

Pelvic embolisation: expand your tool box

Guerbet

Develop your knowledge on the lymphangiography

Cook Medical

The application of fibered, pushable coils: when, where and why

Medtronic

New technology and device selection in embolotherapy

Boston Scientific

Which embolics and why in emergency setting?

Penumbra

The impact of volume advantage: Penumbra's latest technology in peripheral embolisation procedures

Terumo Interventional Systems

Clinical benefits for patients with AZUR hydrogel coils

Get access to ET 2021 on demand!

All lectures will continue to be available on demand via the congress platform until August 31, after which registrants will be able to view them via the CIRSE Library. To get exclusive access to this on demand content, simply head on over to the ET 2021 platform and register today!



See you next year in Nice!

While ET reached impressive success with the online congress platform, we very much look forward to being able to physically come together in Nice from June 22-25, 2022. Save the date and see you there!

CIRSE 2021 will take place online from September 25-28!

Welcome to the CIRSE 2021 SUMMIT

The CIRSE 2021 Summit will provide a unique platform, bringing together interactive live sessions, vibrant on-demand content and a comprehensive industry programme covering all aspects of interventional radiology.

Building upon the success of the CIRSE 2020 Summit, which made the CIRSE annual meeting more accessible than ever before, the CIRSE 2021 Summit will offer more than 100 hours of live content and 950 on-demand presentations. The Summit's eight clinical tracks will be presented by more than 450 speakers coming from 40 countries around the globe, giving attendees the chance to connect with experts in every facet of the field.

IDEAS 2021

The Summit will again feature IDEAS, the Interdisciplinary Endovascular Aortic Symposium. IDEAS is an integral platform for promoting aortic education and keeping an open dialogue between interventional radiology and vascular surgery, and the IDEAS programme committee has worked hard to ensure a comprehensive interdisciplinary meeting. A faculty of world-renowned experts will host focus sessions, expert round tables, and case-based discussions presenting the latest aortic technology and evidence. Stroke prevention and refining endovascular interventions for aortic arch pathology will be discussed in particular, and a new session called "Amazing aortic interventions" will show how complicated cases were solved through technology and creativity. Explore all IDEAS sessions here!



The third PAD Day

Back by popular demand, PAD Day will return for a third year at CIRSE, exploring all aspects of peripheral arterial disease and its treatment. As part of this micro-track, the FIRSE@CIRSE session will provide a stage for first data release in endovascular research. Further highlights will include a controversy session on drug-based technology, and a hot topic symposium on vessel preparation prior to drug delivery. Click here to view the full PAD Day programme.



Live and on demand

Starting September 21, on-demand presentations will be made available during the lead up to the summit, including poster presentations, free papers, and a selection of focus sessions and fundamental courses.

Live material will be available from September 25-28, featuring expert round tables, hot topic symposia, case-based discussions, and all formats you've come to enjoy at CIRSE. In addition to the four live scientific channels, four innovation channels will broadcast satellite symposia to keep you up to date on all the latest industry developments. All live lectures will be available to watch on demand after the broadcast has finished, allowing you to watch at a time that works for you.

Once the congress has concluded, all sessions will be available to watch on the congress platform until November 9, 2021. After that, all content can be viewed via the CIRSE Library. All live content will be available on demand after the session has concluded. Log on to the platform from September 21 to take advantage of the pre-launch and on demand programme offerings!

Summit Sneak Peeks - take a look at what's in store!

In advance of the Summit, we spoke to several presenters to get a first look at what participants can expect from some of CIRSE's most interesting sessions.



Live and on demand!

Live content gives you the opportunity to interact and ask questions to the presenters; on demand content fits into your schedule whenever you have time for it! CIRSE 2021 Scientific Programme Committee member Prof. Gerard O'Sullivan walked us through some of what he's looking forward to at the Summit.



Paediatric IR

Paediatric IR is progressing at a rapid rate; to shine a spotlight on this important topic, CIRSE 2021 will feature several sessions on PIR. Dr. Anne Gill told us more about the importance of PIR education and about what attendees can expect to learn from her presentation.



Interventional oncology at CIRSE

CIRSE 2021 will feature a full track dedicated to interventional oncology, the fourth pillar of cancer care. In this sneak peek, Dr. Edward Kim spoke to us on the current role of TARE in HCC, its key advantages, and the specific approaches his institution uses. Click here to view the full IO programme!



Venous interventions

Dr. Marco van Strijen spoke to us on indications, the role of imaging, and what we can anticipate from the expert round table on acute pulmonary embolism. Click here to explore all sessions in the extensive venous track!

Keep an eye on CIRSE's YouTube channel to catch more sneak peeks!

In advance of CIRSE 2021, we've spoken to presenters from some of the most interesting sessions in order to give you a sneak peek at what you can expect from the congress!

Frontiers in embolotherapy: what is the evidence?

CIRSE: What evidence currently exists to support the use of embolotherapy for osteoarthritis?

Little: There is a growing body of evidence supporting the role of GAE in the treatment of patients with knee OA. All studies to-date have reported the embolotherapy to be technically achievable, with a good safety profile. The cohort studies have all shown a consistent signal that GAE is potentially efficacious in treating the symptoms of knee OA at early follow-up.

CIRSE: What is the importance of the evidence created by IR in establishing new techniques, such as embolotherapy for osteoarthritis?

Little: Evidence-based medicine has to be central to IR clinical practice. Interventional radiologists have always been great innovators, but we need to ensure that our enthusiasm for new techniques and equipment is grounded in sound scientific methodology and clinical trials.

CIRSE: What evidence is still needed to continue to enhance novel techniques, such as those for osteoarthritis?

Little: For any treatment that attempts to reduce a patient's pain, the placebo effect must be considered. Controlled trials of GAE against a sham procedure, or best medical therapy are needed to address this issue. We eagerly await the GAE sham RCT trial data from the USA, and my research group have ethical approval and funding for the first European GAE sham RCT, which we hope to commence as soon as possible. It is an extremely exciting time for GAE data!

CIRSE: What is the importance of continually gaining new evidence for matured techniques such as PAE?

Little: Knowledge acquisition never ends, which is one of the fantastic things about research! I think that PAE is a success story for evidence-based practice in IR.

From the first serendipitous report by DeMerritt, the IR community has worked collaboratively to produce a body of level 1 evidence, showing PAE to be a safe and effective treatment for men with BPH. In the UK, ROPE was a national registry that provided real world data on the technique, which ultimately led to NICE recommending its use in the NHS, highlighting how evidence-based medicine can alter clinical practice.

CIRSE: What evidence is still needed to advance PAE treatment?

Little: This is a question that has been debated lots recently, particularly in light of the exclusion of PAE from the AUA guidelines. Many advocate controlled trials of PAE vs HoLEP, however I believe that equipoise will be extremely challenging to achieve. We need to continue to strive to optimise clinical outcomes, and minimise re-intervention rates. From my own research into adenomatous-dominant BPH, I am interested in imaging correlates of clinical success. I also believe that future research will study drug-loaded technologies, such as finasteride-loaded particles, to optimise clinical success. The future of PAE remains bright!

CIRSE 2021 SUMMIT SEPTEMBER 25-28 ONLINE

Tuesday, Sep 28, 2021, 08:30-09:30 CEST

FS 2103 Frontiers in embolotherapy: what is the evidence?

2103.1 Embolisation for hypersplenism *T. Tanaka (Kashihara/JP)*2103.2 Osteo-arthritis embolisation *M. W. Little (Reading/GB)*2103.3 Haemorrhoid embolisation *V. Vidal (Marseille/FR)*2103.4 Prostate embolisation *F. C. Carnevale (São Paulo/BR)*





Lower limb DVT: venous interventions to treat venous thrombosis and pulmonary embolism

CIRSE: What is the current state of endovascular intervention to treat deep vein thrombosis of the lower limb?

de Haan: It's really still under discussion, because the three major studies do not give an unambiguous result in terms of prevention of PTS. In addition, none of the three show a gain in quality of life.

CIRSE: What are the benefits of these treatments for patients?

de Haan: In theory, a rapid recovery of central vein patency reduces the chances of developing PTS. However, this has not (yet) been conclusively demonstrated.

CIRSE: How have DVT techniques developed/changed in recent years?

de Haan: As catheter-guided thrombolysis can be time consuming, a lot of attention has recently been paid to percutaneous thrombectomy systems. The majority of these systems originate from the arterial field and have their limitations in the larger (venous) vessels with a higher thrombus load.

CIRSE: What evidence currently exists to support endovascular interventions to treat deep vein thrombosis?

de Haan: Although the hypothesis that a rapid recovery of central venous flow leads to a better quality of life (including a reduction in the risk of PTS) still exists, it has yet to be (fully) confirmed. The optimal endovascular thrombolytic approach, with or without thrombectomy, needs further investigation.

CIRSE: What questions still need to be addressed from these studies?

de Haan: Because it is often difficult for patients to indicate when the first complaints have arisen, there is a good chance that we will treat deep vein thrombosis of very different ages (and therefore compositions). These differences are likely to have a major impact on the (successful) outcome of endovascular therapy. It is therefore worthwhile, in addition to defining an optimal endovascular approach, to also look at techniques with which the thrombus age can be determined, so that we can stratify patients.

CIRSE 2021 SUMMIT SEPTEMBER 25-28 ONLINE

Watch on demand from Sep. 23!FC 2904Lower limb DVT2904.1Pathophysiology
N. Karunanithy (London/GB)2904.2Imaging and patient preparation
M. W. de Haan (Maastricht/NL)2904.3Techniques for clearance of acute thrombus
A. J. Wigham (Oxford/GB)2904.4Procedure completion and optimising
outcomes
H. K. Moriarty (Melbourne, VIC/AU)



Robotic and stereotactic approaches in IR

CIRSE: Why is it important to shine a spotlight on this topic at CIRSE 2021?

Bale: This topic, together with digitalisation and automation, is one of the key drivers in achieving consistently high-quality outcomes, as well as increasing the number of candidates for treatments. Excellent results should be the standard, not exceptional.

CIRSE: This is fast evolving subject – can you tell us briefly what has changed over the past 5-10 years as far as robotics in IR?

On the one hand, the industry seems much more interested in bringing solutions to the market, in fact, they are betting heavily on it. So, we could say that this is going from the academic/start-up realm to the mainstream, and that's great for patients and IRs alike.

CIRSE: What is the current status of stereotactic systems?

Bale: Many players in the navigation space seem to be more interested in expanding from static neurointerventions to the more challenging abdominal field. Most industry leaders have, to some extent, applications for this in their angiography products, like Philips's ablation guidance, or Siemens with their needle guidance. I also know that some big companies are integrating this into CT. There's still room for further development in the planning side, in my opinion, as this is one of the key challenges.

Image fusion for treatment planning and intraprocedural treatment verification has always been a key and an integral part of the stereotactic workflow. It is great to see that this technique is increasingly integrated into conventional CT- or US-guided approaches.

CIRSE: What are the advantages and limits of stereotactic guidance?

Bale: It allows you to tailor thermal ablation to any tumour of any size, and to deliver it in a consistent way, helping to achieve consistently good results for a larger number of patients than conventionally guided ablation can. This is

what happened in our institution, and we are now treating almost four times more patients with curative intent than what the hospital was doing when we started. By the way, it is important to note that surgeons have not lost patients at all in our institution, they just get more complex cases now, which I think is more interesting for them too.

CIRSE: Where do you ideally see robotics and stereotactic approaches in IR 10 years from now? What needs to happen to make the ideal a reality?

Bale: In 10 years, we will likely have clinical evidence from more institutions, which would also bring the reimbursement support to make this approach feasible to more people. At the same time, technological advances will bring automation in planning and probably also in the delivery; this will make it possible to offer these approaches everywhere. Access to the best outcomes should not depend on where you live or on having resources to go to a leading institution.

CIRSE: What key points can participants in this session look forward to taking home?

Bale: Participants can take home thoughts on how we can use existing technologies to overcome the limitations of thermal ablation, helping us offer curative intent treatments to more patients. Also, that this is not a competition with the other curative treatments, like surgery, but rather a multiplier for institutions.

CIRSE 2021 SUMMIT SEPTEMBER 25-28 ONLINE

Thursday, Sep 23, 2021, 17:00-18:00 CEST FS 32 Robotic and stereotactic approaches in IR

- 32.1 Endovascular robotics: current status *R. H. Kassamali (Doha/QA)*
- 32.2 Simulation in IR L. B. Lönn (Copenhagen/DK)
- 32.3 Robotic ablation L. P. Beyer (Potsdam/DE)
- 32.4 Stereotactic guidance systems in IR *R. Bale (Innsbruck/AT)*

Congratulations to Prof. Speck and Prof. Scheller!

Award of Excellence and Innovation in IR



Rolf W. Günther Foundation for Radiological Sciences

The Award of Excellence and Innovation in Interventional Radiology is sponsored by the Rolf W. Günther Foundation for Radiological Sciences and is awarded for outstanding work for the advancement of interventional radiology. Established in 2012, this distinction has been given to some of the most innovative physicians in the field. The distinction comes with a cash prize of \in 6,000.

We have a winner! Congratulations!

This year, the honour will go to Prof. Ulrich Speck and Prof. Bruno Scheller for their work on the development of drug-coated balloons for local treatment of intimal hyperplasia, which included the development of a completely concept, device and recognised treatment.

Profs. Speck and Scheller will receive their award and be officially announced as the winners during the CIRSE 2021 Summit.

The Innovation:

Prof. Speck and Prof. Scheller worked in close cooperation on the development of drug-coated balloons (DCB) for local treatment of intimal hyperplasia. Based on their observations with paclitaxel mixed contrast medium leading to inhibition of intimal proliferation after coronary angioplasty (1999), the two took the next step to local application of an antiproliferative agent on an angioplasty balloon. The first proof of concept was started in a porcine coronary model in 2002. Local intracoronary treatment with paclitaxel balloon coating resulted in a significant reduction of late lumen loss and an increase in minimal lumen diameter compared with controls.

A first-in-man randomised study in the coronaries was initiated in Dec. 2003 in Germany (PACCOCATH In-Stent Restenosis I Trial) showing significantly better results in the PACCOCATH balloon group. The effect in the coronaries was confirmed by other studies like the PACCOCATH ISR II Trial and further studies by other groups. Favourable effects on patency rates were also seen in the femoropopliteal arteries. Long-term safety following paclitaxel exposure there is discussed controversially. DCBs also showed their effectiveness in arteries below the knee (BTK), while results in dysfunctional haemodialysis fistulas were less consistent.

About the winners:



Prof. Ulrich Speck

is a professor of experimental radiology at the Charité University Hospital in Berlin, Germany. He is author or co-author of more than 100 research papers and has contributed to numerous reviews and text books.

He also holds more than fifty patents in areas ranging from diagnostic imaging to pharmaceutical preparations. He is especially interested in further developing drugcoated balloon catheters, patenting new inventions, exploring new treatment options in image guided therapy, and seeing research through basic experiments all the way to proof-of-concept clinical trials.



Prof. Bruno Scheller

is a consultant for internal medicine, cardiology, and intensive care, as well as a full professor for clinical and experimental interventional cardiology at the University Hospital in Homburg/Saar, Germany.

He has published extensively, including more than 100 original papers, and his current areas of scientific activity extend to acute myocardial infarction, percutaneous coronary interventions (PCI) and thrombotic complications, alternative techniques for PCI, restenosis, drug coated balloon technology, and catheter-based treatment of structural heart disease. CIRSE continues to improve and expand all aspects of online education!

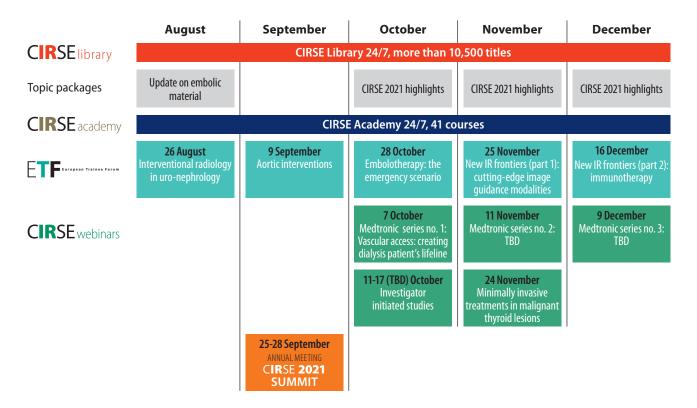
CIRSE's year-round online education

For many years now, CIRSE has been offering online education opportunities through online learning platforms, such as the CIRSE Library and the CIRSE Academy, always striving to keep up with the educational needs and learning behaviours exhibited by its community. While limiting travel opportunities and inperson gatherings, the COVID-19 pandemic has also given educators a strong impetus to increase efforts in online education and to ensure that high-quality educational opportunities are still provided year-round, so that no one gets left behind.

The benefits of online education cannot be denied. The material is available around the clock and accessible from any place in the world; it is more affordable, it is customisable, learners can take the content in at their own pace, and it is more sustainable, as energy consumption and CO_2 emissions are significantly reduced in comparison to in-person events.

Nowadays, online events are much more than simply compensation for the events and congresses that could not be attended in person – they provide an intrinsic value of their own. CIRSE's online offerings are no exception: as a recent survey among members suggests, the CIRSE Library is not just used to catch up with the presentations missed during a congress. The most commonly mentioned reasons were "keeping up to date with the latest developments" and "preparing for a procedure", which demonstrates the need for online education detached from any congress throughout the year.

CIRSE online education in the second half of 2021



The benefits of online eduction cannot be denied – CIRSE's online materials are available around the clock, from anywhere in the world.

From the same survey we know that there is a strong need not only for live content, but also for high-quality, customisable on-demand content.

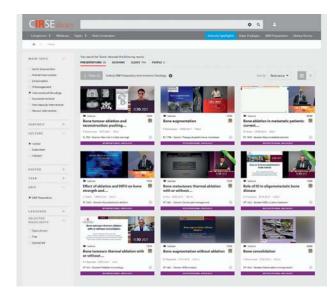
As it is still uncommon that doctors are granted leave from their employing institutions for attending online events, enabling asynchronous learning opportunities is key in allowing all those who are interested to benefit from the materials.

CIRSE Library

The CIRSE Library is IR's top online educational resource, featuring more than 10,500 titles from the CIRSE, ECIO, ET and IROS congresses of the past six years, as well as eight webinars. You can watch any presentation you have missed during a live event on demand.

User convenience

A click into the search field box will prompt you to a filter system, which allows for narrowing the search by topic, event type, year, content type, etc. Full-text search is also supported, and filter and search criteria can be combined.



Following the latest update of the Library, users are able to save content for watching later, and are able to share content through various social media channels.

Topic packages

Compiled and regularly updated by the CIRSE Online Education Committee, topic packages are published on a monthly basis to showcase a selection of highly relevant lectures for a certain topic. If your time does not allow for conducting an extensive search from scratch, one of the many available topic packages might be a good fit for your purposes.

Nine topic packages are planned for release by the end of the year, covering the full spectrum of IR topics and highlighting CIRSE 2021 Summit content.

Next generation

Each month the European Trainee Forum conducts a free webinar with basic or intermediate content in order to help medical students and beginning interventional radiologists become more familiar with different fields of interventional radiology and the treatments that can be performed.

All webinars are broadcasted free of charge and available to watch on demand shortly after the event on the CIRSE Library under "Next generation".

EBIR preparation

Planning to take the EBIR exam? The "EBIR preparation" page on the CIRSE Library is the place to be for candidates who are looking for high-quality preparation material. It offers a compendium of topic packages, online Academy courses and a selection of recommended lectures from CIRSE events arranged according to the structure of the topics in the European Curriculum and Syllabus for Interventional Radiology.

CIRSE Academy

The CIRSE Academy features CME certified courses for selfdirected learning, which can be taken at the convenience of the user. All courses include a theoretical part, example cases and teaching videos, as well as an interactive quiz to ensure the learner's progress. Upon completion of the quiz and a feedback form, users will receive a CME certificate for accredited courses.

ONLINE EDUCATION

After three years of authoring, compiling, peer-reviewing and revising course material, a team of over one hundred authors and reviewers has achieved the goal of nearly every item of the European Curriculum and Syllabus for IR being covered by at least one course.

In order to ensure the quality of the materials, courses are regularly updated and re-accredited. During the process of re-accreditation, the old course version remains online for learners' convenience without CME certification until a new, CME accredited version becomes available for purchase.

Browse the CIRSE Academy courses in our webshop.

Courses come at a fee of €25 for CIRSE members and €55 for non-members. After purchase, each course can be accessed for a duration of 90 days.

New CIRSE Academy courses out soon

Currently, 27 new courses spanning eight IR topics are under preparation. With the release of these courses, up to 80% of the EBIR curriculum will be covered in the CIRSE Academy. Additionally, five of the upcoming courses are at a specialist level in the fields of aortic intervention and interventional oncology. The aim is to have at least 20 new courses published by the end of the year.

CIRSE webinars

Over the past year, CIRSE has established a new series of smaller online live events, the CIRSE webinars. These are highly specialised and innovative topical courses, ranging from an hour to one day in duration. The webinars include live and pre-recorded lectures prepared and delivered by leading experts in the field, step-by-step video commentaries of interventions, heated panel discussions on the most pressing topics, and live Q&A sessions allowing the participants to actively take part in the event.



Watch on demand

Since 2020, eight webinars have taken place, and many more are in the pipeline. Visit the CIRSE Library to explore the past webinars on demand!

Coming up next

Stay tuned, register with CIRSE and be first to learn about our upcoming events! You will receive our mailings about new webinars, such as:

- Investigator initiated studies
- Minimally invasive treatments in malignant thyroid lesions
- A Medtronic series on Innovative treatment strategies for PVD
- ... and many others!



Discovery Leadglasses Meets the eyes!



The new EBIR format offers candidates the opportunity to sit the exam from anywhere in the world.

An inside look on the EBIR remote exams with EBIR Chairperson Dr. Raman Uberoi

The European Board of Interventional Radiology (EBIR) continues to evolve, and took a massive leap forward in 2021 with the release of a new fully digital, remote online examination format that enables IRs to sit the exam from anywhere in the world. Delivering this project has been a major undertaking, with a lot of hard work over the last 18 months from everyone in the office and the EBIR Council. In addition, the new format has also facilitated the examination to be offered in in German for the first time, thanks to a joint collaborative effort with the Deutsche Gesellschaft für Interventionelle Radiologie (DeGIR) and the Österreichische Gesellschaft für Interventionelle Radiologie (ÖGIR). The EBIR Council is delighted with the success of the first two examinations which took place this year in January and in March and would like to congratulate the successful IRs who are now the latest EBIR holders. Now, as the committee prepares for the next examination, taking place in October of this year, EBIR Council Chairperson Dr. Raman Uberoi spoke with us about the new format and what the EBIR will focus on next.

CIRSE: The EBIR has had quite a few changes over the past years. Can you tell us about the progress EBIR has made?

Uberoi: I have been honoured to be involved with the EBIR from very early on, since 2011. The ambition for the EBIR has always been to produce a world-class examination to assess and accredit the knowledge and skills of IRs throughout the world, as well as support training. To that end, the EBIR Council is always striving to stay at the forefront in terms of technological developments, examination content and modern examination theory. Since the examination's beginning in 2010, it has undergone several changes in format, structure, delivery, and question types to optimise the quality of the EBIR. In 2019, we made a strategic decision to move from a fully written and oral format to a digital one, which has allowed us to not only improve the validity and reproducibility of the examination, but also to help meet the rising demand for this highly desirable examination. This change was a big success and was well received by candidates. More recently, despite setbacks caused by the COVID-19 pandemic, the EBIR has worked

hard to further develop a feasible solution for candidates to take the exam remotely, using the latest technology and sophisticated monitoring software. In January 2021, the first-ever fully digital online EBIR examination took place with more than 110 candidates, breaking the record for the most candidates to take the examination in one sitting. We have received a lot of encouraging comments from candidates about the exam and the application process, which has been really satisfying for all those involved. We also offered the exam in German the first time to great success, with 33 of our German-speaking colleagues taking advantage of this opportunity, propelling us to perhaps be even more ambitious in the future.

CIRSE: Could you describe the new remote examination setup?

Uberoi: The examination format remains the same in that candidates take the entire examination in one day, with 100 questions split into two parts and a break in between. Candidates take the exam alone in a closed room on a laptop or desktop computer and additionally have a second device, such as a smartphone or tablet, to provide additional surveillance. Throughout the duration of the examination, candidates are supervised remotely from their webcams and microphones using online proctoring software. After the exam, the recorded images, audio and screen activity are reviewed to provide a countermeasure against any violations during remote exams. Before the examination day, usually two weeks before, candidates have the opportunity for a dummy run to complete a system check and a practice examination to troubleshoot any issues and ensure they are well prepared.

CIRSE: How does the new remote examination format benefit candidates?

Uberoi: The fully remote, digital format of the examination has a lot of benefits. The biggest one being the increased accessibility of the EBIR exams. Now, candidates can take the examination from any location without having to travel to an examination venue, even in the comfort of their own homes. The number of IRs wishing to take the exam has increased substantially over the years. With this remote, digital format, many more candidates can sit the



examination at one time, thus decreasing overall waiting times. Working closely with our educationalist, we've also ensured the software used for the exam ensures candidates are supervised and monitored sufficiently so the examinations remain fair. The examination itself is also highly effective in testing candidates on the clinical and technical knowledge necessary to perform safe and effective treatments for patients. In terms of assessment theory, the EBIR is an extremely valid and credible examination, testing IR expertise through this newly accessible, digital format.



CIRSE: You have mentioned that the examination was offered in German. Could you tell us a little more about this new proposal?

Uberoi: We are very happy to be able to offer the new remote EBIR exam to our German-speaking colleagues. This initiative is a result of a collaboration with the German and Austrian national IR societies – DeGIR and ÖGIR. The EBIR examination complements these countries' IR certification pathways, but is also available to all German-speaking IRs. This takes away the barrier to some potential candidates who, although are excellent IR's, find sitting the examination in English very challenging. The EBIR in German will now be offered on an annual basis with the next examination taking place March 17, 2022 – be sure to sign up before the exam becomes fully booked!

What is the EBIR Council's current focus?

Uberoi: The EBIR Council is constantly working to improve question types and ensure that the examination remains of the highest quality. This means we are constantly looking to educate, train and further develop our examiners and contributors to produce the highest guality examination material which tests not just mental recall but also higher cognitive skills. To this end, in 2020 we released a new online-training course for EBIR contributors on the CIRSE Academy. The course is available to all EBIR holders wishing to support the exams, and equips contributors with the knowledge and skills to write effective, high-quality questions for the EBIR examinations. Ensuring contributors are well trained is also a critical step in providing high quality content which fully covers the European Curriculum and Syllabus for Interventional Radiology. The council is additionally focusing on improving the technical elements of the new remote exams, so that candidates will always have a smooth examination experience.

To learn more about the online-training course for EBIR contributors, please contact EBIR Examination Services at **ebir@cirse.org**

Upcoming examinations with available seats:

Examination dates 2022



- March 17 | English | German application deadline February 10, 2022
- October 20 | English | Spanish
 application deadline September 15, 2022

Online learning resources are available at the CIRSE Academy and the CIRSE Library to help you prepare for the examination. To find out more, go to **academy.cirse.org**